GULF POWER COMPANY

Reliability

and

Storm Hardening Initiatives

Report

March 1, 2008

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APPENDICES

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 (Gulf, Gulf Power, the Company) Storm Hardening Plan as required by paragraph seven of the "Process to Engage Third Party Attachers" Stipulated Agreement dated September 26, 2007.

1.1 2007 Storm Hardening Activities

Pursuant to the "Process to Engage Third Party Attachers" Stipulated Agreement, Gulf Power Company recently completed a series of 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 Cable, MediaCom, SouthernLight, TelCove, GTC, Comcast, Springfield Knology, Embarq, Brighthouse and Madison River. Increased communications between these parties are 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) the transition plan from Grade C construction standards to Grade B construction standards on all new construction, major projects, and maintenance work; (2) the extreme wind loading projects for 2008; (3) the pole loading results of the 5% sampling of poles identified with three or more attachers that are older than twenty years; and (4) the ongoing pole inspection program (Osmose). 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. Follow-up meetings will be held in July 2008.

Attendees at the meetings included:

- Pensacola meeting held on January 23, 2008
    - Gulf field personnel, special project engineers, technical services engineers, and their respective supervision and management representing the Pensacola, Gulf Breeze, Pace, and Milton areas
    - AT&T
    - Mediacom

- Panama City meeting held on February 1, 2008
    - Gulf field personnel, special project engineers, technical services engineers, and their respective supervision and management representing Panama City, Panama City Beach, and Chipley
    - Embarq
    - Mediacom
    - Bright House
- Fort Walton Beach meeting held on February 6, 2008
    - Gulf field personnel, special project engineers, technical services engineers, and their respective supervision and management representing the Fort Walton Beach, Destin, Crestview, Niceville, and Defuniak Springs areas
    - Cox Communications

On February 11, 2008, Gulf Power Company, Southern Linc, and AT&T representatives met to discuss providing each other with better information and support in the event of a major storm. As a result of this meeting, Gulf Power has assigned a liaison to AT&T during storm events. This initiative should facilitate a smooth and timelier flow of information that indicates when Gulf Power has neared completion of restoration efforts in a particular area so that AT&T can then begin their own restoration work. Additionally, a Gulf Power Information Technology representative will work with his AT&T counterpart to determine communication needs for the major staging sites. Finally, additional Gulf/Southern Linc personnel have been assigned to communicate directly with their AT&T counterparts regarding restoration efforts for key leased telecommunication circuits.

The following storm hardening activities were initiated and/or completed in the field during 2007:

- Transmission
    - All critical lines were inspected
    - Four separate aerial inspections of the total system were completed
    - Comprehensive walking/climbing and groundline inspections as part of the six-year inspection program were completed
    - 230kV Right of Way (ROW) vegetation inspections were completed and all hazard tree conditions were corrected
- Distribution
    - Extreme Wind Loading 2007 Projects
        - Bayou Chico 6522 – Feeds the fuel depot
        - Romana 5912 – Primary feed for Escambia County Utilities Authority sewage plant
        - DeVilliers 7402 – Backup feed for Escambia County Utilities Authority sewage plant

- Sandestin 8162 – Feed for Sacred Heart Hospital
- I-10 Crossings – 13 primary conductor crossings along I-10 between Pensacola and Chipley

Analysis and engineered work orders have been completed for all the above listed projects (See details in chart below)

Location	Poles Analyzed	# w/ Attachers	Upgraded*	Added Guying**
Eastern / I-10 Crossings	28	7	0	9
Central / I-10 Crossings	12	5	0	3
Central / Sacred Heart - Sandestin 8162	5	0	0	4
Western / ECUA - Romana 5912	22	21	0	22
Western / ECUA - Devillars 7402	54	42	32	26
Western / Fuel Depot - Bayou Chico 6522	50	27	38	22
Total	**171**	**102**	**70**	**86**

***Upgraded means pole change out or E-truss**
****Added guying means new guy or upgrade of existing guy**

All of the I-10 crossings and the Sandestin 8162 feeder project have been completed. The Bayou Chico 6522, Romana 5912, and DeVilliers 7402 feeder projects will be complete by July 2008. The communication of these projects to affected third party attachers was accomplished through joint use update meetings held on the following dates:

County	**Date**
Escambia/Santa Rosa	January 23, 2008
Washington/Holmes/Bay/Jackson	February 1, 2008
Okaloosa/Walton	February 6, 2008

Communication plans with affected local city officials have been prepared and are awaiting reply from officials.

- Grade B Construction
  - All system engineers have been trained on PoleForeman and “Grade B” construction
  - All new overhead construction will be modeled in PoleForeman and designed to “Grade B”
  - Any existing overhead facilities that require a non-emergency pole change out will be modeled in PoleForeman and designed to “Grade B”

Special Projects

During 2007, the following underground storm hardening projects were undertaken and either completed or are currently underway.

- Opal Beach, Navarre Beach, FL
  This project encompassed a distance of 15,795 feet where Gulf Power installed 2 phases of 1/0 aluminum primary conductor, directly buried six feet below the surface, using a vibrating plow injection method. Three separate flush mounted concrete enclosures will provide points for lightning arrestors. This is a pilot project installed in National Seashore/State Park, with sandy beach conditions. It is believed this project will assist in determining storm surge mitigation effectiveness in coastline areas. This project was completed at a cost of $272,000.

- Churchwell Drive, Panama City Beach, FL
  This project encompassed a distance of 1,890 feet of concrete encased duct bank with two flush mounted switches located approximately one block from the Gulf of Mexico. This project was completed at a cost of $556,209.

- Beckrich Road, Panama City Beach, FL
  This project, located approximately 2 blocks from the Gulf of Mexico, proceeding northward a distance of 4,000 feet, consists of three flush mounted concrete enclosures. This project is currently in the estimating phase, so project cost is yet to be determined. This project is being done at the request of the City of Panama City Beach.

2.0 Wood Pole Inspection Program

2.1 Wood Pole Inspection Description

Gulf's 2007 Wood Pole Inspection Program was designed to comply with Florida Public Service Commission (FPSC) Order No. PSC-06-0144PAA-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 2007, Gulf completed the first 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 2007 Accomplishments

Gulf created an Asset Management Coordinator (AMC) position in 2006 to provide a single source of oversight for the management of the pole inspection program across the entire Company. The first full-year this position existed was 2007.

In 2007, the AMC began realigning the inspection areas to allow the contractor to minimize travel and set up time between inspection locations. Prior to 2007, Gulf's pole inspection program had been administered through the various field offices.

The AMC re-bid the pole inspection contracts and established new multi-year contracts with multiple vendors for the entire system. The realignment of areas allowed the contractor to minimize travel and set up time, thus reducing projected contractor cost increases.

Prior to 2007, Gulf had inspected poles on a ten-year cycle. Beginning in 2007, Gulf implemented the new eight-year pole inspection cycle. A total of 33,026 poles were inspected with a rejection rate of 2.2%.

See Appendix Two, entitled "Wood Pole Inspection Report" for details.

As noted earlier, Gulf uses an inspection matrix that is based on pole age, condition, and treatment type. Gulf received Commission approval to continue the use of this matrix, which calls for a sound and selective bore on CCA poles 0 to 14 years of age. Gulf also agreed to sample 1% of the CCA poles that would not normally qualify for full excavation under its inspection matrix and perform a full excavation inspection on the sample poles. This was performed to further ensure validity of Gulf's inspection matrix and provide reassurance that Gulf's inspection process is not allowing reject poles to remain in service or go untreated.

During 2007, Gulf performed full excavation on 341 poles that had passed the initial sound and selective bore process. This reflects a 1.03% sample rate of Gulf's 2007 pole inspection program. These poles were selected at random. None of these poles qualified as rejects and 27.9% of the sampled poles showed signs of decay in the early stages. Only two poles experienced a diameter reduction in response to decay removal, but neither experienced enough reduction to be rejected. This sample clearly indicates Gulf's sound and selective bore process is not allowing defective poles to remain in service.

Poles that are fully excavated are then treated with a compound to prevent future decay since disturbance of the soil increases the risk of future decay as well as the rate of existing decay. Once the sample poles were fully excavated, full treatment was required, greatly increasing the inspection cost on these poles.

It should be noted that the cost of fully excavating and treating the sample poles was 251% higher than the average cost of all poles utilizing the sound and selective bore process, thus causing a substantial increase in the inspection cost on these poles. Utilization of a full excavation inspection process on Gulf's entire distribution wood pole plant would result in an annual incremental cost increase of approximately $557,000 without providing any apparent benefit in terms of identifying reject or danger poles. Based on the foregoing results and analysis, full excavation and future sampling is not justified.

During its 2006 pole inspection, Gulf identified 185 reject poles. Gulf changed out 148 of these rejects and reinforced the remaining 37 reject poles during 2007.

2.3 Projected 2008 Accomplishments

Gulf plans to inspect an average of 32,000 poles each year to ensure it adheres to an eight-year cycle. In addition, poles identified in the 2007 pole inspection as rejects will be changed out or reinforced in 2008. These poles are now being engineered and will be upgraded to Grade B construction standards.

3.0 Vegetation Management Programs

3.1 Vegetation Management Review

The Company's entire Vegetation Management (VM) Program was evaluated in 2006. Each VM program element was analyzed and, if necessary, restructured to ensure it directly and aggressively supported the Company's short and long range reliability and storm hardening efforts. Gulf began implementing its revised VM program in January 2007.

3.2 Vegetation Management - Definitions and Acronyms

ABSIT

An ABSIT is an acronym used to identify and document an abnormal situation or condition that will pose a threat to the safety and/or operational integrity of the Company's transmission system within the following 12-month period.

Aerial Patrol
Fixed wing and/or helicopter aircraft fly the Company's ROW corridors to visually inspect, identify, and document the current condition of the Company's transmission system. Aerial patrols are conducted on a scheduled basis and in response to emergencies (i.e. severe weather, fire, and/or other emergency conditions).

Customer Tickets or Spot Trim
Customer tickets are turned in by customers, employees, and/or as a result of field patrols. All tickets are evaluated to identify risks and determine if and/or what type corrective vegetation activities are required.

DLOR
Distribution **L**ock-**O**ut **R**eport is a tracking process developed by the Company to document and track distribution feeder lock-outs, helps identify root causes of feeder breaker lock-outs, and identify systems and operational modifications that could be implemented to improve system reliability by the prevention of future feeder lock-outs.

Forestry Services
The Company's Forestry Services section is staffed with a team of degreed Foresters and/or ISA Certified Arborists. These employees develop and manage the Company's VM programs and manage the contract resources responsible for performing vegetation management work throughout the Company's transmission and distribution system.

Ground Patrol
Vegetation Management Ground Patrols are performed by driving and walking a ROW corridor to visually inspect, make assessments, and document vegetation conditions. Forestry Services personnel are assigned to perform these ground patrols utilizing 4X4 trucks, Marsh Masters, GPS and computer mapping equipment.

Lateral
Any distribution line that has at least one protective device located between it and the substation breaker.

Main-Line Feeder
The section of a distribution circuit located between the substation breaker and the first protective device.

MATS Program
Main-line **A**nnual **T**rim **S**chedule is a three-year cyclical based distribution feeder main-line vegetation maintenance program.

MICS Program
Main-line **I**nspect & **C**orrect **S**chedule is an annual distribution feeder main-line vegetation maintenance program designed to inspect and correct vegetation deficiencies along feeder main-line circuit corridors that are not scheduled within the current year's MATS program.

ROW
Rights-**O**f-**W**ay is property the Company has purchased, leased, or been granted the rights to use, to locate its transmission and distribution electric utility system within the Company's transmission and distribution system circuit corridors.

SALT Program
Scheduled **A**nnual **L**ateral **T**rim is a six-year average cyclical-based distribution lateral vegetation maintenance program. The SALT program is a combination of cycle-based and reliability-based vegetation management methodologies which ensure system reliability priority is maintained through the scheduling of poorest performing lateral circuits into each year's vegetation management program.

SHARP
Storm **H**ardening **A**nnual **R**emoval **P**rogram is a vegetation maintenance program designed to identify and correct tree conditions adjacent to the Company's distribution ROW that present a threat to the distribution system during adverse weather. Vegetative conditions that are identified are corrected through pruning or tree removal if customer permission can be obtained to work outside the ROW.

VM
Vegetation **M**anagement includes practices and activities conducted along transmission and distribution ROW corridors.

3.3 Distribution Vegetation Management Plan Overview

The Company modified its approach to 2007 Distribution Vegetation Management. Programs and work-plans continued their principal focus on ROW corridor safety and feeder reliability, while actual program planning and scheduling activities were redirected into the two functional areas of storm hardening and vegetation maintenance on main-line feeders and laterals.

In 2007, additional resources were added to the Company's VM storm hardening program to address vegetation-caused outages during adverse weather conditions. Supporting distribution's short and long-range VM efforts, the Company's Forestry Services section developed and implemented the SHARP. Under SHARP, trees located outside the

maintained ROW that pose a threat to the Company's distribution facilities during storms are identified for removal or corrective pruning.

Routine distribution vegetation management was separated into main-line feeder programs and lateral line programs. Vegetation maintenance on main-line feeders was accomplished through the MICS and MATS. MICS focused on the removal or remediation of vegetation conditions that would pose a threat to the main-line feeder circuits within the following 12 months, while MATS established a three-year routine trim cycle on main-line feeders. These two programs aggressively supported both the Company's short and long-range VM efforts, while ensuring every mile of the Company's main-line feeders were visually inspected and maintained during 2007.

The Company's lateral circuit corridors were the target of the SALT. SALT is a combination of cycle based and reliability based VM concepts. One area of the program is based on a six-year average maintenance cycle, ensuring every lateral circuit corridor is patrolled and/or maintained within a six-year cycle. The reliability segment of this program ensures that the poorest performing lateral circuits are a priority within each year's lateral VM program. Circuit location, vegetation types and conditions, land uses, and many other factors influence how vegetation growth impacts urban and rural ROW conditions. The Company's lateral VM program manages these many factors through the reliability segment of this program. Managing main-line feeder and lateral ROW corridors through the above specialized and individualized programs enhanced the Company's 2007 VM efforts, the results of which will be presented later in this report.

3.4 Transmission Vegetation Management Plan Overview

Every mile of the Company's transmission ROW corridors was inspected by ground patrols between November 2006 and March 2007. Information collected during these patrols was used to refine Transmission VM work-plans for 2007. ROW corridor safety and hazard trees, both on and off ROW, continued to be Transmission's top VM priority.

Specialized transmission contract crews worked throughout the system removing hazard tree conditions. Transmission VM programs and work-plans were aligned into two functional areas of floor maintenance and side maintenance. Current transmission vegetation management needs are determined through data collected during the ground patrol. Vegetation management contractors performed ROW corridor mowing, swamp clearing, herbicide applications, manual side-trim, and mechanical side-trim activities throughout the system during 2007.

3.5 2007 Transmission Vegetation Management Program Activity

During 2007, the Company's transmission ROW corridors were ground patrolled by Forestry Services personnel to inspect, document, and correct any vegetation condition that would pose a threat to the safety and/or operational integrity of the transmission system within the following 12-month period. Reports from these patrols were used to assess the system's overall vegetation maintenance needs and to develop work-plans for the 2007 transmission VM programs.

Aerial patrols were performed throughout 2007 on a scheduled basis and in response to emergencies to inspect transmission facilities and overall system conditions. These aerial patrols are designed to identify and document any condition that could pose a threat to the system's safety and operational integrity, including vegetation ABSITs.

The Company's 200kV and above ROW corridors were inspected through each of the patrols discussed above; and by May 1, 2007, all vegetation ABSITs identified were corrected.

The Company's 115kV and 46kV ROW corridors were inspected through each of the patrols discussed above; and by June 1, 2007, all vegetation ABSITs identified were corrected.

In addition to the vegetation ABSITs that were identified and corrected, transmission floor and side VM programs were planned and implemented during 2007. Data collected from ground and aerial patrols, vegetation maintenance historical data, and projected floor and side vegetation maintenance needs were evaluated and prioritized within the 2007 transmission floor and side VM programs. It is important to note that weather conditions, system loading, and contract resource availability were included during the planning process.

All 2007 transmission VM program activities were performed as scheduled and accomplished within budget.

3.6 2008 Transmission Vegetation Management Programs

Program planning and budgeting activities for 2008 VM transmission rights-of-way inspections & corrections programs were completed during January 2008. The 200kV and above inspection & correction program is scheduled to be completed by May 1, 2008. The 115kV and 46kV inspection & correction programs are scheduled to be completed by June 1, 2008. The 2008 transmission floor and side-trim programs will continue to be reviewed and updated as vegetation conditions dictate.

3.7 2007 Distribution Vegetation Management Programs

During 2007, Gulf Power implemented the distribution VM Programs that received Commission approval in FPSC Order No. PSC-06-0947-PAA-EI. The Company's 2007 VM Programs focused on storm hardening and vegetation maintenance on main-line feeders and laterals. In support of these 2007 VM programs, contractor resources were increased, revised data reporting and processing activities were implemented, and forensic data collection and review activities were expanded.

3.8 2007 Distribution Vegetation Management Activity

Implementation

Planning for the 2007 VM programs began during the fourth quarter of 2006. Upon receiving Commission approval in November 2006, vegetation management contracts were re-bid and awarded. Contractors began increasing the work force in the first quarter of 2007 but had difficulty finding adequate labor to fully staff crews. Crews were staffed throughout the first quarter and the new emphasis on main-line feeder management began to have an impact on reliability in mid-April.

Danger Tree Removal for Storm Hardening

The Company's SHARP was performed throughout the entire 2007 calendar year, both on main-line feeders and lateral ROW corridors. The program's success far exceeded its 2007 target of 5,000 hazard tree removals, through the removal of more than 13,100 hazard tree conditions adjacent to the distribution system's ROW corridors. The tree profiles targeted under SHARP were off-right-of-way trees that posed a threat to the electrical system because they had died, were in a state of decline, or had storm-damaged leaders or main limbs overhanging the distribution system.

A decision was made to implement SHARP across the system rather than target individual feeders given the decline and mortality of a vast number of trees across the Company's distribution system as a result of the 2004 and 2005 hurricanes and drought conditions. The removal of the more than 13,100 hazard tree conditions helped avoid a great number of large tree failures that would create major damage and time consuming restoration efforts to the distribution system's lines and structures.

Main-line Feeder Vegetation Management

During 2007, main-line feeder programs addressed every mile of the Company's main-line distribution system. One-third of the main-line

feeder system was maintenance trimmed. Maintenance trimming systematically trims every tree on the feeder to obtain three years of clearance. The remaining two-thirds of the main-line feeders were inspected for any vegetative condition that would pose a reliability problem over the following 12 months. Prior to storm season, corrective vegetation maintenance was performed on all conditions that were identified by the inspection.

Lateral Circuit Vegetation Management

Laterals were scheduled on a six-year average cycle VM program under the SALT program. Each year circuit performance and reliability are reviewed to establish the program's annual lateral maintenance schedule. Company reliability reports, field circuit patrol data, and continuous feedback from internal and external customers help ensure the worst performing lateral circuits are identified and scheduled for maintenance work.

Gulf met its SALT goal by trimming over 675 miles of lateral primary line. Since emphasis was placed on main-line feeder programs during the first half of 2007, the SALT program did not begin to have a meaningful impact on reliability until the third and fourth quarters.

2007 VM Program Impact on Performance and Reliability

The Company's distribution VM programs were redesigned for 2007. Resources were reallocated, which placed additional contract tree crews into areas where vegetation-caused outage reductions would have the greatest impact on the system's overall performance and reliability.

Benefits from these redesigned programs will not be fully realized until they continue to work through scheduled maintenance cycles and additional data can be collected. The top priorities for these VM programs are storm hardening and reduction of vegetation-caused customer interruptions (CI), customer minutes of interruption (CMI), and main-line feeder outages.

During 2007, the Company experienced 28 vegetation-caused main-line feeder outages. Eleven of these outages occurred before April 16, 2007. When evaluating the Company's 2007 VM Programs' performance, it is important to note that these 11 outages occurred before the new programs were fully operational in mid-April. Also, these outages accounted for approximately 40% of the feeder outages, 46% of the Customer Interruptions (CI), and 47% of the Customer Minutes of Interruptions (CMI) caused by vegetation on the Company's main-line feeders in 2007.

When comparing the last eight months of 2007 with the same time period during 2006, the following benefits and outage reductions are realized from the Company's main-line feeder management programs:

1) A 29% reduction in CI
2) A 25% reduction in CMI
3) A 37% reduction in number of outages
4) A 28% reduction in SAIDI

Gulf believes these benefits and reductions are directly related to the successes of the Company's new VM programs and that these benefits will continue to be experienced in the future.

VM storm hardening was responsible for reducing the effect large tree failures had on the distribution system. Gulf's 2007 Distribution Performance Metrics (Tables 3.10 through 3.15) reveal that Gulf continued to experience storm damage on its lateral system. Lateral data, unadjusted for storms, reveals 3,598 additional customer interruptions were experienced due to storm events. However, there were no additional CI or CMI to report in the unadjusted data for main-line feeders. While the number cannot be quantified, it is known that every avoided main-line feeder outage yields an average of 1,305 avoided CI and 98,000 avoided CMI. Gulf's main-line feeder maintenance and storm hardening programs appear to be having a positive impact on main-line feeder performance during storms. While Gulf's reconfigured VM programs are still in their infancy, early results are encouraging.

As the 2007 Distribution Performance Metrics (Sections 3.9 – 3.14) are reviewed, two conditions should be taken into account regarding program performance and comparisons of Three-Year Cycle Data to Company Program data. The Three-Year Cycle Base Program data represents a fully developed program, having the benefit of being completely cycled through each of its scheduled maintenance periods. The Three-Year Cycle data represents fully realized benefits from a fully established and maintained three-year cycle. The Company Program data represents only eight months of actual data from its revised 2007 VM Programs combined with three months of data from the Company's previous VM programs. It is anticipated that as the Company VM program matures, actual historical data will likely reflect positive reliability results related to storm hardening and every day performance.

3.9 2007 Distribution Performance Metrics (System Wide)

2007 System Vegetation Management Performance Metrics *(Table 3.9)*

System Wide	Feeders			Laterals		
	Unadjusted	Adjusted	Diff.	Unadjusted	Adjusted	Diff.
(A) Number of Outages (Note 2)	28	28	0	1,424	1,337	87
(B) Customer Interruptions	45,128	45,128	0	55,409	51,811	3,598
(C) Miles Cleared	1,878	1,878	0	675	675	0
(D) Remaining Miles	0	0	0	3,306	3,306	0
(E) Outages per Mile [A/(C+D)]	.015	.015	0	.358	.336	.022
(F) Vegetation CI per Mile [B/(C+D)]	24.02	24.02	0	13.92	13.01	.91
(G) Number of Hotspot Trims	139	139	0	737	737	0
(H) All Vegetation Management Costs ($)	2,752,375	2,752,375	0	1,784,584	1,784,584	0
(I) Customer Minutes of Interruption	3,407,281	3,407,281	0	7,722,856	7,215,548	507,308
(J) Outage Restoration Costs (Note 1)	N/A	N/A	N/A	N/A	N/A	N/A
(K) Vegetation Budget 2007 ($)	2,984,196	2,984,196	0	1,478,480	1,478,480	0
(L) Vegetation Goal 2007	1,844	1,844	0	662	662	0
(M) Vegetation Budget 2008 ($)		2,020,918			2,107,500	
(N) Vegetation Goal 2008 (Mi) (Note 3)	N/A	803	0	N/A	843	0
(O) Trim-Back Distance (ft)	10	10	0	10	10	0

3.10 2007 Distribution Performance Metrics (Western Region)

2007 Management Region Vegetation Management Performance Metrics *(Table 3.10)*

Western Region	Feeders			Laterals Note 4		
	Unadjusted	Adjusted	Diff.	Unadjusted	Adjusted	Diff.
(A) Number of Outages (Note 2)	23	23	0	901	814	87
(B) Customer Interruptions	38,848	38,848	0	36,684	33,086	2,878
(C) Miles Cleared	966	966	0	354	354	0
(D) Remaining Miles	0	0	0	1,852	1,852	0
(E) Outages per Mile [A/(C+D)]	.024	.024	0	.370	.369	.001
(F) Vegetation CI per Mile [B/(C+D)]	40.22	40.22	0	14.88	15.00	.12
(G) Number of Hotspot Trims	43	43	0	227	227	0
(H) All Vegetation Management Costs ($)	1,356,527	1,356,527	0	671,283	671,283	0
(I) Customer Minutes of Interruption	3,014,457	3,014,457	0	5,122,167	4,614,859	507,308
(J) Outage Restoration Costs (Note 1)	N/A	N/A	N/A	N/A	N/A	N/A
(K) Vegetation Budget 2007 ($)	1,593,917	1,593,917	0	671,283	671,283	0
(L) Vegetation Goal 2007	945	945	0	366	366	0
(M) Vegetation Budget 2008 ($)	1,010,459	1,010,459	0	1,053,750	1,053,750	0
(N) Vegetation Goal 2008 (Mi) (Note 3)	436	436	0	456	456	0
(O) Trim-Back Distance (ft)	10	10	0	10	10	0

3.11 2007 Distribution Performance Metrics (Central Region)

2007 Management Region Vegetation Management Performance Metrics *(Table 3.11)*

Central Region	Feeders			Laterals		
	Unadjusted	Adjusted	Diff.	Unadjusted	Adjusted	Diff.
(A) Number of Outages (Note 2)	1	1	0	211	211	0
(B) Customer Interruptions	7	7	0	5,723	5,723	0
(C) Miles Cleared	395	395	0	148	148	0
(D) Remaining Miles	0	0	0	618	618	0
(E) Outages per Mile [A/(C+D)]	.0025	.0025	0	.275	.275	0
(F) Vegetation CI per Mile [B/(C+D)]	.0177	.0177	0	7.47	7.47	0
(G) Number of Hotspot Trims	29	29	0	245	245	0
(H) All Vegetation Management Costs ($)	738,476	738,476	0	399,252	399,252	0
(I) Customer Minutes of Interruption	497	497	0	647,216	647,216	0
(J) Outage Restoration Costs (Note 1)	N/A	N/A	N/A	N/A	N/A	N/A
(K) Vegetation Budget 2007 ($)	721,794	721,794	0	337,775	337,775	0
(L) Vegetation Goal 2007	395	395	0	127	127	0
(M) Vegetation Budget 2008 ($)	505,230	505,230	0	526,875	526,875	0
(N) Vegetation Goal 2008 (Mi) (Note 3)	178	178	0	164	164	0
(O) Trim-Back Distance (ft)	10	10	0	10	10	0

3.12 2007 Distribution Performance Metrics (Eastern Region)

2007 Management Region Vegetation Management Performance Metrics *(Table 3.12)*

Eastern Region	Feeders			Laterals		
	Unadjusted	Adjusted	Diff.	Unadjusted	Adjusted	Diff.
(A) Number of Outages (Note 2)	4	4	0	312	312	0
(B) Customer Interruptions	6,273	6,273	0	13,002	13,002	0
(C) Miles Cleared	518	518	0	172	172	0
(D) Remaining Miles	0	0	0	836	836	0
(E) Outages per Mile [A/(C+D)]	.0077	.0077	0	.309	.309	0
(F) Vegetation CI per Mile [B/(C+D)]	12.11	12.11	0	12.90	12.90	0
(G) Number of Hotspot Trims	67	67	0	265	265	0
(H) All Vegetation Management Costs ($)	657,372	657,372	0	477,065	477,065	0
(I) Customer Minutes of Interruption	392,327	392,327	0	1,953,473	1,953,473	0
(J) Outage Restoration Costs (Note 1)	N/A	N/A	N/A	N/A	N/A	N/A
(K) Vegetation Budget 2007 ($)	668,485	668,485	0	469,422	469,422	0
(L) Vegetation Goal 2007	504	504	0	169	169	0
(M) Vegetation Budget 2008 ($)	505,230	505,230	0	526,875	526,875	0
(N) Vegetation Goal 2008 (Mi) (Note 3)	188	188	0	223	223	0
(O) Trim-Back Distance (ft)	10	10	0	10	10	0

3.13 2007 Distribution Feeder Comparison

2007 Feeder Comparison – Three-Year Cycle Based Program Vs Company Programs *(Table 3.13)*

System Wide	Three-Year Cycle Program			Company Program		
	Unadjusted	Adjusted	Diff.	Unadjusted	Adjusted	Diff.
(A) Number of Outages (Note 2)	N/A	20	N/A	28	28	0
(B) Customer Interruptions	N/A	31,893	N/A	45,128	45,128	0
(C) Miles Cleared	N/A	626	N/A	1,878	1,878	0
(D) Remaining Miles	N/A	1,252	N/A	0	0	0
(E) Outages per Mile [A/(C+D)]	N/A	.01	N/A	.015	.015	0
(F) Vegetation CI per Mile [B/(C+D)]	N/A	16.98	N/A	24.02	24.02	0
(G) Number of Hotspot Trims	N/A	N/A	N/A	139	139	0
(H) All Vegetation Management Costs ($)	N/A	2,560,966	N/A	2,752,375	2,752,375	0
(I) Customer Minutes of Interruption	N/A	2,379,514	N/A	3,407,281	3,407,281	0
(J) Outage Restoration Costs (Note 1)	N/A	N/A	N/A	N/A	N/A	N/A
(K) Trim-Back Distance (ft)	10	10	0	10	10	0

3.14 2007 Distribution Lateral Comparison

2007 Lateral Comparison – Three-Year Cycle Based Program Vs Company Programs *(Table 3.14)*

System Wide*	Three-Year Cycle Program			Company Program		
	Unadjusted	Adjusted	Diff.	Unadjusted	Adjusted	Diff.
(A) Number of Outages (Note 2)	N/A	936	N/A	1,424	1,337	87
(B) Customer Interruptions	N/A	35,964	N/A	55,409	51,811	3,598
(C) Miles Cleared	N/A	1,327	N/A	675	675	0
(D) Remaining Miles	N/A	2,654	N/A	3,306	3,306	0
(E) Outages per Mile [A/(C+D)]	N/A	.235	N/A	.358	.336	.022
(F) Vegetation CI per Mile [B/(C+D)]	N/A	9.03	N/A	13.92	13.01	.91
(G) Number of Hotspot Trims	N/A	N/A	N/A	737	737	0
(H) All Vegetation Management Costs ($)	N/A	5,429,528	N/A	1,784,584	1,784,584	0
(I) Customer Minutes of Interruption	N/A	5,056,467	N/A	7,722,856	7,215,548	507,308
(J) Outage Restoration Costs(Note1)	N/A	N/A	N/A	N/A	N/A	N/A
(K) Trim-Back Distance (ft)	10	10	0	10	10	0

Notes:

The current VM programs include tracking mechanisms that enable the Company to report on activities that have not historically been tracked. The Company's Vegetation Management program received FPSC approval in 2006, with program implementation beginning in January 2007. The new programs are still in the initial stages and have not been in service long enough to quantify actual performance or realize full benefits from these new VM programs.

Note 1 Outage Restoration Cost: Historical data not available for 2007.

Note 2 Eleven main-line outages occurred prior to starting storm hardening initiatives in April 2007, accounting for 20,804 CI and 1,609,623 minutes of customer interruption. While vegetation-caused CMI did not maintain 2007's goals, it must be noted that 47% of this CMI occurred before 2007 VM programs were fully operational and had an opportunity to impact the system's overall distribution reliability.

Note 3 Mileage goals for 2008 were updated to identify main-line feeder miles that exist along Gulf's distribution ROW corridors (these mileage amounts were not available in previous years). Main-line (feeder) goals for 2007 include all 3 phase mileage for Gulf Power's system.

3.15 2008 Distribution Vegetation Management Programs

The Company's 2008 Distribution Vegetation Management Programs will employ all of the elements of the Company's successful 2007 Programs (MATS, MICS, SALT, SHARP, and Customer Ticket Activity). Minor enhancements have been implemented into the Company's 2008 vegetation management programs to more effectively align Forestry Services' data collecting and reporting activities with the Company's overall storm hardening reporting systems.

Feeder Outage Investigating and Reporting System

Forestry Services is one of the six area contributors to DLOR and, as such, provides forensic investigation of all tree-caused feeder lock-outs. Forestry Services evaluates each tree-caused event to determine if the outage should have been prevented by the Company's VM program. The forensic data is also used to refine VM programs to ensure the trees-causing outages fit the tree profile targeted by the Company's SHARP program.

Enhancements to the 2008 SHARP Program

In 2007, the Company far exceeded its SHARP goal of 5,000 off-ROW tree conditions by correcting over 13,100 off-ROW tree conditions. Since the 2007 program targeted trees which were dead or dying due to past storms and drought, the program was well received by Gulf's customers. However, as the program continues and begins to target green trees, it is anticipated that customer support will decline, thus reducing the number of customers who will allow the Company to address off-ROW tree conditions that pose a threat during storms. The Company's 2008 SHARP goal has, therefore, been set at 5,000 trees.

3.16 Company's Overall Vegetation Management Summary

Gulf's 2007 vegetation management accomplishments met or exceeded Gulf's targeted goals. The real success of the Company's new VM programs will be more fully realized in three to six years as the distribution feeder main-line and lateral programs have time to completely move through their scheduled maintenance cycle periods.

Forestry Services personnel will continue to assist the Company's efforts to provide safety and educational information to the public. These educational programs provide information to the public about effective ways to live and play safely and responsibly around electric utility power lines. During 2007, Company employees presented programs to 59

police, fire, city and county agencies and to more than 126 local area schools, reaching over 12,700 people.

System safety and reliability are the key components covered through these safety and educational presentations. The influences vegetation can have of the safety and reliability of the electric utility systems are also included through these programs. Company, community, and individual vegetation responsibilities are presented responsibly and clearly during each presentation. Attendees are shown how responsible vegetation stewardship is important to the Company and to each home owner's safety and service reliability. Gulf Power believes educating today's customers, young future customers, and community leaders will continue to help reduce vegetation-caused outages in the future.

Forestry Services will continue to analyze the new technical improvements and advanced VM methods being studied within the electric utility industry. One very promising and detailed study being conducted is focused on many of the same vegetation management practices that are included in Gulf Power's revised VM programs. Early results from this study have shown reliability improvements, but the study is quite large and not scheduled for final completion until 2011.

The Company's Forestry Services personnel will continue to review and evaluate new vegetation management research and studies, operational techniques and processes, and the current program to help ensure the Company's vegetation management programs are both effective and cost efficient. The Company's 2008 VM programs will continue the successful, validated work-plans and practices employed during 2007. Storm hardening activities, transmission hazard tree removal programs, and distribution main-line feeder and lateral VM programs will continue to be a priority for the Company. As these vegetation management programs develop, the Company will continue to evaluate their overall performance on an annual basis, using reliability data and forensic storm data analysis as its primary evaluation tools.

4.0 Joint Use Pole Attachment Audits

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

a) Percent of system audited: 100% feeders: 100%
   Laterals: 100%
b) Date audit conducted? May 1, 2006 through September 30, 2006

c) Date of previous audit? 2001
d) List of audits conducted annually: None in the out years.

Gulf Power has also initiated an annual program to perform pole strength and loading analysis of 500 poles located along major evacuation routes. The poles selected are twenty years or older and have at least three third party attachers. The results of the 2007 testing program are shown in the table below.

4.1 Activity and Costs Incurred for 2007 and 2008 Projections

1	2007 Joint Use Pole Audit	N/A
2	2008 Pole Strength and Loading Engineering and Replacements	$400,000

4.2 Joint Use Attachment Audits – Distribution Poles

(A) Number of company owned distribution poles (See Note 1)	246,434
(B) Number of company distribution poles leased: 9 Telecomm attachers on Gulf's poles (See Note 2)	128,402
(C) Number of owned distribution pole attachments: 9 CATV, numerous Government and other 3rd party attachers on Gulf's poles (See Note 3)	156,005
(D) Number of leased distribution pole attachments: Foreign poles Gulf Power is attached to (See Note 4)	63,048
(E) Number of authorized attachments: Sum of all attachments to Gulf Power Company poles (See Note 4)	260,572
(F) Number of unauthorized attachments: Gulf's best estimate based on Joint Use Pole Inventory results (See Note 3)	6,379
(G) Number of distribution poles strength tested:	500
(H) Number of distribution poles passing strength test	457
(I) Number of distribution poles failing strength test (overloaded)	41
(J) Number of distribution poles failing strength test (other reasons)	2
(K) Number of distribution poles corrected (strength failure)	0
(L) Number of distribution poles corrected (other reasons)	0
(M) Number of distribution poles replaced: M=I + J (See Note 5)	43
(N) Number of apparent NESC violations involving electric infrastructure:	Note 6
(O) Number of apparent NESC violations involving 3rd party facilities:	Note 6

Note 1: As of December 2007.
Note 2: Number of Companies changed due to consolidation of contracts.
Note 3: Data based on the 2006 Pole Audit.
Note 4: Data based on permitting done in 2007.
Note 5: Corrective measures for the 43 poles involve replacing 20 of the 43 poles in place, setting an additional 58 intermediate poles, and removing facilities and subsequently pulling 6 poles.
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 has corrective measures that are taken.

5.0 Six-Year Inspection Cycle for Transmission Structures

5.1 Activity and Costs Incurred for 2007 and 2008 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 results in a structure being inspected at least every six years.

In 2007, Gulf Power spent a total of $73,123 on a combination of wood ground line treatment and steel ground line inspection contractors. In addition to this amount, Gulf Power spent $139,274 on a combination of comprehensive walking inspections, aerial inspections and emergency inspections. The number of structures inspected and the amount of dollars spent, as shown in Table 5.4, were for the comprehensive walking and the wood ground line treatment inspections. All inspections are proceeding as planned to meet the required six-year timeline.

In 2008, Gulf Power plans to continue its inspection schedule at the rate such that one sixth of the system's structures will be addressed. The projected expenditure for these inspections is $76,055. The breakdown of this amount is shown in the 2008 columns of Table 5.3 and Table 5.4.

5.2 Transmission Circuit, Substation and Other Equipment Inspections

	2007 Activity		2007 Budget		2008	
	Goal	Actual	Budget	Actual	Goal	Budget
(A) Total Transmission Circuits	N/A [Note 2]					
(B) Planned Transmission circuit inspections						
(C) Completed Transmission circuit inspections						
(D) Percent of transmission circuit inspections completed						
(E) Planned transmission substation inspections	32	-	-	-	33	Note 1
(F) Completed transmission substation inspections	-	32	Note 1	Note 1	-	-
(G) Percent transmission substation inspections completed	-	100%	-	-	-	-
(H) Planned transmission equipment inspections (other equipment)	-	-	-	-	-	-
(I) Completed transmission equipment inspections (other equipment)	-	-	-	-	-	-
(J) Percent of transmission equipment inspections completed (other equipment)	-	-	-	-	-	-

Notes:

Note 1 Substation inspection dollars are not tracked separate from general Maintenance.
Note 2 Gulf Transmission does not inspect by circuit.

5.3 Transmission Tower Structure Inspections

	2007 Activity		2007 Budget		2008	
	Goal	Actual	Budget	Actual	Goal	Budget
(A) Total Transmission tower structures	-	2,551	-	-	-	-
(B) Planned Transmission tower structure inspections	118	-	$29,500	$47,842	137	$34,250
(C) Completed Transmission tower structure inspections	-	118	-	-	-	-
(D) Percent of transmission tower structure inspections completed	-	4.6%	-	-	-	-

5.4 Transmission Pole Inspections

	2007 Activity		2007 Budget		2008	
	Goal	Actual	Budget	Actual	Goal	Budget
(A) Total number of Transmission Poles	-	13,300	-	-	-	-
(B) Number of transmission poles strength tested	3,450	3,450	$76,425	$73,322	2,787	$41,805
(C) Number of transmission poles passing strength test	-	3,205	-	-	-	-
(D) Number of transmission poles failing strength test (overloaded)	-	0	-	-	-	-
(E) Number of transmission poles failing strength test (other reasons)	-	245	-	-	-	-
(F) Number of transmission poles corrected (strength failure)	-	0	-	-	-	-
(G) Number of transmission poles corrected (other reasons)	-	314	-	-	-	-
(H) Total transmission poles replaced	-	314	-	-	-	-

6.0 Storm Hardening Activities for Transmission Structures

6.1 Activity and Costs Incurred for 2007 and 2008 Projections

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

Gulf Power Company believes that the two activities chosen 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

	Activity		Current Budget		Next Year	
	Goal	Actual	Budget	Actual	Goal	Budget
(A) Transmission structures scheduled for hardening	300	-	$600,000	-	300	$600,000
(B) Transmission structures hardening completed	-	342	-	N/A Note 1	-	-
(C) Percent Transmission structures hardening completed	-	114%	-	-	-	-

NOTES:

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

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 trend occurring in the future. The review of data for the past five years does not show any trends or patterns for distribution substation reliability.

7.2 Distribution Substation Reliability Tracking

Each abnormal substation related outage is reviewed and actions are taken to reduce possible future outages from happening 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 which include visual checks on all equipment including breakers, regulators, transformers and battery banks. The substation is verified to have the proper signs installed, the fence is checked for security and proper grounding, yard lights checked, and weed problems noted. A visual inspection of all structures, buss work, switches and capacitor banks is also completed. Any abnormal condition is repaired immediately or recorded as an abnormal situation to be repaired at some time scheduled in the future based on priority.

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. Oil Breakers preventative diagnostics are performed every two years. 12kV vacuum breakers have a preventative diagnostic performed every four years. Preventative diagnostics are performed every year on regulators. Transformers have a dissolved gas analysis performed every year and power factor testing is performed every six years.

7.4 Distribution Substation Inspections during Normal Operations

In 2007, Gulf inspected all of its distribution substations at least once.

8.0 Geographic Information System (GIS)

8.1 Activity and Costs Incurred for 2007 and 2008 Projections

In respect to distribution, Gulf has completed its mapping transition to its new Distribution Geographic Information System, called **DistGIS.**

Transmission uses the same software as Distribution to map the GIS data. All data that is mapped on the Transmission Mapping tools is pulled from the Common Transmission Database (CTDB). Transmission collects data from the CTDB through various means. There are two methods by which Gulf's data is primarily collected. The first is through inspection with results recorded on field computers using the Transmission Lines Inspection System (TLIS). This data is transferred into the CTDB and then extracted into various mapping programs. The second method involves the use of aerial imagery and the ESRI ArcMap program to select coordinates for existing structures. All updates made to the transmission system are captured in the CTDB and are then available in GIS format.

At the current rate of data collection and population of the CTDB, Gulf will complete the initial mapping of its transmission system into the GIS database within the next five years.

8.2 Distribution Overhead Data Input

All overhead distribution equipment has been captured in Gulf's DistGIS. This includes conductors, regulators, capacitors and switches, protective devices such as reclosers, sectionalizers, fuses and transformers. The DistGIS is updated with any additions and changes as the associated work orders for maintenance, system improvements, and new business are completed. This 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. This includes conductors, regulators, capacitors and switches, protective devices such as reclosers, sectionalizers, fuses and transformers. The DistGIS is updated with any additions and changes as the associated work orders for maintenance, system improvements, and new business are completed. This 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.

8.4 Transmission Overhead Data Input

	2007 Activity		2007 Budget		2008	
	Goal	Actual	Budget	Actual	Goal	Budget
(A) Total number of system wide OH transmission assets for input	-	12,856	N/A Note 1		12,856	N/A Note 1
(B) Number of OH transmission assets currently on system	-	6,529			7,593	
(C) Percent of OH transmissions assets already on system	-	50.8%			59.1%	
(D) Annual OH transmission assets targeted for input	1,064	-			1,064	
(E) Annual OH transmission assets input to system	-	2155			-	
(F) Annual percent of OH transmission assets input	-	16.8%			-	

Notes:

1. This data is captured as part of the inspection process and, therefore, is not tracked separately.

8.5 Transmission Underground Data Input

	2007 Activity		2007 Budget		2008	
	Goal	Actual	Budget	Actual	Goal	Budget
(A) Total number of system wide UG transmission assets for input	N/A Note 2	0	N/A Note 2			
(B) Number of UG transmission assets currently on system		3				
(C) Percent of UG transmission assets already on system		100				
(D) Annual UG transmission assets targeted for input		0				
(E) Annual UG transmission assets input to system		0				
(F) Annual percent of UG transmission assets input		0				

Notes:

1. Gulf Power Company defines an underground transmission asset as the complete installation from termination to termination.
2. Gulf Power Company already has GIS data on the location of all of its underground transmission facilities.

9.0 Post Storm Data Collection and Forensic Analysis

9.1 Activity and Costs Incurred for 2007 and 2008 Projections

Distribution:
During 2007, Gulf worked with Osmose, Inc. and KEMA, Inc. to finalize the forensic process for the Company. Osmose will be the contractor that will aid Gulf in collecting the data in the field after a storm. Osmose will have hand-held computers to collect the data. These computers contain a copy of Gulf's infrastructure which will aid in collecting the information in the field. Data will only be collected on poles that incurred damage during the storm. To reduce the collection time in the field, general information on the poles is stored in Gulf's GIS database. This general information will be paired with the data collected in the field by using GPS coordinates or by a unique pole number. Osmose will collect information on the damage that occurred and this information will be supplied to KEMA to perform a forensic analysis for Gulf. This analysis will be the basis of a report containing an executive summary, description of the data collected, preliminary storm data, areas affected and the analysis results in tabular and graphical results.

This data collection and transfer process was tested twice during 2007. An initial test was performed on a small sample of poles to ensure the process of exchanging information from one contractor to another would not present a problem during a storm situation. Later in the year, a second test was successfully completed on a larger sample of poles.

Transmission:
Gulf Power Company's Transmission department's forensics team will be lead 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 these failures with the Transmission Line Inspection Tool (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 inspectors and determine if additional information should be gathered.

Gulf Power's existing CTDB will be utilized to capture all forensics 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

There is no major storm related data available for this section since Gulf was not affected by a National Weather Service named storm in 2007.

10.1 Activities and Costs Incurred in 2007 and 2008 Projections

As reported last year in the first quarter of 2007, Gulf implemented additional 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 began 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. The outage management software used to collect the outage data and the outage management software database used to store the outage data was modified to capture this information. Since this is the first year of collecting data to this level of detail, no meaningful observations can be made at this time.

In 2008, further expansion of data recording is being reviewed to determine what added information may be of value in this collection process.

The costs for this were minimal as it utilizes existing systems and processes.

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 the governmental entities involved to review the scope of the projects, the steps involved in the design, and discuss the coordination of 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 communication survey with the four active EOCs in Northwest Florida to gauge the Company's participation and communication levels with the EOCs. The Directors for the Escambia County, Santa Rosa County, Okaloosa County, and Bay County EOCs were asked to complete a survey regarding Gulf's participation level, responsiveness, presence in the EOC, and overall information exchange. All four EOCs rated Gulf Power's coordination efforts as outstanding in 2007. As the surveys attest, Gulf Power values and actively pursues a positive, cooperative relationship with the leadership in every community served.

In addition to being active partners with these 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 hosts Community Leader Forums each year 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.

Once a year, Gulf invites community leaders from all over Northwest Florida to the Gulf Power Economic Symposium – a two-day event designed to bring together regional and state decision-makers. This meeting is normally attended by more than 450 decision-makers who discuss common challenges and opportunities. Included in this meeting is a presentation by the FPSC to ensure good, open communications and cooperation between communities, Gulf Power, and the state.

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

11.1 Ongoing Programs

a) Number of city/county liaisons initiated.

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 positions 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:

- Executive Board Member of BRACE (Be Ready Alliance for Coordinating for Emergencies). BRACE is an Escambia County organization unique to Florida but part of a federal government directive that encourages communities to develop more effective preparedness programs for various types of disasters. The federal government organization is called COAD (Communities Organized and Active in Disasters). BRACE meets on a monthly basis.
- Member of Okaloosa County Emergency Management Committee. This Committee is a coordinated effort between government and business to address emergency preparedness issues on a monthly basis.
- Member of Walton County Mitigating Committee. This Committee provides an interactive dialogue between Walton County officials and businesses in order to coordinate efforts on many issues, including emergency preparedness and infrastructure needs.

Gulf Power Line Clearance Specialists and Forestry Services Technicians communicate routinely with members of the community; local municipal, county, state, and federal officials; and military leaders concerning area vegetation projects, needs, and concerns associated with: (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 can range from office and field visits to phone and radio conversations.

b) Number of periodic communications initiated with cities/counties.

Gulf Power personnel communicate with local government personnel on a daily/weekly basis.

c) Number of restoration training and assistance programs conducted.

In addition to numerous planning meetings with the EOCs, Gulf Power personnel also participated in the following 2007 hurricane drills:

- Escambia County EOC – 2 Hurricane Drills in 2007
- Santa Rosa County EOC – 1 Hurricane Drill in 2007
- Okaloosa County EOC – 1 Hurricane Drill in 2007
- Bay County EOC – 1 Hurricane Drill in 2007

d) Number of city/county problem resolution plans.

Gulf Power has developed a single Emergency Operations Plan. There is no need for multiple plans.

11.2 Storm Preparation

a) Number of communication links and contingency plans established.

Gulf Power Company has 12 employees dedicated to the county EOCs throughout Northwest Florida. Each of those employees have received federal certification under the National Incident Management System (NIMS). 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.

b) Number of operational contingency plans developed for emergency services.

All Gulf Power contingency plans are incorporated into its central Emergency Operations Plan.

c) Number of public communication plans developed prior to, during and after the storm.
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

a) Number of emergency communication links maintained.

Gulf has 12 employees assigned to the Northwest Florida EOCs. Depending on how many counties activate their emergency operations centers for a storm event, Gulf will maintain a communication link with the activated EOCs. No Northwest Florida EOCs were activated for hurricanes during 2007.

b) Number of priority emergency services restored.

Gulf Power always restores priority emergency services as quickly as possible. There were no hurricane-related outages to priority emergency services during 2007.

c) For each tropical storm, hurricane and other emergency event impacting the utility's service area, what community coordination action did the utility pursue not otherwise in a) and b) above?

Not applicable for 2007.

12.0 Collaborative Research

12.1 Activity and Costs Incurred for 2007 and 2008 Projections

1	2007 Collaborative Research	$24,130
2	2008 Collaborative Research Expenditures to date	$20,000

12.2 Project Planning Report

As a member of PURC, Gulf is participating in the research activities for Storm Hardening as described by PURC management in Appendix Four.

13.0 Disaster Preparedness and Recovery Plan

Gulf's 2007 plan had no major revisions from what was submitted for 2006. A copy can be provided upon request.

13.1 Activity and Costs Incurred for 2007 and 2008 Projections

Gulf anticipates an expenditure of $5,000 to enhance the communication infrastructure in the Pine Forest bunker facility. This work will be completed by June 1, 2008.

13.2 Disaster Recovery Plan Activity

Gulf's 2008 Storm Procedures Manual is currently being reviewed by management. Revisions, if any, will be returned and incorporated in the Manual by June 1, 2008. Training schedules are being developed now, with plans for the training to be completed prior to hurricane season.

14.0 Storm Season Ready Status

The following is an overview of Gulf Power Company's 2008 Hurricane Preparedness Briefing.

- Transmission Inspections
    - All critical lines will be inspected by May 1, 2008
    - The complete transmission system has been inspected aerially once in 2008. Gulf Power typically performs four aerial inspections annually;
    - Comprehensive walking/climbing and ground line inspection six-year program ensures:
        - 85% of inspections will be complete by August 1, 2008

- Vegetation Management
    - VM Contracts for Storm Restoration Resources
        - Storm Restoration contracts have been established with numerous VM contractors to ensure sufficient crew and equipment resources are available to support the Company's T&D ROW corridor VM storm restoration requirements.
    - Transmission Rights-of-Way (ROW) Corridors
        - All transmission ROW corridors will be inspected to identify and correct vegetation conditions that pose a hazard to the transmission system within the following 12 months and/or during periods of adverse weather conditions.
    - Distribution Rights-of-Way (ROW) Corridors
        - All main-line three phase feeder ROW corridors will be inspected to identify and correct vegetation conditions that pose a hazard to the distribution main-line three phase feeder systems within the following 12 months and/or during periods of adverse weather conditions.
        - Off ROW danger tree removal will continue to take place throughout 2008.

In summary, Gulf Power Company is fully prepared for the 2008 hurricane season. The following summarizes Gulf's intent for the 2008 season.

Storm Recovery Plan

Gulf Power Company uses the plans described in its Storm Recovery Plan to respond to any natural disaster that may occur in northwest Florida. These plans have previously proven to be very effective in recovering from multiple storms that have impacted Gulf Power and its customers. As part of its annual operations, Gulf Power has developed and refined its planning and preparations for the possibility of a natural disaster 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.

As previously stated, the Storm Recovery Plan is annually updated as improvements or modifications arise. For 2008, the following updates have been incorporated into the Storm Recovery Plan:

- In the event of a Category 4 or 5 storm, a core group of Gulf employees will occupy the recently constructed Company Emergency Management Center (CEMC) "Bunker Facility" location, rather than the previously utilized Pace Boulevard complex.
- Due to organizational changes within Gulf, employee storm assignments have been aligned to the new structure, resulting in modification and/or deletion of some Plan exhibits.
- Gulf Power's Fleet Maintenance personnel have been moved from their temporary facility at Pine Forest to a more centralized permanent location entitled the Vehicle Maintenance Center (VMC) in Milton, Florida. This location is closer to the Interstate 10 corridor.
- The primary staging site for fuel tankers has been moved to the new Vehicle Maintenance Center (VMC). All fuel requests will be dispatched to the VMC prior to sending out to the main staging areas.
- A centralized parts department will be housed at the new Vehicle Maintenance Center (VMC) where all vehicle repair parts will be issued and tracked.

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 consistent with protecting the safety of everyone involved.

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

15.0 2007 Reliability Performance

15.1 Overall Performance

Gulf Power's indices, both actual and adjusted, show improved reliability for 2007. There was a 35% and 40% improvement respectively. There are indications that the "lingering affects" from the 2004 and 2005 storm seasons are beginning to diminish.

In 2007, to continue to improve the company's distribution reliability, Gulf developed a tracking tool to investigate feeder outages called DLOR which stands for **D**istribution **L**ock-**O**ut **R**eport. DLOR was developed 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. Areas throughout the Company are utilizing DLOR as their distribution reporting and investigating tool. The collective contributions gathered through DLOR have already helped analyze causes of several distribution breaker outages. DLOR continues to correctly identify and effectively respond to these types of outages throughout the Company's distribution system.

The DLOR system emails key individuals when any breaker outage occurs, and assigns a file location for outage data to be centrally collected. As restoration and investigations activities are in process, DLOR continues to alert key personnel by email when updates are added. These individuals update DLOR as each phase of their restoration and investigations are completed. Feeder identification and trouble location, outage date and times, weather and line conditions and field comments are examples of the information collected. This data is available, real time and 24 hours a day to all key individuals and managers throughout the Company. An Operations Manager is assigned to each outage within DLOR. It is the assigned Operations Manager's responsibility to oversee restoration efforts, review investigation findings, and prepare DLOR final reports for each event or outage he/she is assigned.

DLOR Contributors are made up from the Company's Technical Services, Vegetation Management, Substation, System Protection, and Other Manager/Supervisor areas.

See Appendix One for 2007 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 2007, Gulf was impacted by several storm events which met the FPSC exclusion criteria.

Gulf's review of reliability and system data indicates that the carry over effects from the 2004 and 2005 storm season are beginning to level off. An example of this is shown in Gulf's summary of the scrapping data for overhead and underground transformers show below. In 2007, the overhead transformers scrapped have dropped to pre-Ivan (2004) levels. The underground transformers slightly increased. In Gulf's analysis, this is likely due to water intrusion that has more of a long term effect leading to slower failures which leads to a longer recovery period for underground facilities.

YEAR	OVERHEADS	% OH CHANGE Compared to 99 - 03 Average of 1523	PADMOUNTS	% 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%

Gulf's adjusted total system outages (N) from 2006 to 2007 stayed approximately the same. Outage causes typically associated with storms such as "Lightning", "Wind/Rain", and "Unknown" showed an 8%, 74%, and 25% decrease respectively. This decrease was offset by several outage causes showing an increase such as "Deterioration", "Animal" and "Tree".

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 2007.

15.6 Transmission Events – Adjustments

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

15.7 Extreme Weather – Adjustments

Gulf had the following weather events which met the FPSC exclusion criteria.

The March 1-2, 2007 Storm indices are as follows (exclusion based on Escambia County EOC activation):

- SAIDI = 0.85
- SAIFI = 0.013
- CAIDI = 66.88
- N = 74
- CMI = 362,176
- CI = 5,415

The October 18, 2007 Tornado indices are as follows:

- SAIDI = 5.07
- SAIFI = 0.029
- CAIDI = 189.33
- N = 132
- CMI = 2,167,258
- CI = 11,447

15.8 Other Distribution Adjustments

Please see Appendix One 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 for five years for the top ten causes of outage events.

Cause	(All)						
Region	Data	2002	2003	2004	2005	2006	2007
Central	N	2,739	2,544	2,097	2,371	2,404	2,567
	% Change	15%	-7%	-18%	13%	1%	7%
Eastern	N	1,743	1,863	1,572	1,719	2,273	1,917
	% Change	9%	7%	-16%	9%	32%	-16%
Western	N	6,486	5,587	5,214	5,548	5,199	5,466
	% Change	3%	-14%	-7%	6%	-6%	5%
Company	N	10,968	9,994	8,883	9,638	9,876	9,950
	% Change	7%	-9%	-11%	8%	2%	1%

Cause	Lightning						
Region	Data	2002	2003	2004	2005	2006	2007
Central	N	443	458	334	361	427	447
	% Change	42%	3%	-27%	8%	18%	5%
Eastern	N	292	413	275	270	461	378
	% Change	-12%	41%	-33%	-2%	71%	-18%
Western	N	1,130	956	932	1,220	1,419	1,287
	% Change	15%	-15%	-3%	31%	16%	-9%
Company	N	1,865	1,827	1,541	1,851	2,307	2,112
	% Change	14%	-2%	-16%	20%	25%	-8%

Cause	Deterioration						
Region	Data	2002	2003	2004	2005	2006	2007
Central	N	446	394	400	439	497	573
	% Change	8%	-12%	2%	10%	13%	15%
Eastern	N	292	325	319	343	365	430
	% Change	0%	11%	-2%	8%	6%	18%
Western	N	939	875	892	852	1,052	1,185
	% Change	12%	-7%	2%	-4%	23%	13%
Company	N	1,677	1,594	1,611	1,634	1,914	2,188
	% Change	9%	-5%	1%	1%	17%	14%

Cause	Animal						
Region	Data	2002	2003	2004	2005	2006	2007
Central	N	1,082	811	556	532	611	730
	% Change	6%	-25%	-31%	-4%	15%	19%
Eastern	N	452	349	264	264	412	345
	% Change	18%	-23%	-24%	0%	56%	-16%
Western	N	2,540	1,840	1,192	690	586	1,014
	% Change	-2%	-28%	-35%	-42%	-15%	73%
Company	N	4,074	3,000	2,012	1,486	1,609	2,089
	% Change	2%	-26%	-33%	-26%	8%	30%

Cause	Tree						
Region	Data	2002	2003	2004	2005	2006	2007
Central	N	132	169	197	170	217	219
	% Change	4%	28%	17%	-14%	28%	1%
Eastern	N	223	207	211	170	249	325
	% Change	17%	-7%	2%	-19%	46%	31%
Western	N	757	630	785	640	827	875
	% Change	0%	-17%	25%	-18%	29%	6%
Company	N	1,112	1,006	1,193	980	1,293	1,419
	% Change	3%	-10%	19%	-18%	32%	10%

Cause	Unknown						
Region	Data	2002	2003	2004	2005	2006	2007
Central	N	348	474	330	518	218	224
	% Change	39%	36%	-30%	57%	-58%	3%
Eastern	N	217	315	243	368	274	151
	% Change	39%	45%	-23%	51%	-26%	-45%
Western	N	585	827	817	1,351	495	367
	% Change	13%	41%	-1%	65%	-63%	-26%
Company	N	1,150	1,616	1,390	2,237	987	742
	% Change	25%	41%	-14%	61%	-56%	-25%

Cause	Wind/Rain						
Region	Data	2002	2003	2004	2005	2006	2007
Central	N	29	30	28	38	172	37
	% Change	38%	3%	-7%	36%	353%	-78%
Eastern	N	34	29	29	41	251	40
	% Change	100%	-15%	0%	41%	512%	-84%
Western	N	63	36	61	156	257	98
	% Change	17%	-43%	69%	156%	65%	-62%
Company	N	126	95	118	235	680	175
	% Change	37%	-25%	24%	99%	189%	-74%

Cause	Vehicle						
Region	Data	2002	2003	2004	2005	2006	2007
Central	N	69	50	59	85	62	62
	% Change	33%	-28%	18%	44%	-27%	0%
Eastern	N	62	51	58	52	65	63
	% Change	38%	-18%	14%	-10%	25%	-3%
Western	N	115	126	186	287	157	211
	% Change	5%	10%	48%	54%	-45%	34%
Company	N	246	227	303	424	284	336
	% Change	19%	-8%	33%	40%	-33%	18%

Cause	Overload						
Region	Data	2002	2003	2004	2005	2006	2007
Central	N	73	38	51	66	46	71
	% Change	87%	-48%	34%	29%	-30%	54%
Eastern	N	60	76	53	84	65	63
	% Change	3%	27%	-30%	58%	-23%	-3%
Western	N	88	87	108	104	112	137
	% Change	-15%	-1%	24%	-4%	8%	22%
Company	N	221	201	212	254	223	271
	% Change	11%	-9%	5%	20%	-12%	22%

Cause	Dig In						
Region	Data	2002	2003	2004	2005	2006	2007
Central	N	32	24	51	52	50	79
	% Change	-22%	-25%	113%	2%	-4%	58%
Eastern	N	24	22	33	40	32	19
	% Change	9%	-8%	50%	21%	-20%	-41%
Western	N	34	35	36	44	62	32
	% Change	-37%	3%	3%	22%	41%	-48%
Company	N	90	81	120	136	144	130
	% Change	-23%	-10%	48%	13%	6%	-10%

Cause	Contamination/Corrosion						
Region	Data	2002	2003	2004	2005	2006	2007
Central	N	12	6	21	32	36	35
	% Change	-48%	-50%	250%	52%	13%	-3%
Eastern	N	7	15	24	28	29	37
	% Change	-46%	114%	60%	17%	4%	28%
Western	N	36	16	18	58	72	71
	% Change	50%	-56%	13%	222%	24%	-1%
Company	N	55	37	63	118	137	143
	% Change	-8%	-33%	70%	87%	16%	4%

The SAIDI and SAIFI trend tables showing the percentage change for five years for the top ten causes are shown below. They show the same trends as mentioned for N. Gulf is still in the process of analyzing data to determine the need for any specific improvement activities beyond current programs and storm hardening initiatives which are underway.

Cause	(All)						
Region	Data	2002	2003	2004	2005	2006	2007
Central	SAIDI	101.26	67.29	75.37	121.09	174.13	109.35
	% Change	58%	-34%	12%	61%	44%	-37%
Eastern	SAIDI	77.26	74.39	68.53	78.74	331.38	100.44
	% Change	33%	-4%	-8%	15%	321%	-70%
Western	SAIDI	88.81	83.57	116.50	129.79	157.55	145.73
	% Change	-7%	-6%	39%	11%	21%	-8%
Company	SAIDI	89.17	77.18	93.91	114.87	205.12	124.80
	% Change	14%	-13%	22%	22%	79%	-39%

Cause	(All)						
Region	Data	2002	2003	2004	2005	2006	2007
Central	SAIFI	1.025	0.818	0.748	1.349	1.276	0.952
	% Change		-20%	-9%	80%	-5%	-25%
Eastern	SAIFI	0.812	0.830	0.650	0.712	1.288	1.121
	% Change		2%	-22%	10%	81%	-13%
Western	SAIFI	1.021	0.927	1.077	1.237	1.274	1.323
	% Change		-9%	16%	15%	3%	4%
Company	SAIFI	0.971	0.876	0.886	1.135	1.278	1.176
	% Change		-10%	1%	28%	13%	-8%

Cause	Lightning						
Region	Data	2002	2003	2004	2005	2006	2007
Central	SAIDI	29.79	20.30	20.90	22.86	37.07	32.78
	% Change	148%	-32%	3%	9%	62%	-12%
Eastern	SAIDI	12.96	15.86	19.05	21.41	52.12	26.47
	% Change	-5%	22%	20%	12%	143%	-49%
Western	SAIDI	24.76	29.66	26.90	40.01	44.79	36.73
	% Change	16%	20%	-9%	49%	12%	-18%
Company	SAIDI	23.18	23.92	23.40	30.97	44.61	33.09
	% Change	36%	3%	-2%	32%	44%	-26%

Cause	Lightning						
Region	Data	2002	2003	2004	2005	2006	2007
Central	SAIFI	0.295	0.229	0.201	0.292	0.261	0.269
	% Change	131%	-22%	-12%	46%	-11%	3%
Eastern	SAIFI	0.117	0.145	0.119	0.178	0.290	0.268
	% Change	-10%	24%	-18%	50%	62%	-7%
Western	SAIFI	0.219	0.294	0.197	0.288	0.306	0.311
	% Change	3%	34%	-33%	46%	7%	1%
Company	SAIFI	0.213	0.241	0.179	0.262	0.290	0.289
	% Change	25%	13%	-26%	46%	11%	0%

Cause	Deterioration						
Region	Data	2002	2003	2004	2005	2006	2007
Central	SAIDI	16.95	9.57	13.70	23.54	42.01	17.45
	% Change	9%	-44%	43%	72%	78%	-58%
Eastern	SAIDI	12.94	10.99	13.08	8.71	16.14	15.99
	% Change	27%	-15%	19%	-33%	85%	-1%
Western	SAIDI	10.17	8.05	10.76	9.51	13.61	19.37
	% Change	12%	-21%	34%	-12%	43%	42%
Company	SAIDI	12.57	9.15	12.10	12.93	21.62	18.01
	% Change	14%	-27%	32%	7%	67%	-17%

Cause	Deterioration						
Region	Data	2002	2003	2004	2005	2006	2007
Central	SAIFI	0.121	0.089	0.100	0.184	0.159	0.163
	% Change	0%	-26%	12%	84%	-14%	2%
Eastern	SAIFI	0.117	0.104	0.120	0.059	0.115	0.168
	% Change	78%	-11%	15%	-51%	94%	46%
Western	SAIFI	0.095	0.063	0.071	0.061	0.104	0.173
	% Change	3%	-34%	13%	-15%	71%	66%
Company	SAIFI	0.107	0.080	0.091	0.092	0.121	0.169
	% Change	15%	-26%	14%	2%	31%	40%

Cause	Animal						
Region	Data	2002	2003	2004	2005	2006	2007
Central	SAIDI	10.44	5.83	5.66	4.81	7.49	11.67
	% Change	47%	-44%	-3%	-15%	56%	56%
Eastern	SAIDI	4.68	6.05	1.80	3.58	9.51	5.03
	% Change	14%	29%	-70%	99%	166%	-47%
Western	SAIDI	9.09	7.16	6.41	2.84	3.23	5.33
	% Change	8%	-21%	-10%	-56%	13%	65%
Company	SAIDI	8.36	6.55	5.07	3.53	5.90	6.88
	% Change	19%	-22%	-23%	-30%	67%	17%

Cause	Animal						
Region	Data	2002	2003	2004	2005	2006	2007
Central	SAIFI	0.172	0.088	0.077	0.063	0.103	0.153
	% Change	45%	-49%	-12%	-18%	62%	49%
Eastern	SAIFI	0.061	0.093	0.024	0.035	0.105	0.063
	% Change	-24%	52%	-74%	42%	203%	-39%
Western	SAIFI	0.144	0.110	0.079	0.037	0.042	0.074
	% Change	5%	-23%	-29%	-54%	15%	78%
Company	SAIFI	0.131	0.100	0.065	0.043	0.073	0.092
	% Change	10%	-23%	-35%	-34%	71%	25%

Cause	Tree						
Region	Data	2002	2003	2004	2005	2006	2007
Central	SAIDI	6.82	3.80	7.47	6.28	10.79	5.94
	% Change	195%	-44%	97%	-16%	71%	-45%
Eastern	SAIDI	10.84	10.39	10.23	8.87	15.49	22.01
	% Change	-8%	-4%	-2%	-13%	75%	42%
Western	SAIDI	24.43	14.93	28.96	15.58	36.55	37.40
	% Change	15%	-39%	94%	-46%	135%	2%
Company	SAIDI	16.64	10.98	18.72	11.52	24.61	25.39
	% Change	18%	-34%	70%	-39%	114%	3%

Cause	Tree						
Region	Data	2002	2003	2004	2005	2006	2007
Central	SAIFI	0.064	0.048	0.086	0.086	0.101	0.053
	% Change	75%	-25%	80%	1%	17%	-47%
Eastern	SAIFI	0.103	0.133	0.123	0.103	0.131	0.180
	% Change	-21%	30%	-8%	-16%	28%	37%
Western	SAIFI	0.309	0.182	0.333	0.184	0.332	0.358
	% Change	16%	-41%	83%	-45%	81%	8%
Company	SAIFI	0.197	0.136	0.216	0.138	0.222	0.234
	% Change	12%	-31%	59%	-36%	60%	5%

Cause	Unknown						
Region	Data	2002	2003	2004	2005	2006	2007
Central	SAIDI	10.45	11.87	11.30	23.73	14.00	16.37
	% Change	31%	14%	-5%	110%	-41%	17%
Eastern	SAIDI	9.43	11.57	12.65	17.65	26.24	9.92
	% Change	114%	23%	9%	40%	49%	-62%
Western	SAIDI	7.28	9.23	16.87	27.49	11.15	9.04
	% Change	-21%	27%	83%	63%	-59%	-19%
Company	SAIDI	8.61	10.47	14.37	24.08	15.65	11.15
	% Change	11%	22%	37%	67%	-35%	-29%

Cause	Unknown						
Region	Data	2002	2003	2004	2005	2006	2007
Central	SAIFI	0.123	0.154	0.153	0.352	0.208	0.079
	% Change	-6%	25%	-1%	131%	-41%	-62%
Eastern	SAIFI	0.126	0.141	0.145	0.180	0.119	0.160
	% Change	190%	11%	3%	24%	-34%	34%
Western	SAIFI	0.121	0.137	0.172	0.335	0.129	0.107
	% Change	-23%	13%	25%	95%	-62%	-17%
Company	SAIFI	0.123	0.142	0.160	0.301	0.147	0.114
	% Change	0%	16%	13%	88%	-51%	-23%

Cause	Wind/Rain						
Region	Data	2002	2003	2004	2005	2006	2007
Central	SAIDI	8.65	2.42	0.73	1.32	47.53	6.31
	% Change	618%	-72%	-70%	82%	3494%	-87%
Eastern	SAIDI	1.29	1.77	1.42	4.58	189.18	7.07
	% Change	-30%	37%	-20%	223%	4028%	-96%
Western	SAIDI	2.12	0.60	1.62	4.33	20.87	4.20
	% Change	63%	-72%	169%	167%	382%	-80%
Company	SAIDI	3.58	1.35	1.34	3.62	69.69	5.47
	% Change	154%	-62%	-1%	170%	1826%	-92%

Cause	Wind/Rain						
Region	Data	2002	2003	2004	2005	2006	2007
Central	SAIFI	0.061	0.022	0.008	0.012	0.243	0.044
	% Change	841%	-64%	-62%	44%	1960%	-82%
Eastern	SAIFI	0.010	0.023	0.013	0.040	0.342	0.059
	% Change	18%	143%	-46%	221%	752%	-83%
Western	SAIFI	0.030	0.005	0.016	0.051	0.138	0.036
	% Change	68%	-82%	191%	229%	169%	-74%
Company	SAIFI	0.033	0.014	0.013	0.038	0.216	0.044
	% Change	162%	-58%	-7%	197%	463%	-80%

Cause	Vehicle						
Region	Data	2002	2003	2004	2005	2006	2007
Central	SAIDI	6.90	7.83	9.44	12.29	6.54	6/27
	% Change	21%	14%	20%	30%	-47%	-4%
Eastern	SAIDI	5.13	5.33	6.45	5.94	8.36	5.63
	% Change	62%	4%	21%	-8%	41%	-33%
Western	SAIDI	6.01	8.04	15.62	19.03	15.43	22.28
	% Change	-38%	34%	94%	22%	-19%	44%
Company	SAIDI	6.02	7.33	11.74	14.04	11.36	13.91
	% Change	-15%	22%	60%	20%	-19%	22%

Cause	Vehicle						
Region	Data	2002	2003	2004	2005	2006	2007
Central	SAIFI	0.067	0.104	0.043	0.061	0.067	0.049
	% Change	57%	55%	-59%	44%	9%	-26%
Eastern	SAIFI	0.034	0.065	0.041	0.048	0.072	0.084
	% Change	67%	89%	-37%	18%	50%	17%
Western	SAIFI	0.051	0.059	0.113	0.163	0.093	0.147
	% Change	-35%	14%	93%	44%	-43%	58%
Company	SAIFI	0.051	0.072	0.077	0.108	0.081	0.106
	% Change	-8%	40%	7%	41%	-25%	31%

Cause	Overload						
Region	Data	2002	2003	2004	2005	2006	2007
Central	SAIDI	8.02	1.76	1.38	4.42	1.81	3.56
	% Change	226%	-78%	-21%	219%	-59%	96%
Eastern	SAIDI	8.02	8.55	1.29	4.40	1.51	2.82
	% Change	434%	7%	-85%	240%	-66%	87%
Western	SAIDI	1.93	1.69	4.22	2.81	4.49	3.42
	% Change	-51%	-12%	149%	-34%	60%	-24%
Company	SAIDI	4.96	3.37	2.76	3.62	3.05	3.30
	% Change	68%	-32%	-18%	31%	-16%	8%

Cause	Overload						
Region	Data	2002	2003	2004	2005	2006	2007
Central	SAIFI	0.081	0.022	0.020	0.058	0.025	0.066
	% Change	348%	-73%	-11%	196%	-56%	160%
Eastern	SAIFI	0.056	0.085	0.013	0.029	0.015	0.040
	% Change	245%	53%	-85%	132%	-47%	159%
Western	SAIFI	0.020	0.019	0.037	0.036	0.045	0.042
	% Change	-43%	-9%	99%	-3%	26%	-7%
Company	SAIFI	0.045	0.036	0.026	0.040	0.033	0.048
	% Change	68%	-20%	-26%	51%	-18%	46%

Cause	Dig In						
Region	Data	2002	2003	2004	2005	2006	2007
Central	SAIDI	0.49	0.53	1.00	1.99	1.58	4.34
	% Change	-73%	9%	88%	99%	-21%	175%
Eastern	SAIDI	1.53	1.17	0.63	1.34	2.43	0.78
	% Change	51%	-23%	-47%	114%	81%	-68%
Western	SAIDI	0.22	0.61	1.45	3.08	1.30	0.59
	% Change	-90%	180%	139%	112%	-58%	-54%
Company	SAIDI	0.61	0.73	1.13	2.37	1.65	1.60
	% Change	-67%	20%	56%	110%	-30%	-3%

Cause	Dig In						
Region	Data	2002	2003	2004	2005	2006	2007
Central	SAIFI	0.003	0.007	0.005	0.020	0.009	0.022
	% Change	-94%	182%	-25%	277%	-57%	148%
Eastern	SAIFI	0.007	0.011	0.004	0.006	0.010	0.004
	% Change	-6%	59%	-67%	61%	79%	-60%
Western	SAIFI	0.003	0.004	0.013	0.030	0.012	0.003
	% Change	-85%	42%	240%	125%	-60%	-73%
Company	SAIFI	0.004	0.006	0.009	0.021	0.011	0.008
	% Change	-82%	74%	37%	143%	-50%	-24%

Cause	Contamination/Corrosion						
Region	Data	2002	2003	2004	2005	2006	2007
Central	SAIDI	0.16	0.02	0.11	0.29	1.61	1.30
	% Change	-96%	-88%	483%	157%	460%	-19%
Eastern	SAIDI	1.72	0.04	0.32	0.18	3.85	0.72
	% Change	1464%	-98%	661%	-43%	2008%	-81%
Western	SAIDI	0.17	0.07	0.10	0.17	0.53	1.96
	% Change	-97%	-57%	36%	68%	218%	268%
Company	SAIDI	0.54	0.05	0.16	0.20	1.64	1.47
	% Change	-85%	-91%	204%	29%	711%	-10%

Cause	Contamination/Corrosion						
Region	Data	2002	2003	2004	2005	2006	2007
Central	SAIFI	0.001	0.000	0.002	0.002	0.033	0.012
	% Change	-98%	-90%	1478%	58%	1225%	-64%
Eastern	SAIFI	0.048	0.000	0.003	0.001	0.034	0.006
	% Change	4514%	-99%	870%	-60%	2416%	-83%
Western	SAIFI	0.002	0.001	0.001	0.001	0.004	0.017
	% Change	-93%	-53%	-6%	-5%	416%	336%
Company	SAIFI	0.013	0.001	0.002	0.001	0.019	0.013
	% Change	-44%	-96%	208%	-17%	1307%	-33%

15.9.1.2 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.

15.9.1.3 2008 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 are provided in section 3.0.

15.9.2 Three Percent Feeder List

15.9.2.1 Five-Year Patterns

Gulf's Three Percent Feeder Report increased to nine feeders as a result of system expansion.

Gulf had one feeder in the Actual and Adjusted reports which was a repeat in the last five years.

In all but one case, the associated feeder problems did not require any follow up actions and were corrected at the same time of the outage. In respect to the one feeder mentioned, there were three outages, all of which were due to lightning. A follow-up review will be performed to determine if any additional corrective actions are needed.

15.9.2.2 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.

15.9.2.3 2008 Activities and Budget Allowances

Please see the response to 15.9.1.3 for 2008 Activities and Budget allowances.

15.9.3 Regional Reliability Indices

15.9.3.1 Five-Year Patterns

Please see tables given in 15.9.1.1.

15.9.3.2 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.

15.9.3.3 2008 Activities and Budget Allowances

Please see the response to 15.9.1.3 for 2008 Activities and Budget allowances.

15.10 Overhead – Underground Reliability

15.10.1 Five-Year Patterns

Gulf does not have complete customer data by overhead and underground customers to do a five-year analysis of trends. Gulf did perform the calculations using the total customer numbers for each year, which is shown below. Although comparisons directly between overhead and underground are not possible at this time, it does show the trends for each.

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

System	**Overhead**						
Region	Data	2002	2003	2004	2005	2006	2007
Central	N	2,450	2,272	1,826	2,040	2,112	2,224
	% Change		-7%	-20%	12%	4%	5%
Eastern	N	1,526	1,700	1,387	1,484	2,080	1,727
	% Change		11%	-18%	7%	40%	-17%
Western	N	5,945	5,046	4,675	4,807	4,597	4,963
	% Change		-15%	-7%	3%	-4%	8%
Company	N	9,921	9,018	7,888	8,331	8,789	8,914
	% Change		-9%	-13%	6%	5%	1%

System	URD						
Region	Data	2002	2003	2004	2005	2006	2007
Central	N	289	272	271	331	292	343
	% Change		-6%	0%	22%	-12%	17%
Eastern	N	217	163	185	235	193	190
	% Change		-25%	13%	27%	-18%	-2%
Western	N	541	541	539	741	602	503
	% Change		0%	0%	37%	-19%	-16%
Company	N	1,047	976	995	1,307	1,087	1,036
	% Change		-7%	2%	31%	-17%	-5%

System	Overhead						
Region	Data	2002	2003	2004	2005	2006	2007
Central	SAIDI	93.21	60.23	65.79	109.01	161.46	85.85
	% Change		-35%	9%	66%	48%	-47%
Eastern	SAIDI	67.66	66.95	59.96	69.46	319.65	92.62
	% Change		-1%	-10%	16%	360%	-71%
Western	SAIDI	81.83	77.70	106.27	117.55	145.43	136.50
	% Change		-5%	37%	11%	24%	-6%
Company	SAIDI	81.28	70.63	84.26	103.41	192.96	112.27
	% Change		-13%	19%	23%	87%	-42%

System	URD						
Region	Data	2002	2003	2004	2005	2006	2007
Central	SAIDI	8.04	7.06	9.57	12.07	12.67	23.50
	% Change		-12%	36%	26%	5%	85%
Eastern	SAIDI	9.60	7.44	8.57	9.29	11.73	7.82
	% Change		-23%	15%	8%	26%	-33%
Western	SAIDI	6.98	5.87	10.23	12.24	12.13	9.22
	% Change		-16%	74%	20%	-1%	-24%
Company	SAIDI	7.89	6.55	9.65	11.46	12.17	12.53
	% Change		-17%	47%	19%	6%	3%

System	Overhead						
Region	Data	2002	2003	2004	2005	2006	2007
Central	SAIFI	0.977	0.748	0.694	1.260	1.216	0.865
	% Change		-23%	-7%	81%	-4%	-29%
Eastern	SAIFI	0.759	0.717	0.602	0.671	1.235	1.070
	% Change		-6%	-16%	11%	84%	-13%
Western	SAIFI	0.972	0.860	1.008	1.174	1.203	1.272
	% Change		-11%	17%	16%	2%	6%
Company	SAIFI	0.921	0.797	0.826	1.071	1.214	1.116
	% Change		-13%	4%	30%	13%	-8%

System	URD						
Region	Data	2002	2003	2004	2005	2006	2007
Central	SAIFI	0.049	0.069	0.053	0.088	0.060	0.087
	% Change		42%	-23%	65%	-32%	44%
Eastern	SAIFI	0.053	0.114	0.049	0.042	0.053	0.051
	% Change		115%	-57%	-14%	27%	-4%
Western	SAIFI	0.049	0.067	0.069	0.063	0.071	0.051
	% Change		35%	3%	-8%	13%	-29%
Company	SAIFI	0.050	0.079	0.060	0.064	0.064	0.060
	% Change		58%	-24%	7%	-1%	-6%

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 2007 Activities and Budget Allowances

Please see Section 10.0.

15.10.4 Overhead (OH) and Underground (UG) Metrics

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

The tables below represent an initial process which Gulf has implemented to begin tracking and analyzing reliability metrics for Gulf's overhead and underground system.

System	Region	Miles	Customers	N	Duration	CMI	CI
Overhead	CENTRAL	1,165.39	61,353	2,224	227,455	9,428,309	94,966
	EASTERN	1,533.82	62,921	1,727	199,844	10,134,066	117,039
	WESTERN	3,188.90	134,912	4,963	660,882	28,452,363	265,131
	System	5,888.10	259,186	8,914	1,088,181	48,014,738	477,136
Underground	CENTRAL	418.96	46,590	343	69,078	2,580,485	9,571
	EASTERN	397.54	44,050	190	33,578	855,409	5,574
	WESTERN	931.16	68,193	503	121,749	1,922,022	10,590
	System	1,747.67	158,833	1,036	224,404	5,357,916	25,735

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

Region	System	SAIDI	SAIFI	SAIDI / mile	L-Bar	CI / N	CAIDI
CENTRAL	Overhead	153.67	1.55	0.13	102.27	42.7	99.28
EASTERN	Overhead	161.06	1.86	0.11	115.72	67.8	86.59
WESTERN	Overhead	210.90	1.97	0.07	133.16	53.4	107.31
System	Overhead	185.25	1.84	0.03	122.08	53.5	100.63
CENTRAL	Underground	55.39	0.21	0.13	201.39	27.9	269.61
EASTERN	Underground	19.42	0.13	0.05	176.72	29.3	153.46
WESTERN	Underground	28.19	0.16	0.03	242.05	21.1	181.49
System	Underground	33.73	0.16	0.02	216.61	24.8	208.20

Note: The above metrics are for 2007.

In reviewing the above data, it was recognized that 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 brings out many important points.

First, Gulf has less than one-fourth of its system installed as underground. This means that overhead is 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 supports 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, less than half. This supports the observation of an overhead backbone serving "pockets" of underground. Thus the data available to Gulf for underground outages, at this time, is 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 twice that of overhead's which is consistent with Gulf's previous observations that underground outages have longer durations and fewer customers affected.

The problem of scale appears 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, 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.

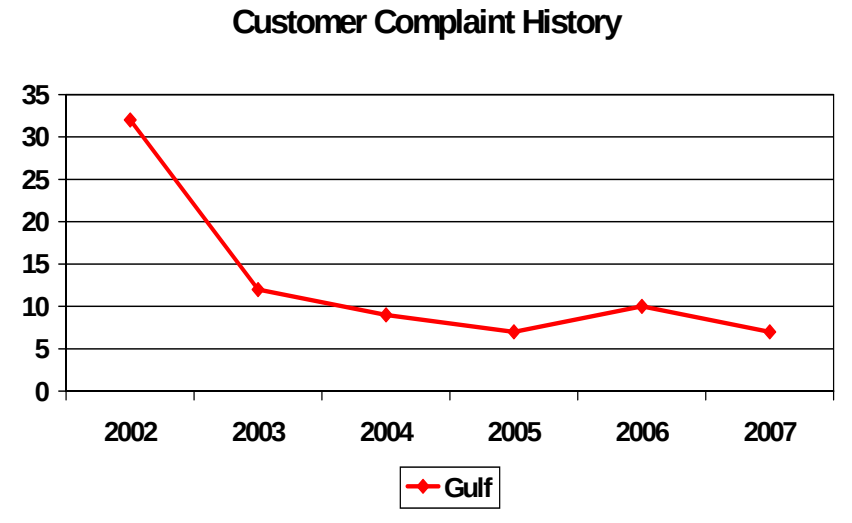
It should be noted that Gulf's installation of underground distribution facilities is fast outpacing overhead due to customer demand based on aesthetic reasons. In 2007, Gulf added 118 new underground miles and a net of 18 new overhead miles. This equates to a ratio of nearly 7:1 for underground expansion compared to overhead.

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 avoided any infractions for over seven years, and the complaint activity as reflected in the FPSC Consumer Activity Report has remained at very low levels.

In order to illustrate Gulf Power's customer complaint trend, the graph below, based on the FPSC Consumer Activity Report, is provided.



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

Form 102 - Actual Data

2007 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	128.72	84.00	1.532	7.55	0.52 %
Eastern	134.50	86.09	1.562	4.76	4.08 %
Western	179.89	88.08	2.042	7.75	2.41 %
System Averages	155.14	86.74	1.789	6.93	2.35 %

Appendix 1

2007 Distribution Service Reliability Reports - Actual

	CENTRAL		EASTERN		WESTERN		SYSTEM	
SAIDI = System Average Interruption Duration Index								
Total Number of Customer Minutes of Interruption (CMI)	14,135,753	128.72	14,715,246	134.50	37,496,523	179.89	66,347,522	155.14
Total Number of Customers Served (C)	109,817		109,410		208,436		427,663	
CAIDI = Customer Average Interruption Duration Index								
Total Number of Customer Minutes of Interruption (CMI)	14,135,753	84.00	14,715,246	86.09	37,496,523	88.08	66,347,522	86.74
Total Number of Customer Interruptions (CI)	168,284		170,919		425,725		764,928	
SAIFI = System Average Interruption Frequency Index								
Total Number of Customer Interruptions (CI)	168,284	1.532	170,919	1.562	425,725	2.042	764,928	1.789
Total Number of Customers Served (C)	109,817		109,410		208,436		427,663	
$MAIFI_e$ = Momentary Average Interruption Frequency Index								
Total Number of Customer Momentary Interruption Events (CME)	828,954	7.55	520,983	4.76	1,614,960	7.75	2,964,897	6.93
Total Number of Customers Served (C)	109,817		109,410		208,436		427,663	
CEMI5 = Customers Experiencing More Interruptions than 5								
Number of Customers Experiencing More Interruptions than 5	573	0.52%	4,462	4.08%	5,018	2.41%	10,053	2.35%
Total Number of Customers Served (C)	109,817		109,410		208,436		427,663	
L-Bar								
Minutes of Interruption							1,387,368	127.60
Total Number of Outages							10,873	

Appendix 1

2007 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. Deterioration	2,189	164.52	106.57
2. Lightning	2,178	149.95	113.30
3. Animal	2,089	82.64	74.89
4. Tree	1,506	143.52	109.61
5. Unknown	742	91.43	98.18
6. Planned Outage	646	67.35	53.51
7. Vehicle	336	164.72	131.15
8. Overload	271	98.89	69.42
9. Wind/Rain	227	163.96	147.26
10. Contamination/Corrosion	143	127.42	116.60
All Other Causes	546	115.25	42.78
System Totals	10,873	127.60	86.74

Appendix 1

2007 Distribution Service Reliability Reports - Actual

3 Percent Feeder List - Actual													
Utility Name: Gulf Power Company Year: 2007													
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)						
0714	East Hill	Western	462	3	-	-	465	6	152	152	N	-	December 2007
7952	Ponce De Leon	Central	122	63	-	-	185	6	136	136	N	-	June 2008
7962	Ponce De Leon	Central	256	52	-	-	308	5	69	68	N	-	October 2007
5612	Black Water	Western	2112	178	-	-	2290	5	85	83	N	-	September 2007
8822	North Side	Eastern	2611	361	-	-	2972	5	63	61	N	-	September 2007
0748	East Hill	Western	377	37	-	-	414	5	120	121	N	1	December 2007
9142	Destin	Central	1902	259	-	-	2161	4	59	55	N	-	October 2007
9562	Destin	Central	510	838	-	-	1348	4	100	102	N	-	March 2007
7252	Jay Road	Western	2162	164	-	-	2326	4	163	198	N	-	September 2007

Appendix 1

Form 103 - Adjusted Data

2007 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	109.35	114.88	0.952	7.55	0.52%
Eastern	100.44	89.63	1.121	4.76	4.08%
Western	145.73	110.16	1.323	7.36	2.15%
System Averages	124.80	106.14	1.176	6.74	2.22%

Appendix 1

2007 Distribution Service Reliability Reports - Adjusted

	CENTRAL		EASTERN		WESTERN		SYSTEM	
SAIDI = System Average Interruption Duration Index								
Total Number of Customer Minutes of Interruption (CMI)	12,008,794	109.35	10,989,475	100.44	30,374,385	145.73	53,372,654	124.80
Total Number of Customers Served (C)	109,817		109,410		208,436		427,663	
CAIDI = Customer Average Interruption Duration Index								
Total Number of Customer Minutes of Interruption (CMI)	12,008,794	114.88	10,989,475	89.63	30,374,385	110.16	53,372,654	106.14
Total Number of Customer Interruptions (CI)	104,537		122,613		275,721		502,871	
SAIFI = System Average Interruption Frequency Index								
Total Number of Customer Interruptions (CI)	104,537	0.952	122,613	1.121	275,721	1.323	502,871	1.176
Total Number of Customers Served (C)	109,817		109,410		208,436		427,663	
$MAIFI_e$ = Momentary Average Interruption Frequency Index								
Total Number of Customer Momentary Interruption Events (CME)	828,954	7.55	520,983	4.76	1,534,240	7.36	2,884,177	6.74
Total Number of Customers Served (C)	109,817		109,410		208,436		427,663	
CEMI5 = Customers Experiencing More Interruptions than 5								
Number of Customers Experiencing More Interruptions than 5	573	0.52%	4,462	4.08%	4,476	2.15%	9,511	2.22%
Total Number of Customers Served (C)	109,817		109,410		208,436		427,663	
L-Bar								
Minutes of Interruption							1,312,586	131.92
Total Number of Outages							9,950	

Appendix 1

2007 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. Deterioration	2,188	164.56	106.57
2. Lightning	2,112	150.93	114.46
3. Animal	2,089	82.64	74.89
4. Tree	1,419	144.10	108.48
5. Unknown	742	91.43	98.18
6. Vehicle	336	164.72	131.15
7. Overload	271	98.89	69.42
8. Wind/Rain	175	159.65	124.66
9. Contamination/Corrosion	143	127.42	116.60
10. Dig-In	130	210.17	196.12
All Other Causes	345	96.15	75.44
System Totals	9,950	131.92	106.14

Appendix 1

2007 Distribution Service Reliability Reports - Adjusted

3 Percent Feeder List - Adjusted													
Utility Name: Gulf Power Company Year: 2007													
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)						
5612	Black Water	Western	2112	178	-	-	2290	5	85	83	N	-	September 2007
8822	North Side	Eastern	2611	361	-	-	2972	4	77	76	N	-	September 2007
7252	Jay Road	Western	2162	164	-	-	2326	3	209	283	N	-	September 2007
7952	Ponce De Leon	Central	122	63	-	-	185	3	240	240	N	-	June 2008
9562	Destin	Central	838	510	-	-	1348	3	112	117	N	1	March 2007
9142	Destin	Central	1902	259	-	-	2161	3	57	51	N	-	October 2007
7512	Gulf Breeze	Western	1399	259	-	-	1658	3	19	19	N	-	November 2007
7962	Ponce De Leon	Central	256	52	-	-	308	2	125	129	N	-	October 2007
7542	Gulf Breeze	Western	247	62	-	-	309	2	102	145	N	-	September 2007

Appendix 1

2007 Excluded Transmission Events Resulting in Customer Outages

Outage Event Description	Reason of Exclusion	N	CMI Excluded	CI Excluded	Duration
Transmission Outages	Transmission Outage	71	3,819,531.37	121,376	2,434.8

Event Code	Date	Reason of Exclusion	CMI	CI	Dur	Causation	Resolution
541062	1/2/2007	Transmission	100,342.87	2,852	35.18	Tree Cut (Public)	Removed tree
541063	1/2/2007	Transmission	111,089.08	2,917	38.08	Tree Cut (Public)	Removed tree
541065	1/2/2007	Transmission	52,639.88	1,499	35.12	Tree Cut (Public)	Removed tree
541066	1/2/2007	Transmission	82,160.48	2,333	35.22	Tree Cut (Public)	Removed tree
541067	1/2/2007	Transmission	36,519.00	1,260	28.98	Tree Cut (Public)	Removed tree
541074	1/2/2007	Transmission	60,191.17	1,766	34.08	Tree Cut (Public)	Removed tree
541080	1/2/2007	Transmission	82,922.45	2,509	33.05	Tree Cut (Public)	Removed tree
541092	1/2/2007	Transmission	61,643.53	2,377	25.93	Tree Cut (Public)	Removed tree
541094	1/2/2007	Transmission	63,487.67	2,548	24.92	Tree Cut (Public)	Removed tree
541095	1/2/2007	Transmission	72,580.30	2,418	30.02	Tree Cut (Public)	Removed tree
541097	1/2/2007	Transmission	19,494.75	935	20.85	Tree Cut (Public)	Removed tree
541420	1/5/2007	Transmission	166,122.00	2,517	66.00	Deterioration	Equipment replaced
541421	1/5/2007	Transmission	72,020.00	1,108	65.00	Deterioration	Equipment replaced
541422	1/5/2007	Transmission	128,774.00	1,922	67.00	Deterioration	Equipment replaced
541427	1/5/2007	Transmission	165,360.00	2,544	65.00	Deterioration	Equipment replaced
541440	1/5/2007	Transmission	187,054.00	3,017	62.00	Deterioration	Equipment replaced
544027	1/28/2007	Transmission	5,478.00	83	66.00	APC Problem	
546703	2/26/2007	Transmission	9,549.90	3,537	2.70	Accidental Trip	Supervisory restoration
546704	2/26/2007	Transmission	9,378.35	3,539	2.65	Accidental Trip	Supervisory restoration
546711	2/26/2007	Transmission	6,166.80	2,284	2.70	Accidental Trip	Supervisory restoration
548566	3/12/2007	Transmission	14,398.00	313	46.00	Unknown	Unknown
548571	3/12/2007	Transmission	8,648.00	188	46.00	Unknown	Unknown
548703	3/14/2007	Transmission	72,118.00	1,685	42.80	Deterioration	Re-energized tx
548706	3/14/2007	Transmission	74,666.67	1,792	41.67	Deterioration	Re-energized tx
549905	3/26/2007	Transmission	4,255.00	185	23.00	Unknown	Unknown
549907	3/26/2007	Transmission	7,130.00	310	23.00	Unknown	Unknown
549946	3/27/2007	Transmission	4,995.00	185	27.00	Deterioration	Fixed down structure
549947	3/27/2007	Transmission	8,424.00	312	27.00	Deterioration	Fixed down structure
550347	3/30/2007	Transmission	19,989.17	830	24.08	Vehicle	Fixed 115kV phase
550351	3/30/2007	Transmission	118,597.58	4,945	23.98	Vehicle	Fixed 115kV phase
550367	3/30/2007	Transmission	59,159.02	2,477	23.88	Vehicle	Fixed 115kV phase
550381	3/30/2007	Transmission	23,575.20	1,034	22.80	Vehicle	Fixed 115kV phase
552032	4/14/2007	Transmission	29,825.25	1,365	21.85	Relay failure	Manual restoration
552036	4/14/2007	Transmission	46,828.60	2,170	21.58	Relay failure	Manual restoration
552038	4/14/2007	Transmission	47,594.82	2,274	20.93	Relay failure	Manual restoration
552050	4/14/2007	Transmission	35,745.84	2,223	16.08	Relay failure	Manual restoration
552057	4/14/2007	Transmission	115,974.00	2,274	51.00	Relay failure	Manual restoration
552063	4/14/2007	Transmission	88,920.00	2,223	40.00	Relay failure	Manual restoration
552064	4/14/2007	Transmission	46,781.00	1,141	41.00	Relay failure	Manual restoration
552068	4/14/2007	Transmission	171,430.00	2,170	79.00	Relay failure	Manual restoration
552071	4/14/2007	Transmission	38,089.00	929	41.00	Relay failure	Manual restoration
552074	4/14/2007	Transmission	66,478.00	1,546	43.00	Relay failure	Manual restoration

Appendix 1

2007 Excluded Transmission Events Resulting in Customer Outages

Event Code	Date	Reason of Exclusion	CMI	CI	Dur	Causation	Resolution
552078	4/14/2007	Transmission	83,220.00	2,190	38.00	Relay failure	Manual restoration
552079	4/14/2007	Transmission	65,520.00	1,365	48.00	Relay failure	Manual restoration
552103	4/14/2007	Transmission	127,088.91	2,223	57.17	Relay failure	Manual restoration
552104	4/14/2007	Transmission	25,935.00	1,365	19.00	Relay failure	Manual restoration
552108	4/14/2007	Transmission	47,754.00	2,274	21.00	Relay failure	Manual restoration
552124	4/14/2007	Transmission	51,774.45	1,365	37.93	Relay failure	Manual restoration
552131	4/14/2007	Transmission	72,813.48	2,274	32.02	Relay failure	Manual restoration
556049	5/16/2007	Transmission	4,330.00	866	5.00	Accidental trip	Re-energized bank
556054	5/16/2007	Transmission	8,975.00	1,795	5.00	Accidental trip	Re-energized bank
556056	5/16/2007	Transmission	4,110.00	822	5.00	Accidental trip	Re-energized bank
563666	7/2/2007	Transmission	17,487.00	1,206	14.50	Lightning	Fixed 115kV wire
563667	7/2/2007	Transmission	20,933.25	1,469	14.25	Lightning	Fixed 115kV wire
563668	7/2/2007	Transmission	11,717.10	831	14.10	Lightning	Fixed 115kV wire
622050	7/22/2007	Transmission	99,520.00	1,555	64.00	Animal	Manual restoration
567302	7/22/2007	Transmission	154,891.80	2,394	64.70	Animal	Manual restoration
602332	8/2/2007	Transmission	55,999.00	1,931	29.00	Lightning	Supervisory restoration
603031	8/7/2007	Transmission	7,296.00	1,216	6.00	Deterioration	Manual restoration
622048	8/7/2007	Transmission	4,890.00	815	6.00	Deterioration	Manual restoration
603032	8/7/2007	Transmission	8,802.00	1,467	6.00	Deterioration	Manual restoration
608249	9/10/2007	Transmission	118,788.00	1,563	76.00	Animal	Manual restoration
608252	9/10/2007	Transmission	58,058.00	754	77.00	Animal	Manual restoration
608256	9/10/2007	Transmission	20,216.00	266	76.00	Animal	Manual restoration
609878	9/22/2007	Transmission	39,488.00	2,468	16.00	Animal	Repaired equipment
609885	9/22/2007	Transmission	50,476.00	3,145	172.00	Animal	Repaired equipment
609901	9/22/2007	Transmission	28,496.00	1,781	16.00	Animal	Repaired equipment
616643	11/12/2007	Transmission	19,817.00	2,831	7.00	Accidental Trip	Construction activity
616644	11/12/2007	Transmission	8,724.00	1,454	6.00	Accidental Trip	Construction activity
616647	11/12/2007	Transmission	5,735.00	1,147	5.00	Accidental Trip	Construction activity
618590	11/30/2007	Transmission	80.00	8	10.00	Unknown	Unknown

Appendix 1

2007 Planned Outages Table

Outage Event Description	Reason of Exclusion	N	CMI	CI	Duration
Planned Outages	Planned Outage	646	6,625,902.73	123,819	43,510.82

Ref ID	Date	Reason of Exclusion	CMI	CI	Duration
541059	1/2/2007	Planned Outage	198.00	6	33.00
541255	1/3/2007	Planned Outage	135.00	1	135.00
541275	1/3/2007	Planned Outage	12,177.00	123	99.00
541276	1/3/2007	Planned Outage	25,286.00	269	94.00
541312	1/3/2007	Planned Outage	1,869.60	304	6.15
541684	1/7/2007	Planned Outage	105,113.67	1,011	103.97
541800	1/8/2007	Planned Outage	693.00	33	21.00
542007	1/10/2007	Planned Outage	456.00	12	38.00
542018	1/10/2007	Planned Outage	318.00	6	53.00
542030	1/10/2007	Planned Outage	11,236.00	530	21.20
542034	1/10/2007	Planned Outage	8,628.00	362	23.83
542043	1/10/2007	Planned Outage	47,591.00	1,225	38.85
542046	1/10/2007	Planned Outage	2,208.20	362	6.10
542048	1/10/2007	Planned Outage	12,250.00	1,225	10.00
542050	1/10/2007	Planned Outage	122.50	1,225	0.10
542051	1/10/2007	Planned Outage	35.00	5	7.00
542255	1/10/2007	Planned Outage	21.00	7	3.00
542262	1/10/2007	Planned Outage	72.00	6	12.00
542306	1/11/2007	Planned Outage	192.00	4	48.00
543046	1/18/2007	Planned Outage	60.00	5	12.00
543049	1/18/2007	Planned Outage	85.00	5	17.00
543054	1/18/2007	Planned Outage	920.00	5	184.00
543439	1/23/2007	Planned Outage	277.43	2,378	0.12
543535	1/24/2007	Planned Outage	140.00	2	70.00
543772	1/25/2007	Planned Outage	1,476.00	6	246.00
543856	1/26/2007	Planned Outage	235.00	5	47.00
543865	1/26/2007	Planned Outage	476.00	7	68.00
543978	1/27/2007	Planned Outage	10,756.20	234	45.97
543980	1/27/2007	Planned Outage	19,774.15	471	41.98
543986	1/27/2007	Planned Outage	8,653.05	201	43.05
543991	1/27/2007	Planned Outage	17,478.42	415	42.12
544080	1/29/2007	Planned Outage	70,231.17	2,978	23.58
544085	1/29/2007	Planned Outage	699.00	3	233.00
544101	1/29/2007	Planned Outage	108.00	6	18.00
544105	1/29/2007	Planned Outage	60.00	6	10.00
544350	2/1/2007	Planned Outage	3,085.00	3,085	1.00
544400	2/1/2007	Planned Outage	300.00	4	75.00
544401	2/1/2007	Planned Outage	3,600.00	50	72.00
544444	2/2/2007	Planned Outage	18.00	9	2.00
544510	2/3/2007	Planned Outage	5,085.00	113	45.00
544534	2/3/2007	Planned Outage	103.96	113	0.92
544607	2/5/2007	Planned Outage	13,117.23	329	39.87

Appendix 1

2007 Planned Outages Table

Ref ID	Date	Reason of Exclusion	CMI	CI	Duration
544614	2/5/2007	Planned Outage	68.00	4	17.00
544615	2/5/2007	Planned Outage	24.00	4	6.00
544630	2/5/2007	Planned Outage	195.00	15	13.00
544973	2/9/2007	Planned Outage	308.00	11	28.00
544985	2/9/2007	Planned Outage	72.00	9	8.00
545063	2/12/2007	Planned Outage	288.00	8	36.00
545107	2/12/2007	Planned Outage	1,856,217.77	3,259	569.57
545375	2/13/2007	Planned Outage	3,960.00	88	45.00
545421	2/14/2007	Planned Outage	37,638.00	306	123.00
545458	2/14/2007	Planned Outage	271.00	1	271.00
545464	2/14/2007	Planned Outage	1,218.00	14	87.00
545635	2/16/2007	Planned Outage	11,074.00	113	98.00
545676	2/16/2007	Planned Outage	34,804.00	2,486	14.00
545685	2/16/2007	Planned Outage	60,116.00	113	532.00
545829	2/17/2007	Planned Outage	360.00	30	12.00
545958	2/18/2007	Planned Outage	1,259.25	15	83.95
546075	2/19/2007	Planned Outage	20.00	10	2.00
546078	2/19/2007	Planned Outage	1,570.00	10	157.00
546117	2/19/2007	Planned Outage	120.00	5	24.00
546125	2/19/2007	Planned Outage	10.00	1	10.00
546262	2/20/2007	Planned Outage	85.00	1	85.00
546502	2/23/2007	Planned Outage	3,100.00	100	31.00
546505	2/23/2007	Planned Outage	44.00	4	11.00
546512	2/23/2007	Planned Outage	14.00	7	2.00
546520	2/23/2007	Planned Outage	400.00	40	10.00
546524	2/23/2007	Planned Outage	3.00	3	1.00
546542	2/23/2007	Planned Outage	98.00	2	49.00
546551	2/24/2007	Planned Outage	5,267.73	272	19.37
546590	2/24/2007	Planned Outage	775.00	31	25.00
546595	2/24/2007	Planned Outage	1,927.00	47	41.00
546609	2/25/2007	Planned Outage	20,268.00	2,252	9.00
546675	2/25/2007	Planned Outage	15,808.00	494	32.00
546785	2/27/2007	Planned Outage	57.00	3	19.00
546786	2/27/2007	Planned Outage	498.00	3	166.00
546836	2/27/2007	Planned Outage	24.00	6	4.00
547004	2/28/2007	Planned Outage	751.47	4	187.87
547014	2/28/2007	Planned Outage	89,250.00	525	170.00
547056	2/28/2007	Planned Outage	82.23	2	41.12
547090	3/1/2007	Planned Outage	704.20	6	117.37
547113	3/1/2007	Planned Outage	420.00	6	70.00
547121	3/1/2007	Planned Outage	3,980.00	796	5.00
547122	3/1/2007	Planned Outage	5,475.00	1,095	5.00
547217	3/1/2007	Planned Outage	647.01	3	215.67
547282	3/1/2007	Planned Outage	546.00	3	182.00
547298	3/1/2007	Planned Outage	61.00	1	61.00
547698	3/4/2007	Planned Outage	115.00	5	23.00

Appendix 1

2007 Planned Outages Table

Ref ID	Date	Reason of Exclusion	CMI	CI	Duration
547701	3/4/2007	Planned Outage	84.00	6	14.00
547704	3/4/2007	Planned Outage	59,618.93	2,864	20.82
547705	3/4/2007	Planned Outage	86,199.17	4,222	20.42
547708	3/4/2007	Planned Outage	306,999.00	7,086	43.35
547725	3/4/2007	Planned Outage	129.00	3	43.00
547737	3/4/2007	Planned Outage	28.00	1	28.00
547787	3/4/2007	Planned Outage	42.00	3	14.00
547790	3/4/2007	Planned Outage	42.00	7	6.00
547795	3/4/2007	Planned Outage	60.00	4	15.00
547797	3/4/2007	Planned Outage	42.00	6	7.00
547815	3/5/2007	Planned Outage	45.00	1	45.00
547833	3/5/2007	Planned Outage	1,050.00	15	70.00
547985	3/6/2007	Planned Outage	4,426.33	140	31.62
548299	3/7/2007	Planned Outage	1,248.00	16	78.00
548356	3/8/2007	Planned Outage	520.00	8	65.00
548409	3/9/2007	Planned Outage	867.50	25	34.70
548412	3/9/2007	Planned Outage	306.75	15	20.45
548414	3/9/2007	Planned Outage	3.00	1	3.00
548421	3/9/2007	Planned Outage	160.00	10	16.00
548516	3/10/2007	Planned Outage	2,556.00	18	142.00
548626	3/13/2007	Planned Outage	235.00	5	47.00
548630	3/13/2007	Planned Outage	84.00	3	28.00
548646	3/13/2007	Planned Outage	112.00	8	14.00
548696	3/14/2007	Planned Outage	496.00	2	248.00
548725	3/14/2007	Planned Outage	414.00	6	69.00
548728	3/14/2007	Planned Outage	156.00	12	13.00
549045	3/15/2007	Planned Outage	118.00	1	118.00
549064	3/16/2007	Planned Outage	189.00	1	189.00
549107	3/16/2007	Planned Outage	798.00	19	42.00
549113	3/16/2007	Planned Outage	48.00	1	48.00
549313	3/20/2007	Planned Outage	20,100.00	50	402.00
549335	3/21/2007	Planned Outage	8.00	4	2.00
549336	3/21/2007	Planned Outage	1,110.00	111	10.00
549342	3/21/2007	Planned Outage	653.00	4	163.25
549351	3/21/2007	Planned Outage	234.50	3	78.17
549358	3/21/2007	Planned Outage	53,912.00	293	184.00
549406	3/21/2007	Planned Outage	456.00	8	57.00
549408	3/22/2007	Planned Outage	98.00	7	14.00
549412	3/22/2007	Planned Outage	52.00	1	52.00
549768	3/23/2007	Planned Outage	6,237.00	81	77.00
549794	3/24/2007	Planned Outage	31.00	1	31.00
549802	3/24/2007	Planned Outage	1,824.00	16	114.00
549961	3/27/2007	Planned Outage	360.00	15	24.00
549968	3/27/2007	Planned Outage	492.00	6	82.00
549972	3/27/2007	Planned Outage	2,400.00	15	160.00
550001	3/27/2007	Planned Outage	195.00	3	65.00

Appendix 1

2007 Planned Outages Table

Ref ID	Date	Reason of Exclusion	CMI	CI	Duration
550052	3/28/2007	Planned Outage	1,020.75	9	113.42
550060	3/28/2007	Planned Outage	396.00	3	132.00
550065	3/28/2007	Planned Outage	531.00	9	59.00
550081	3/28/2007	Planned Outage	69.00	3	23.00
550104	3/28/2007	Planned Outage	57.00	1	74.33
550117	3/28/2007	Planned Outage	52,365.00	357	503.95
550118	3/28/2007	Planned Outage	8,188.00	2,047	4.00
550127	3/28/2007	Planned Outage	1,645.00	35	47.00
550269	3/29/2007	Planned Outage	4.00	1	4.00
550457	3/30/2007	Planned Outage	1,079.00	13	83.00
550509	3/31/2007	Planned Outage	8,052.00	61	132.00
550513	3/31/2007	Planned Outage	1,170.00	15	78.00
550648	4/1/2007	Planned Outage	4,125.00	15	275.00
550771	4/2/2007	Planned Outage	518.00	14	37.00
550809	4/2/2007	Planned Outage	35.00	7	5.00
550859	4/2/2007	Planned Outage	4,794.00	1,598	3.00
551036	4/4/2007	Planned Outage	17,034.00	102	167.00
551037	4/4/2007	Planned Outage	549.00	9	61.00
551042	4/4/2007	Planned Outage	14,251.95	135	105.57
551043	4/4/2007	Planned Outage	10,010.00	65	154.00
551050	4/4/2007	Planned Outage	6.00	1	6.00
551118	4/5/2007	Planned Outage	16.00	1	16.00
551121	4/5/2007	Planned Outage	20.00	5	4.00
551386	4/9/2007	Planned Outage	60.00	10	6.00
551513	4/10/2007	Planned Outage	36.00	9	4.00
551519	4/10/2007	Planned Outage	130.00	13	10.00
551699	4/11/2007	Planned Outage	134.00	2	67.00
551723	4/11/2007	Planned Outage	164.00	4	41.00
551761	4/11/2007	Planned Outage	6.00	2	3.00
552142	4/14/2007	Planned Outage	416.00	8	52.00
552426	4/15/2007	Planned Outage	11,845.60	884	13.40
552616	4/15/2007	Planned Outage	980.00	35	28.00
552822	4/15/2007	Planned Outage	214,118.00	709	302.00
553020	4/16/2007	Planned Outage	35.00	5	7.00
553030	4/16/2007	Planned Outage	560.00	4	140.00
553259	4/17/2007	Planned Outage	68.00	4	17.00
553289	4/17/2007	Planned Outage	126.00	9	14.00
553351	4/17/2007	Planned Outage	32.00	16	2.00
553352	4/17/2007	Planned Outage	10,208.25	25	408.33
553353	4/17/2007	Planned Outage	19,994.45	49	408.05
553359	4/17/2007	Planned Outage	72.00	24	3.00
553461	4/19/2007	Planned Outage	384.00	4	96.00
553606	4/20/2007	Planned Outage	414.00	6	69.00
553623	4/21/2007	Planned Outage	2,971.50	21	141.50
553784	4/24/2007	Planned Outage	7,272.00	36	202.00
553796	4/24/2007	Planned Outage	306.00	6	51.00

Appendix 1

2007 Planned Outages Table

Ref ID	Date	Reason of Exclusion	CMI	CI	Duration
553833	4/24/2007	Planned Outage	38.00	1	38.00
554098	4/26/2007	Planned Outage	320.00	8	40.00
554099	4/26/2007	Planned Outage	432.00	27	16.00
554360	4/29/2007	Planned Outage	6.00	1	6.00
554499	5/1/2007	Planned Outage	21.00	1	21.00
554504	5/1/2007	Planned Outage	1.00	1	1.00
554513	5/1/2007	Planned Outage	35.00	1	35.00
554515	5/1/2007	Planned Outage	196.00	7	28.00
554555	5/2/2007	Planned Outage	252.00	2	126.00
554566	5/2/2007	Planned Outage	46.00	2	23.00
554875	5/4/2007	Planned Outage	75.00	1	75.00
554934	5/4/2007	Planned Outage	90.00	10	9.00
554972	5/5/2007	Planned Outage	2,360.00	10	236.00
555127	5/7/2007	Planned Outage	243.00	1	243.00
555279	5/8/2007	Planned Outage	492.00	6	82.00
555358	5/8/2007	Planned Outage	1,734.20	52	33.35
555454	5/10/2007	Planned Outage	114.30	254	0.45
555455	5/10/2007	Planned Outage	5.11	7	0.73
555456	5/10/2007	Planned Outage	292.10	254	1.15
555457	5/10/2007	Planned Outage	17.50	7	2.50
555460	5/10/2007	Planned Outage	5.39	7	0.77
555461	5/10/2007	Planned Outage	127.00	254	0.50
555462	5/10/2007	Planned Outage	75.40	130	0.58
555463	5/10/2007	Planned Outage	0.53	1	0.53
555474	5/10/2007	Planned Outage	54.00	3	18.00
555476	5/10/2007	Planned Outage	505.00	5	101.00
555496	5/10/2007	Planned Outage	207.00	9	23.00
555515	5/10/2007	Planned Outage	365.00	5	73.00
555516	5/10/2007	Planned Outage	4,270.00	61	70.00
555522	5/10/2007	Planned Outage	588.00	14	42.00
555523	5/10/2007	Planned Outage	220.00	11	20.00
555526	5/10/2007	Planned Outage	676.00	26	26.00
555554	5/11/2007	Planned Outage	6,072.03	129	47.07
555564	5/11/2007	Planned Outage	1,301.07	56	23.23
555565	5/11/2007	Planned Outage	110.02	7	15.72
555568	5/11/2007	Planned Outage	260.00	10	26.00
555569	5/11/2007	Planned Outage	705.00	28	25.47
555570	5/11/2007	Planned Outage	1,225.80	54	22.70
555573	5/11/2007	Planned Outage	530.88	16	33.18
555574	5/11/2007	Planned Outage	1,401.38	41	34.18
555578	5/11/2007	Planned Outage	1,517.00	37	41.00
555580	5/11/2007	Planned Outage	966.00	6	161.00
555581	5/11/2007	Planned Outage	78.00	13	6.00
555606	5/11/2007	Planned Outage	10.00	5	2.00
555635	5/11/2007	Planned Outage	6,096.00	381	16.00
555745	5/12/2007	Planned Outage	5,704.00	713	8.00

Appendix 1

2007 Planned Outages Table

Ref ID	Date	Reason of Exclusion	CMI	CI	Duration
555792	5/12/2007	Planned Outage	1,836.35	57	32.22
555889	5/14/2007	Planned Outage	189.00	9	21.00
555891	5/14/2007	Planned Outage	246.00	6	41.00
555961	5/15/2007	Planned Outage	159.00	3	53.00
556083	5/16/2007	Planned Outage	1,204.00	28	43.00
556093	5/16/2007	Planned Outage	152.00	4	38.00
556117	5/16/2007	Planned Outage	5,484.00	2,742	2.00
556259	5/17/2007	Planned Outage	42.00	7	6.00
556288	5/17/2007	Planned Outage	7.00	1	7.00
556357	5/18/2007	Planned Outage	62.00	1	62.00
556364	5/18/2007	Planned Outage	68.00	1	68.00
556505	5/18/2007	Planned Outage	104.00	4	26.00
556530	5/18/2007	Planned Outage	35,743.00	1,153	31.00
556830	5/22/2007	Planned Outage	1,647.98	11	149.82
556832	5/22/2007	Planned Outage	50,232.00	364	138.00
556838	5/22/2007	Planned Outage	36.00	6	6.00
557229	5/25/2007	Planned Outage	22.00	2	11.00
557231	5/25/2007	Planned Outage	-	4	-
557233	5/25/2007	Planned Outage	3,555.89	17	209.17
557234	5/25/2007	Planned Outage	2,574.00	13	198.00
557256	5/25/2007	Planned Outage	57.00	1	57.00
557257	5/25/2007	Planned Outage	5,502.05	17	323.65
557259	5/25/2007	Planned Outage	1,431.30	13	110.10
557413	5/28/2007	Planned Outage	66.00	1	66.00
557479	5/29/2007	Planned Outage	274.00	2	137.00
557921	5/31/2007	Planned Outage	30.00	1	30.00
557928	5/31/2007	Planned Outage	3.00	1	3.00
558013	6/1/2007	Planned Outage	7,794.17	94	82.92
558024	6/1/2007	Planned Outage	144.00	9	16.00
558060	6/1/2007	Planned Outage	92.00	4	23.00
558082	6/1/2007	Planned Outage	1,345.04	1,462	0.92
558083	6/1/2007	Planned Outage	4.80	24	0.20
558317	6/3/2007	Planned Outage	436.00	2	218.00
558473	6/4/2007	Planned Outage	369.00	3	123.00
558478	6/4/2007	Planned Outage	132.00	3	44.00
558541	6/5/2007	Planned Outage	21.00	3	7.00
558543	6/5/2007	Planned Outage	8.00	4	2.00
558544	6/5/2007	Planned Outage	3.00	1	3.00
558545	6/5/2007	Planned Outage	2.00	1	2.00
558546	6/5/2007	Planned Outage	5.00	1	5.00
558547	6/5/2007	Planned Outage	4.00	1	4.00
558548	6/5/2007	Planned Outage	3.00	1	3.00
558552	6/5/2007	Planned Outage	1,512.00	504	3.00
558665	6/5/2007	Planned Outage	18,240.00	114	160.00
558674	6/5/2007	Planned Outage	35.00	5	7.00
558775	6/6/2007	Planned Outage	3.00	1	3.00

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2007 Planned Outages Table

Ref ID	Date	Reason of Exclusion	CMI	CI	Duration
558776	6/6/2007	Planned Outage	12.00	3	4.00
558835	6/7/2007	Planned Outage	29,477.33	160	184.23
558868	6/7/2007	Planned Outage	940.00	4	235.00
559007	6/8/2007	Planned Outage	2,750.10	1,854	1.48
559008	6/8/2007	Planned Outage	630.33	2	315.17
559133	6/8/2007	Planned Outage	270.00	1	270.00
559731	6/11/2007	Planned Outage	5,360.95	265	20.23
559817	6/12/2007	Planned Outage	50.00	5	10.00
559821	6/12/2007	Planned Outage	520.53	8	65.07
559829	6/12/2007	Planned Outage	297.00	9	33.00
559832	6/12/2007	Planned Outage	223.00	1	223.00
559846	6/12/2007	Planned Outage	145.00	29	5.00
559891	6/12/2007	Planned Outage	99.00	9	11.00
560473	6/13/2007	Planned Outage	6,900.00	276	25.00
560511	6/13/2007	Planned Outage	144.00	3	48.00
560532	6/13/2007	Planned Outage	186.00	3	62.00
560536	6/13/2007	Planned Outage	156.00	3	52.00
560543	6/13/2007	Planned Outage	56.00	1	56.00
560571	6/13/2007	Planned Outage	2.00	2	1.00
560576	6/13/2007	Planned Outage	14.00	2	7.00
560647	6/14/2007	Planned Outage	6,710.00	305	22.00
560684	6/14/2007	Planned Outage	1,152.00	16	72.00
560750	6/15/2007	Planned Outage	70.00	2	35.00
560768	6/15/2007	Planned Outage	266.00	1	266.00
560801	6/15/2007	Planned Outage	22.40	2	11.20
561068	6/16/2007	Planned Outage	23.00	1	23.00
561150	6/17/2007	Planned Outage	384.00	6	64.00
561467	6/19/2007	Planned Outage	23,620.50	1,810	13.05
561479	6/19/2007	Planned Outage	672.00	16	42.00
561513	6/19/2007	Planned Outage	8.00	2	4.00
561758	6/19/2007	Planned Outage	20,509.50	3,025	6.78
561761	6/19/2007	Planned Outage	13,135.05	1,717	7.65
561950	6/21/2007	Planned Outage	90.00	1	90.00
561995	6/21/2007	Planned Outage	46.00	1	46.00
562000	6/21/2007	Planned Outage	34.00	1	34.00
562028	6/21/2007	Planned Outage	422.00	2	211.00
562108	6/22/2007	Planned Outage	1,022.00	7	146.00
562116	6/22/2007	Planned Outage	7,850.88	29	270.72
562120	6/22/2007	Planned Outage	261.00	3	87.00
562206	6/23/2007	Planned Outage	764.40	4	191.10
562210	6/23/2007	Planned Outage	810.75	5	162.15
562537	6/25/2007	Planned Outage	96.00	1	96.00
562542	6/25/2007	Planned Outage	12,153.60	384	31.65
562574	6/25/2007	Planned Outage	5.00	1	5.00
562575	6/25/2007	Planned Outage	26.00	1	26.00
562587	6/25/2007	Planned Outage	66.00	1	66.00

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2007 Planned Outages Table

Ref ID	Date	Reason of Exclusion	CMI	CI	Duration
562635	6/26/2007	Planned Outage	357.00	17	21.00
562641	6/26/2007	Planned Outage	45.00	3	15.00
562648	6/26/2007	Planned Outage	30,284.00	113	268.00
562728	6/26/2007	Planned Outage	55,980.00	1,866	30.00
562906	6/27/2007	Planned Outage	118.00	2	59.00
563038	6/28/2007	Planned Outage	8.00	1	8.00
563063	6/28/2007	Planned Outage	10.00	1	10.00
563195	6/29/2007	Planned Outage	2,553.00	111	23.00
563253	6/29/2007	Planned Outage	63.00	7	9.00
563390	6/30/2007	Planned Outage	271.00	1	271.00
563484	7/1/2007	Planned Outage	1,711.00	59	29.00
563500	7/1/2007	Planned Outage	155,295.00	2,465	63.00
563647	7/1/2007	Planned Outage	42.00	3	14.00
563717	7/2/2007	Planned Outage	165.00	1	165.00
563718	7/2/2007	Planned Outage	138.00	1	138.00
563860	7/2/2007	Planned Outage	2,280.00	24	95.00
563987	7/3/2007	Planned Outage	4.00	1	4.00
564040	7/3/2007	Planned Outage	13.07	1	13.07
564274	7/5/2007	Planned Outage	9.00	1	9.00
564276	7/5/2007	Planned Outage	140.00	1	140.00
564277	7/5/2007	Planned Outage	35,659.00	211	169.00
564324	7/5/2007	Planned Outage	5.00	1	5.00
564509	7/6/2007	Planned Outage	12.00	6	2.00
564513	7/6/2007	Planned Outage	24.00	8	3.00
564518	7/6/2007	Planned Outage	40.00	1	40.00
564645	7/6/2007	Planned Outage	24,312.00	1,013	24.00
564692	7/7/2007	Planned Outage	258.00	6	43.00
564693	7/7/2007	Planned Outage	160.00	8	20.00
564955	7/9/2007	Planned Outage	6,138.00	1,116	5.50
564959	7/9/2007	Planned Outage	1,785.60	1,116	1.60
564960	7/9/2007	Planned Outage	82.49	73	1.13
564965	7/9/2007	Planned Outage	6.00	1	6.00
565257	7/10/2007	Planned Outage	390.00	5	78.00
565319	7/10/2007	Planned Outage	38.00	1	38.00
565389	7/11/2007	Planned Outage	49,640.00	340	146.00
565417	7/11/2007	Planned Outage	19.17	1	19.17
565671	7/12/2007	Planned Outage	48.00	4	12.00
565786	7/13/2007	Planned Outage	3,464.34	87	39.82
565806	7/13/2007	Planned Outage	30.00	3	10.00
566207	7/14/2007	Planned Outage	22,725.40	222	102.37
566353	7/16/2007	Planned Outage	540.00	10	54.00
566363	7/16/2007	Planned Outage	16.00	1	16.00
566508	7/17/2007	Planned Outage	36.00	2	18.00
566537	7/17/2007	Planned Outage	24.00	8	3.00
566538	7/17/2007	Planned Outage	16.00	8	2.00
566539	7/17/2007	Planned Outage	16.00	8	2.00

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2007 Planned Outages Table

Ref ID	Date	Reason of Exclusion	CMI	CI	Duration
566544	7/17/2007	Planned Outage	56,771.50	425	133.58
566556	7/17/2007	Planned Outage	25.00	5	5.00
566617	7/18/2007	Planned Outage	378.00	21	18.00
566642	7/18/2007	Planned Outage	3,456.00	54	64.00
566694	7/18/2007	Planned Outage	288,941.00	2,557	113.00
566766	7/19/2007	Planned Outage	61,603.63	3,091	19.93
566891	7/20/2007	Planned Outage	60.00	1	60.00
566893	7/20/2007	Planned Outage	30.00	1	30.00
600473	7/23/2007	Planned Outage	290.00	1	290.00
600485	7/23/2007	Planned Outage	30.00	1	30.00
600490	7/23/2007	Planned Outage	1.00	1	1.00
600492	7/23/2007	Planned Outage	216.00	18	12.00
600493	7/23/2007	Planned Outage	56.00	7	8.00
600494	7/23/2007	Planned Outage	48.00	6	8.00
600495	7/23/2007	Planned Outage	24.00	4	6.00
600497	7/23/2007	Planned Outage	50,375.00	775	65.00
600814	7/25/2007	Planned Outage	2,157.00	2,157	1.00
600829	7/25/2007	Planned Outage	7.00	1	7.00
600830	7/25/2007	Planned Outage	444.00	37	12.00
601033	7/26/2007	Planned Outage	1,775.00	5	355.00
601042	7/26/2007	Planned Outage	18.00	2	9.00
601226	7/28/2007	Planned Outage	35.00	5	7.00
601237	7/28/2007	Planned Outage	54,625.00	575	95.00
601276	7/29/2007	Planned Outage	200.00	1	200.00
601338	7/30/2007	Planned Outage	20.00	5	4.00
601490	7/31/2007	Planned Outage	131.00	1	131.00
601505	7/31/2007	Planned Outage	10.00	5	2.00
601509	7/31/2007	Planned Outage	6.00	2	3.00
601510	7/31/2007	Planned Outage	12.00	4	3.00
601511	7/31/2007	Planned Outage	5,715.00	127	45.00
601513	7/31/2007	Planned Outage	430.00	10	43.00
601514	7/31/2007	Planned Outage	203.00	7	29.00
601515	7/31/2007	Planned Outage	18.00	3	6.00
601524	7/31/2007	Planned Outage	15.00	3	5.00
601525	7/31/2007	Planned Outage	8.00	4	2.00
601534	7/31/2007	Planned Outage	2,176.00	17	128.00
601536	7/31/2007	Planned Outage	1,500.00	12	125.00
601537	7/31/2007	Planned Outage	3,250.00	26	125.00
602010	8/1/2007	Planned Outage	1,740.00	10	174.00
602049	8/1/2007	Planned Outage	235.00	5	47.00
602050	8/1/2007	Planned Outage	35,280.00	2,520	14.00
602116	8/1/2007	Planned Outage	1,332.00	12	111.00
602119	8/1/2007	Planned Outage	396.00	4	99.00
602275	8/2/2007	Planned Outage	70.00	7	10.00
602284	8/2/2007	Planned Outage	1,300.00	13	100.00
602388	8/2/2007	Planned Outage	500.00	1	500.00

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2007 Planned Outages Table

Ref ID	Date	Reason of Exclusion	CMI	CI	Duration
602531	8/3/2007	Planned Outage	906.00	3	302.00
602575	8/3/2007	Planned Outage	25,315.00	305	83.00
602854	8/6/2007	Planned Outage	56.00	8	7.00
602892	8/6/2007	Planned Outage	424.00	4	106.00
602896	8/6/2007	Planned Outage	2.00	1	2.00
602917	8/6/2007	Planned Outage	24.00	2	12.00
602920	8/6/2007	Planned Outage	10.00	2	5.00
603005	8/7/2007	Planned Outage	120.00	10	12.00
603007	8/7/2007	Planned Outage	6.00	2	3.00
603020	8/7/2007	Planned Outage	198.00	1	198.00
603401	8/8/2007	Planned Outage	128.00	8	16.00
603402	8/8/2007	Planned Outage	153.00	9	17.00
603512	8/9/2007	Planned Outage	66.00	3	22.00
603523	8/9/2007	Planned Outage	4,672.00	64	73.00
603871	8/10/2007	Planned Outage	24.00	3	8.00
603979	8/11/2007	Planned Outage	7,412.00	218	34.00
604154	8/12/2007	Planned Outage	1,078.00	7	154.00
604373	8/12/2007	Planned Outage	35,024.00	1,592	22.00
604644	8/14/2007	Planned Outage	820.00	41	20.00
604684	8/14/2007	Planned Outage	2,720.00	20	136.00
604687	8/14/2007	Planned Outage	14.00	2	7.00
604750	8/15/2007	Planned Outage	134.00	2	67.00
605068	8/17/2007	Planned Outage	5,400.00	45	120.00
605076	8/17/2007	Planned Outage	44.00	4	11.00
605081	8/17/2007	Planned Outage	40.00	5	8.00
605082	8/17/2007	Planned Outage	1,904.00	119	16.00
605095	8/17/2007	Planned Outage	104.00	8	13.00
605209	8/18/2007	Planned Outage	55,263.00	327	169.00
605361	8/20/2007	Planned Outage	142.00	2	71.00
605406	8/20/2007	Planned Outage	4.00	1	4.00
605454	8/21/2007	Planned Outage	106.00	1	106.00
605531	8/22/2007	Planned Outage	85.00	1	85.00
605534	8/22/2007	Planned Outage	23.00	1	23.00
605620	8/23/2007	Planned Outage	64.00	8	8.00
605628	8/23/2007	Planned Outage	372.00	4	93.00
605636	8/23/2007	Planned Outage	725.00	5	145.00
605650	8/23/2007	Planned Outage	69.00	1	69.00
605736	8/24/2007	Planned Outage	3,256.00	44	74.00
605849	8/24/2007	Planned Outage	35,805.00	165	217.00
606060	8/27/2007	Planned Outage	15.00	1	15.00
606255	8/27/2007	Planned Outage	98.00	7	14.00
606264	8/27/2007	Planned Outage	88.00	2	44.00
606266	8/27/2007	Planned Outage	21.00	1	21.00
606274	8/27/2007	Planned Outage	48.00	1	48.00
606407	8/28/2007	Planned Outage	153.00	1	153.00
606421	8/28/2007	Planned Outage	84.00	1	84.00

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2007 Planned Outages Table

Ref ID	Date	Reason of Exclusion	CMI	CI	Duration
606461	8/28/2007	Planned Outage	60.00	1	60.00
606462	8/28/2007	Planned Outage	59.00	1	59.00
606573	8/29/2007	Planned Outage	420.00	3	140.00
606599	8/29/2007	Planned Outage	19.00	1	19.00
606600	8/29/2007	Planned Outage	1,859.00	11	169.00
606609	8/29/2007	Planned Outage	12.00	1	12.00
606610	8/29/2007	Planned Outage	52.00	1	52.00
606798	8/30/2007	Planned Outage	688.00	4	172.00
606831	8/30/2007	Planned Outage	2,560.00	16	160.00
606929	8/31/2007	Planned Outage	183.00	1	183.00
606939	8/31/2007	Planned Outage	5.00	1	5.00
607128	9/1/2007	Planned Outage	12,912.00	48	269.00
607296	9/2/2007	Planned Outage	13,398.00	174	77.00
607524	9/4/2007	Planned Outage	168.00	7	24.00
607546	9/4/2007	Planned Outage	114.00	6	19.00
607561	9/4/2007	Planned Outage	32.00	8	4.00
607755	9/6/2007	Planned Outage	392.00	28	14.00
607761	9/6/2007	Planned Outage	500.00	5	100.00
607773	9/6/2007	Planned Outage	-	23	-
607775	9/6/2007	Planned Outage	114.00	1	114.00
607852	9/7/2007	Planned Outage	23.00	1	23.00
607866	9/7/2007	Planned Outage	15.00	3	5.00
607872	9/7/2007	Planned Outage	190.00	10	19.00
608076	9/9/2007	Planned Outage	201,096.00	1,512	133.00
608192	9/10/2007	Planned Outage	339.00	3	113.00
608290	9/11/2007	Planned Outage	232.00	2	116.00
608299	9/11/2007	Planned Outage	132.00	6	22.00
608306	9/11/2007	Planned Outage	480.00	16	30.00
608343	9/11/2007	Planned Outage	18,107.00	953	19.00
608516	9/12/2007	Planned Outage	216.00	3	72.00
608685	9/13/2007	Planned Outage	135.00	1	135.00
608775	9/14/2007	Planned Outage	3,162.00	62	51.00
608787	9/14/2007	Planned Outage	43.00	1	43.00
608789	9/14/2007	Planned Outage	35.00	1	35.00
608801	9/14/2007	Planned Outage	11,250.00	90	125.00
608848	9/14/2007	Planned Outage	132.00	1	132.00
608978	9/14/2007	Planned Outage	43,896.00	1,416	31.00
609000	9/14/2007	Planned Outage	2,000.00	500	4.00
609082	9/15/2007	Planned Outage	2,415.00	161	15.00
609130	9/15/2007	Planned Outage	49.00	1	49.00
609202	9/16/2007	Planned Outage	6,195.00	35	177.00
609207	9/17/2007	Planned Outage	10,146.00	114	89.00
609231	9/17/2007	Planned Outage	938.00	7	134.00
609234	9/17/2007	Planned Outage	460.00	5	92.00
609331	9/18/2007	Planned Outage	128.00	2	64.00
609510	9/19/2007	Planned Outage	1,365.00	65	21.00

Appendix 1

2007 Planned Outages Table

Ref ID	Date	Reason of Exclusion	CMI	CI	Duration
609511	9/19/2007	Planned Outage	135.00	9	15.00
609512	9/19/2007	Planned Outage	99.00	9	11.00
609523	9/19/2007	Planned Outage	1,560.00	65	24.00
609527	9/19/2007	Planned Outage	2,720.00	17	160.00
609531	9/19/2007	Planned Outage	198.00	9	22.00
609532	9/19/2007	Planned Outage	1,300.00	65	20.00
609542	9/19/2007	Planned Outage	24.00	12	2.00
609638	9/20/2007	Planned Outage	52.00	4	13.00
609671	9/20/2007	Planned Outage	19,450.00	1,945	10.00
609677	9/20/2007	Planned Outage	28,512.00	324	88.00
609681	9/20/2007	Planned Outage	13,167.00	171	77.00
609687	9/20/2007	Planned Outage	759.00	23	33.00
609692	9/20/2007	Planned Outage	608.00	8	76.00
609735	9/21/2007	Planned Outage	105.00	7	15.00
609972	9/22/2007	Planned Outage	49.00	7	7.00
609973	9/22/2007	Planned Outage	290.00	10	29.00
609975	9/22/2007	Planned Outage	20.00	4	5.00
609977	9/22/2007	Planned Outage	48.00	16	3.00
610111	9/23/2007	Planned Outage	165.00	1	165.00
610121	9/23/2007	Planned Outage	66.00	1	66.00
610122	9/23/2007	Planned Outage	54.00	1	54.00
610125	9/23/2007	Planned Outage	49.00	1	49.00
610128	9/23/2007	Planned Outage	305.00	5	61.00
610205	9/24/2007	Planned Outage	530.00	5	106.00
610223	9/24/2007	Planned Outage	65.00	1	65.00
610224	9/24/2007	Planned Outage	61.00	1	61.00
610237	9/24/2007	Planned Outage	25.00	1	25.00
610549	9/25/2007	Planned Outage	5.00	1	5.00
610566	9/25/2007	Planned Outage	140.00	4	35.00
610615	9/26/2007	Planned Outage	36.00	6	6.00
610627	9/26/2007	Planned Outage	185.00	5	37.00
610628	9/26/2007	Planned Outage	4,433.00	143	31.00
610683	9/27/2007	Planned Outage	9,546.00	74	129.00
610696	9/27/2007	Planned Outage	1,652.00	7	236.00
610927	9/29/2007	Planned Outage	496.00	31	16.00
611002	9/30/2007	Planned Outage	54.00	1	54.00
611054	10/1/2007	Planned Outage	12.00	1	12.00
611350	10/3/2007	Planned Outage	36.00	4	9.00
611359	10/3/2007	Planned Outage	344.00	2	172.00
611477	10/4/2007	Planned Outage	1,072.00	16	67.00
611482	10/4/2007	Planned Outage	1,615.00	19	85.00
611568	10/5/2007	Planned Outage	23,108.00	106	218.00
611591	10/5/2007	Planned Outage	16.00	4	4.00
611882	10/9/2007	Planned Outage	37.00	1	37.00
611883	10/9/2007	Planned Outage	2,040.00	8	255.00
611982	10/10/2007	Planned Outage	30.00	1	30.00

Appendix 1

2007 Planned Outages Table

Ref ID	Date	Reason of Exclusion	CMI	CI	Duration
612003	10/10/2007	Planned Outage	119.00	1	119.00
612315	10/11/2007	Planned Outage	1,326.00	34	39.00
612361	10/12/2007	Planned Outage	156.00	6	26.00
612379	10/12/2007	Planned Outage	20.00	4	5.00
612428	10/13/2007	Planned Outage	60,060.00	1,540	39.00
612438	10/13/2007	Planned Outage	3,454.00	11	314.00
612451	10/13/2007	Planned Outage	2,492.00	89	28.00
612536	10/14/2007	Planned Outage	72.00	6	12.00
612537	10/14/2007	Planned Outage	77.00	7	11.00
612658	10/15/2007	Planned Outage	60.00	4	15.00
612825	10/16/2007	Planned Outage	1,338.00	669	2.00
612829	10/16/2007	Planned Outage	1,882.00	941	2.00
613085	10/17/2007	Planned Outage	486.00	3	162.00
613980	10/19/2007	Planned Outage	196.00	1	196.00
614079	10/19/2007	Planned Outage	81.00	3	27.00
614417	10/22/2007	Planned Outage	754.00	13	58.00
614537	10/23/2007	Planned Outage	453.00	3	151.00
614555	10/23/2007	Planned Outage	36.00	3	12.00
614751	10/24/2007	Planned Outage	5,792.00	32	181.00
614849	10/25/2007	Planned Outage	99.00	1	99.00
614872	10/25/2007	Planned Outage	10.00	1	10.00
614939	10/26/2007	Planned Outage	13.00	1	13.00
614957	10/26/2007	Planned Outage	21.00	1	21.00
615062	10/27/2007	Planned Outage	108,112.00	466	232.00
615130	10/28/2007	Planned Outage	858.00	6	143.00
615292	10/30/2007	Planned Outage	10,010.00	70	143.00
615517	10/31/2007	Planned Outage	250.00	10	25.00
615594	11/1/2007	Planned Outage	180.00	5	36.00
615620	11/1/2007	Planned Outage	4,224.00	66	64.00
615712	11/2/2007	Planned Outage	182.00	7	26.00
615786	11/3/2007	Planned Outage	17.00	1	17.00
615810	11/3/2007	Planned Outage	550.00	5	110.00
615910	11/5/2007	Planned Outage	1,166.00	11	106.00
615997	11/6/2007	Planned Outage	696.00	12	58.00
616006	11/6/2007	Planned Outage	200.00	2	100.00
616025	11/6/2007	Planned Outage	5.00	1	5.00
616037	11/6/2007	Planned Outage	2,240.00	40	56.00
616090	11/7/2007	Planned Outage	192.00	4	48.00
616686	11/12/2007	Planned Outage	20.00	1	20.00
616694	11/12/2007	Planned Outage	11.00	1	11.00
616698	11/12/2007	Planned Outage	24.00	1	24.00
616704	11/12/2007	Planned Outage	82.00	1	82.00
616715	11/12/2007	Planned Outage	26.00	1	26.00
616772	11/13/2007	Planned Outage	377.00	1	377.00
616775	11/13/2007	Planned Outage	1,595.00	11	145.00
616807	11/13/2007	Planned Outage	14.00	2	7.00

Appendix 1

2007 Planned Outages Table

Ref ID	Date	Reason of Exclusion	CMI	CI	Duration
616808	11/13/2007	Planned Outage	26.00	1	26.00
616863	11/14/2007	Planned Outage	212.00	1	212.00
616869	11/14/2007	Planned Outage	2,898.00	46	63.00
616984	11/15/2007	Planned Outage	4,366.00	74	59.00
617036	11/15/2007	Planned Outage	436.00	4	109.00
617297	11/19/2007	Planned Outage	15.00	1	15.00
617306	11/19/2007	Planned Outage	408.00	6	68.00
617312	11/19/2007	Planned Outage	100.00	5	20.00
617375	11/20/2007	Planned Outage	2,940.00	20	147.00
617536	11/21/2007	Planned Outage	38.00	1	38.00
617817	11/25/2007	Planned Outage	77,532.00	2,769	28.00
617899	11/26/2007	Planned Outage	148.00	1	148.00
617913	11/26/2007	Planned Outage	49.00	1	49.00
617919	11/26/2007	Planned Outage	21.00	1	21.00
617922	11/26/2007	Planned Outage	19.00	1	19.00
617992	11/26/2007	Planned Outage	54.00	1	54.00
618195	11/27/2007	Planned Outage	144.00	4	36.00
618223	11/27/2007	Planned Outage	43,800.00	200	219.00
618236	11/27/2007	Planned Outage	460.00	5	92.00
618266	11/27/2007	Planned Outage	814.00	22	37.00
618270	11/27/2007	Planned Outage	1,298.00	22	59.00
618339	11/28/2007	Planned Outage	1,323.00	27	49.00
618359	11/28/2007	Planned Outage	205,802.00	1,355	151.00
618378	11/28/2007	Planned Outage	273,408.00	1,068	256.00
618383	11/28/2007	Planned Outage	17,628.00	1,356	13.00
618524	11/29/2007	Planned Outage	25.00	1	25.00
618530	11/29/2007	Planned Outage	48.00	4	12.00
618532	11/29/2007	Planned Outage	338.00	2	169.00
618869	12/3/2007	Planned Outage	76.00	1	76.00
618890	12/3/2007	Planned Outage	450.00	2	225.00
618919	12/3/2007	Planned Outage	2,176.00	272	8.00
618932	12/4/2007	Planned Outage	280.00	1	280.00
618945	12/4/2007	Planned Outage	160.00	1	160.00
618972	12/4/2007	Planned Outage	67.00	1	67.00
619340	12/10/2007	Planned Outage	35,778.00	178	201.00
619353	12/10/2007	Planned Outage	11,305.00	133	85.00
619631	12/14/2007	Planned Outage	121.00	1	121.00
619692	12/15/2007	Planned Outage	115,500.00	1,650	70.00
619737	12/15/2007	Planned Outage	1,968.00	328	6.00
619751	12/15/2007	Planned Outage	53,504.00	256	209.00
620029	12/17/2007	Planned Outage	21.00	7	3.00
620144	12/18/2007	Planned Outage	8,736.00	416	21.00
620145	12/18/2007	Planned Outage	47,012.00	2,044	23.00
620149	12/18/2007	Planned Outage	9,744.00	464	21.00
620183	12/19/2007	Planned Outage	94.00	2	47.00
620218	12/19/2007	Planned Outage	784.00	98	8.00

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2007 Planned Outages Table

Ref ID	Date	Reason of Exclusion	CMI	CI	Duration
620506	12/22/2007	Planned Outage	48,852.00	2,124	23.00
620950	12/29/2007	Planned Outage	131.00	1	131.00
620968	12/29/2007	Planned Outage	280.00	1	280.00
621029	12/30/2007	Planned Outage	22,170.00	1,478	15.00
621180	12/31/2007	Planned Outage	16.00	1	16.00
621194	12/31/2007	Planned Outage	181.00	1	181.00

APPENDIX 2

Gulf Power Company
Annual Wood Pole Inspection Report
(Reporting Year 2007)

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
255,950	32,000	33,026	736	2.20%	667	0 (See Note)	69	41	V, E, S, B	32,000	33,026	33,026
If b – c > 0, provide explanation												
If d – g > 0, provide explanation	Pole inspection was completed in the fourth quarter of 2007 and repairs have been scheduled for 2008.											
Description of selection criteria for inspections	Gulf is systematically moving across its system. Poles are selected for inspection on a geographical basis.											

APPENDIX 3 FEEDER SPECIFIC DATA

(a) Feeder ID	(b) Sub Region	(c) Number of Overhead Lateral Lines	(d) Number of Overhead Lateral Miles	(e) Number of Customers served on Overhead Lateral Lines	(f) CMI for Overhead Lateral Lines	(g) CI for Overhead Lateral Lines	(h) Number of Underground Lateral Lines	(i) Number of Underground Lateral Miles	(j) Number of Customers served on Underground Lateral Lines	(k) CMI for Underground Lateral Lines	(l) CI for Underground 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 Underground portion of the Feeder Circuit	(u) Length of Overhead portion of the Feeder circuit	(v) Number of customers served by Overhead Feeders	(w) CMI for Overhead Feeders	(x) CI for Overhead Feeders	(y) Load growth since 12/31/05	(z) Peak load recorded through 12/31/06
0102	CENTRAL	16	3.66	359	542	8	1	0.06	0	0	0	0	0	No	4.80	0.06	4.74	359	542	8	0.1	2.180
0152	CENTRAL	14	1.94	225	903	15	1	0.09	4	0	0	0	0	No	3.20	0.14	3.06	229	903	15	0.1	2.180
0514	WESTERN	0	0.00	0	0	0	0	0.00	0	0	0	0	0	No	0.00	0.00	0.00	0	0	0	0.1	4.459
0714	WESTERN	27	3.76	463	1,224	17	0	0.00	0	0	0	0	0	No	5.22	0.00	5.22	463	244,998	951	n/a	n/a
0734	WESTERN	8	1.61	193	1,970	35	0	0.00	0	0	0	0	0	No	2.50	0.00	2.50	193	87,330	423	n/a	n/a
0748	WESTERN	12	3.12	413	7,780	74	0	0.00	0	0	0	0	0	No	5.15	0.00	5.15	413	190,787	906	n/a	n/a
0804	WESTERN	1	0	0	0	0	1	0.54	0	0	0	0	1	No	0.65	0.54	0.11	0	0	0	n/a	n/a
2222	EASTERN	0	0.00	1	0	0	1	0.54	0	0	0	0	0	No	0.72	0.64	0.08	1	0	0	n/a	n/a
2613	CENTRAL	1	1.99	20	1,401	11	0	0.00	0	0	0	0	0	No	2.42	0.00	2.42	20	3,395	31	n/a	n/a
2619	CENTRAL	11	4.00	79	833	6	0	0.00	0	0	0	0	0	No	5.83	0.00	5.83	79	36,518	167	n/a	n/a
5332	WESTERN	85	15.68	720	192,486	2,761	39	8.53	796	5,335	47	0	1	Yes	26.09	8.53	17.56	1,516	197,821	2,808	0.5	9.872
5342	WESTERN	27	3.81	192	8,477	113	19	5.17	921	6,990	35	0	1	Yes	10.65	5.17	5.48	1,113	15,467	148	2	10.249
5352	WESTERN	43	6.23	131	16,298	149	28	2.88	93	0	0	0	1	Yes	11.30	2.88	8.42	224	16,298	149	0.5	13.064
5362	WESTERN	0	0.00	0	0	0	0	0.00	0	0	0	0	0	No	3.23	0.08	3.15	0	0	0	0.5	1.681
5372	WESTERN	0	0.01	0	0	0	0	0.04	0	0	0	0	0	No	3.19	0.08	3.11	0	0	0	0.5	2.626
5382	WESTERN	423	128.85	1,831	766,594	4,346	27	9.02	55	2,070	8	2	4	Yes	146.02	9.11	136.91	1,886	908,496	5,943	1.8	11.361
5392	WESTERN	224	60.85	935	102,894	740	14	1.88	20	0	0	1	1	No	64.56	1.88	62.68	955	219,378	2,697	4	8.250
5412	WESTERN	1	0.47	0	315	2	0	0.00	0	0	0	0	0	No	1.01	0.00	1.01	0	315	2	1	7.368
5502	WESTERN	50	8.31	249	12,935	81	2	1.11	21	324	6	0	1	Yes	11.12	1.11	10.01	270	13,259	87	1	2.401
5512	WESTERN	161	45.50	1,130	266,078	1,565	20	8.96	439	681	6	1	2	Yes	58.56	9.65	48.91	1,569	403,579	4,788	3.5	7.775
5522	WESTERN	93	23.67	568	105,519	609	13	3.78	192	0	0	0	1	Yes	31.28	3.78	27.49	760	105,519	609	0.1	4.115
5542	WESTERN	104	32.62	1,662	13,829	131	27	20.00	864	2,364	16	0	2	Yes	57.09	20.00	37.10	2,526	16,193	147	1	14.277
5562	WESTERN	82	24.28	1,835	57,154	453	15	5.28	316	4,594	11	1	0	Yes	31.37	5.35	26.02	2,151	61,748	464	0.2	9.350
5572	WESTERN	32	12.51	968	20,327	259	13	5.23	318	4,430	28	0	2	Yes	18.93	5.23	13.70	1,286	24,757	287	4	7.207
5582	WESTERN	101	14.92	921	45,245	325	15	7.91	932	0	0	1	0	Yes	27.24	7.91	19.33	1,853	45,245	325	2	12.972
5592	WESTERN	35	7.44	407	12,989	102	15	7.50	1,122	15,473	177	0	1	Yes	17.63	7.50	10.13	1,529	78,549	3,390	1	11.176
5602	WESTERN	285	73.35	1,824	329,596	2,157	34	11.68	125	0	0	0	1	No	91.88	11.69	80.19	1,949	329,596	2,157	1	13.889
5612	WESTERN	344	136.35	2,142	1,098,029	6,492	9	6.14	148	0	0	0	2	Yes	146.84	6.14	140.70	2,290	1,730,726	14,144	5	13.326
5632	WESTERN	20	5.74	483	226,322	1,738	23	6.98	707	68,338	269	0	0	Yes	15.40	8.25	7.15	1,190	294,660	2,007	5	15.953
5642	WESTERN	103	26.00	1,533	20,975	203	19	27.46	1,380	25,129	226	0	0	Yes	59.63	27.46	32.17	2,913	46,104	429	4	15.805
5652	CENTRAL	84	17.47	1,070	72,110	780	32	4.97	404	28,910	118	1	1	Yes	25.18	4.97	20.21	1,474	101,020	898	0.5	8.541
5662	CENTRAL	95	17.74	1,632	257,060	3,209	55	8.17	1,190	79,838	513	1	2	Yes	28.18	8.17	20.01	2,822	408,775	4,692	0.2	12.042
5682	CENTRAL	48	7.88	907	62,413	652	24	2.24	230	1,799	18	1	1	Yes	12.48	2.24	10.24	1,137	64,212	670	1	12.130
5752	WESTERN	189	41.07	1,817	82,369	708	29	23.42	1,238	9,404	45	2	1	Yes	68.86	23.60	45.26	3,055	91,773	753	2	18.951
5762	WESTERN	158	45.71	1,795	399,357	2,841	30	18.30	1,111	2,924	14	0	1	Yes	68.21	19.18	49.04	2,906	700,955	8,733	5	14.660
5772	WESTERN	60	12.88	610	73,267	532	8	4.24	307	28,478	157	0	0	Yes	19.91	4.24	15.67	917	112,753	1,033	7.5	6.532
5782	WESTERN	203	66.61	1,898	465,808	3,672	26	21.61	520	1,280	9	0	1	Yes	91.61	21.61	69.99	2,418	467,088	3,681	3	13.481
5792	WESTERN	276	100.33	2,329	438,960	2,579	34	11.22	486	849	9	3	3	Yes	119.33	12.32	107.01	2,815	546,147	5,462	2	13.971
5812	WESTERN	0	0.00	0	343,666	4,545	0	0.00	0	391	2	0	0	No	0.04	0.00	0.04	0	344,057	4,547	2	119.006
5822	WESTERN	93	24.97	1,144	9,157	53	24	9.34	384	305	2	2	0	Yes	35.63	9.34	26.29	1,528	9,462	55	1	11.080
5832	WESTERN	200	65.93	2,191	249,155	2,744	16	1.68	53	616	2	1	1	Yes	72.27	1.68	70.58	2,244	371,671	5,046	2	11.114
5852	WESTERN	92	25.79	813	34,376	244	5	0.93	6	0	0	0	2	Yes	29.44	0.93	28.51	819	34,376	244	1	6.782
5872	WESTERN	45	11.54	649	61,026	809	30	15.16	906	23,321	122	1	2	Yes	28.00	15.20	12.80	1,555	84,347	931	2	17.288
5882	CENTRAL	73	20.50	2,045	217,453	1,729	36	5.07	619	6,676	39	0	0	Yes	30.20	5.07	25.12	2,664	224,129	1,768	3	10.904
5892	CENTRAL	103	28.11	2,042	97,796	1,277	51	17.52	1,274	11,967	69	1	0	Yes	51.55	17.52	34.03	3,316	168,611	1,959	2	14.972
5902	WESTERN	41	7.26	577	6,591	68	13	2.50	113	671	2	0	1	Yes	11.12	2.84	8.28	690	7,262	70	0.1	8.167
5912	WESTERN	25	2.09	271	4,257	43	35	3.79	277	1,617	5	0	1	Yes	10.41	5.44	4.97	548	24,404	593	1	10.628
5922	WESTERN	40	7.14	672	45,416	534	26	25.30	1,646	111,798	593	0	0	Yes	36.07	25.30	10.77	2,318	157,214	1,127	2	14.262
5932	WESTERN	69	13.97	1,115	65,208	532	27	14.38	864	101,976	696	0	2	Yes	30.09	14.52	15.56	1,979	167,184	1,228	1	18.755
5942	WESTERN	19	9.55	570	147,363	1,686	45	8.38	1,616	77,512	344	0	2	Yes	21.24	10.54	10.70	2,186	224,875	2,030	2	13.627
5952	WESTERN	0	0.01	0	0	0	0	0.00	0	0	0	0	0	No	0.01	0.00	0.01	0	0	0	0.1	11.638
5972	WESTERN	38	9.62	653	19,183	100	20	5.20	474	2,928	8	0	2	Yes	16.74	5.29	11.45	1,127	61,163	1,289	0.5	9.985
5982	WESTERN	47	13.19	982	26,523	256	47	12.39	1,396	30,256	140	0	2	No	29.14	12.91	16.23	2,378	305,331	2,889	0.1	12.859
5992	WESTERN	39	8.22	644	378,633	970	25	12.14	1,126	38,515	227	0	2	Yes	23.96	12.24	11.72	1,770	749,643	3,908	0.1	8.911
6022	WESTERN	0	0.00	0	0	0	0	0.00	0	0	0	0	0	No	0.01	0.00	0.01	0	0	0	0.1	5.312
6032	WESTERN	36	7.65	374	7,614	85	16	4.42	754	3,963	13	2	2	Yes	15.17	4.42	10.75	1,128	11,577	98	0.4	10.262
6042	WESTERN	83	16.52	1,703	101,669	975	5	0.44	47	0	0	0	2	Yes	19.68	0.44	19.23	1,750	101,669	975	0.5	21.183
6052	WESTERN	73	15.45	1,084	93,968	1,136	7	4.20	309	16,867	89	0	0	Yes	22.75	4.67	18.08	1,393	110,835	1,225	0.1	7.770
6062	WESTERN	71	18.43	1,622	105,787	833	7	0.26	9	1,299	3	0	0	Yes	23.23	0.26	22.97	1,631	189,214	2,252	0.1	8.978
6072	WESTERN	101	21.99	1,198	60,775	445	34	21.89	1,537	6,304	53	0	2	Yes	50.31	22.05	28.26	2,735	134,423	3,304	0.5	14.047
6082	WESTERN	166	41.79	1,969	67,299	860	29	18.26	1,780	0	0	0	4	Yes	67.88	18.94	48.94	3,749	987,449	4,710	0.1	14.832
6092	WESTERN	42	14.63	858	26,473	321	26	8.69	1,015	4,434	6	0	2	No	26.73	8.69	18.05	1,873	30,907	327	0.5	9.653
6212	WESTERN	83	23.59	824	249,630	1,684	28	25.51	1,136	57,856	655	0	1	Yes	51.61	25.51	26.09	1,960	307,486	2,339	1	10.963
6338	WESTERN	0	0.00	0	65	1	0	0.88	51	431	1	0	0	No	0.88	0.88	0.00	51	496	2	n/a	n/a
6348	WESTERN	0	0.00	0	0	0	0	0.92	32	0	0	0	0	No	0.92	0.92	0.00	32	0	0	n/a	n/a
6352	WESTERN	0	0.00	0	0	0	0	0.86	57	0	0	0	0	No	0.86	0.86	0.00	57	0	0	n/a	n/a
6412	CENTRAL	70	23.34	469	26,738	227	6	2.12	44	3,428	34	1	0	No	28.09	2.12	25.98	513	30,166	261	0.1	1.880
6432	CENTRAL	22	6.34	211	4,420	35	3	0.48	9	0	0	0	0	No	8.57	0.48	8.09	220	4,420	35	0.1	1.582
6452	CENTRAL	3	0.26	6	498	2	1	0.13	1	0	0	0	0	No	4.11	0.13	3.97	7	995	9	0.1	1.880
6482	WESTERN	33	8.20	855	16,234	161	40	10.55	1,346	6,248	17	0	1	Yes	24.64	10.59	14.05	2,201	148,395	2,387	2	9.806
6508	WESTERN	9	0.60	17	360	2	9	0.34	4	0	0	0	0	Yes	2.45	0.42	2.03	21	360	2	0.1	8.759
6522	WESTERN	114	15.23	1,376	68,513	389	36	3.47	441	6,372	43	0	2	Yes	22.48	3.48	19.00	1,817	74,885	432	0.4	8.676
6532	WESTERN	109	20.27	1,869	170,734	1,265	7	0.26	160	0	0	0	1	Yes	24.72	0.26	24.47	2,029	170,734	1,265	0.5	9.383
6542	WESTERN	58	14.17	1,552	88,980	752	14	1.24	224	0	0	0	2	Yes	19.24	1.24	18.00	1,776	88,980	752	1	12.875
6572	WESTERN	120	21.22	1,705	136,634	947	17	0.68	88	49,168	112	0	2	Yes	24.17	0.68	23.49	1,793	185,802	1,059	3	12.257
6582	WESTERN	99	18.50	1,586	116,602	1,090	4	0.22	38	0	0	0	1	Yes	21.17	0.22	20.95	1,624	116,602	1,090	0.5	7.695
6592	WESTERN	19	2.25	188	753	6	9	0.93	221	6,720	48	0	0	Yes	6.43	0.93	5.50	409	7,473	54	0.1	8.858
6602	WESTERN	33	7.60	674	82,221	481	4	0.16	26	0	0	0	0	Yes	9.07	0.16	8.91	700	82,221	481	2.5	9.041
6612	WESTERN	8	2.97	232	8,479	151	4	0.08	3	0	0	0	0	Yes	5.40	0.18	5.22	235	15,227	392	0.1	6.698

APPENDIX 3 FEEDER SPECIFIC DATA

(a) Feeder ID	(b) Sub Region	(c) Number of Overhead Lateral Lines	(d) Number of Overhead Lateral Miles	(e) Number of Customers served on Overhead Lateral Lines	(f) CMI for Overhead Lateral Lines	(g) CI for Overhead Lateral Lines	(h) Number of Underground Lateral Lines	(i) Number of Underground Lateral Miles	(j) Number of Customers served on Underground Lateral Lines	(k) CMI for Underground Lateral Lines	(l) CI for Underground 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 Underground portion of the Feeder Circuit	(u) Length of Overhead portion of the Feeder circuit	(v) Number of customers served by Overhead Feeders	(w) CMI for Overhead Feeders	(x) CI for Overhead Feeders	(y) Load growth since 12/31/05	(z) Peak load recorded through 12/31/06
6622	WESTERN	41	7.40	705	7,496	92	3	0.08	3	0	0	1	1	Yes	8.95	0.23	8.71	708	7,496	92	0.6	8.117
6632	WESTERN	90	8.71	671	39,029	452	11	0.93	12	0	0	0	3	Yes	11.64	0.93	10.70	683	52,920	931	0.3	9.272
6642	WESTERN	58	10.26	570	13,321	144	6	0.31	5	0	0	1	0	Yes	12.36	0.31	12.05	575	13,321	144	0.1	7.974
6652	WESTERN	158	25.82	2,350	108,308	1,430	10	0.93	147	288	1	3	0	Yes	29.48	0.93	28.56	2,497	108,596	1,431	1.4	11.738
6662	WESTERN	82	16.72	1,015	145,261	1,920	23	3.80	351	248	1	0	0	Yes	25.35	3.80	21.55	1,366	145,509	1,921	1	8.653
6672	WESTERN	0	0.05	0	0	0	0	0.00	0	0	0	0	0	No	0.05	0.00	0.05	0	0	0	0.1	12.691
6678	WESTERN	53	18.29	1,756	220,279	2,416	22	5.42	712	14,628	85	0	1	No	25.09	5.42	19.67	2,468	234,907	2,501	0.1	9.962
6682	WESTERN	33	9.71	779	112,250	1,069	11	2.41	226	2,086	6	0	2	Yes	16.47	2.41	14.05	1,005	151,684	1,484	0.5	6.027
6692	WESTERN	52	13.76	1,190	202,258	1,479	11	2.48	441	13,685	67	0	1	Yes	18.72	2.60	16.12	1,631	367,862	3,186	3	6.340
6706	WESTERN	51	12.63	863	231,902	1,269	4	0.11	4	0	0	0	0	Yes	14.84	0.11	14.73	867	231,902	1,269	0.5	7.635
6716	WESTERN	75	12.64	909	24,615	160	17	1.03	164	0	0	0	1	Yes	19.61	1.03	18.58	1,073	24,615	160	0.1	10.300
6742	WESTERN	28	10.63	1,178	56,968	633	10	6.88	574	29,732	217	0	0	Yes	21.18	6.97	14.22	1,752	86,701	850	0.1	9.213
6774	WESTERN	59	15.23	733	337,740	2,559	29	1.80	79	0	0	0	1	Yes	20.83	1.91	18.92	812	348,281	2,686	0.5	7.833
6782	WESTERN	107	28.03	1,054	98,031	917	20	7.29	698	524	4	2	1	Yes	40.03	7.29	32.74	1,752	98,555	921	1	11.894
6792	WESTERN	145	33.24	1,204	349,305	3,428	37	12.07	877	66,498	563	1	1	Yes	48.61	12.14	36.47	2,081	415,803	3,991	4	16.683
6912	WESTERN	134	33.16	930	139,742	1,112	17	6.51	232	2,118	16	0	1	Yes	42.41	6.51	35.90	1,162	141,860	1,128	2	7.142
6922	WESTERN	167	46.68	1,210	384,535	4,257	4	2.38	111	224	2	4	0	Yes	50.27	2.38	47.89	1,321	384,759	4,259	0.5	12.283
6932	WESTERN	87	16.84	783	264,876	1,079	17	9.04	506	0	0	0	0	Yes	33.70	9.04	24.67	1,289	264,876	1,079	2	7.330
6942	WESTERN	271	52.35	1,501	768,000	3,822	15	4.12	125	0	0	0	3	Yes	61.73	4.12	57.61	1,626	805,184	4,486	1.5	16.758
6966	WESTERN	1	0.39	0	0	0	1	0.02	0	0	0	0	0	No	0.42	0.02	0.41	0	0	0	0.1	1.388
6982	WESTERN	8	9.53	11	1,057	7	0	0.00	0	0	0	0	0	No	10.18	0.00	10.18	11	1,057	7	0.1	9.180
6992	WESTERN	117	23.36	1,183	216,169	3,148	36	22.94	1,298	2,978	43	0	1	Yes	52.45	23.26	29.18	2,481	219,147	3,191	4	15.670
7012	WESTERN	182	43.97	2,212	353,008	2,320	19	7.46	375	6,288	26	0	1	Yes	58.02	7.46	50.55	2,587	484,199	7,443	4	14.387
7022	WESTERN	43	9.06	521	47,826	366	11	4.49	162	380	5	0	0	Yes	17.70	4.64	13.06	683	101,721	1,066	4	11.129
7032	WESTERN	74	19.49	1,066	181,992	1,421	23	7.54	419	1,104	12	0	1	No	28.70	7.63	21.07	1,485	183,096	1,433	4	9.264
7042	WESTERN	74	21.77	916	96,638	753	21	14.20	538	6,886	72	0	1	Yes	40.65	14.66	25.99	1,454	390,261	5,707	4	13.076
7112	WESTERN	113	23.41	1,172	66,521	1,052	22	6.68	422	55	1	0	2	Yes	31.34	6.69	24.65	1,594	66,576	1,053	0.1	7.612
7122	WESTERN	129	23.93	723	183,202	2,119	33	21.81	770	7,683	38	0	2	Yes	48.69	21.86	26.82	1,493	357,784	3,669	1	12.460
7132	WESTERN	122	18.61	901	66,808	639	22	8.79	502	46,568	131	0	0	Yes	32.15	8.86	23.28	1,403	113,376	770	0.5	15.185
7157	WESTERN	1	0.33	0	0	0	1	0.08	0	0	0	0	1	No	0.46	0.08	0.38	0	0	0	n/a	n/a
7172	WESTERN	94	22.57	969	701,974	5,040	24	12.62	415	841	12	0	1	Yes	43.46	13.77	29.69	1,384	702,815	5,052	4	14.888
7232	WESTERN	196	51.71	1,903	378,454	3,443	46	8.43	381	1,126	5	0	1	Yes	65.07	8.43	56.64	2,284	700,132	5,805	6	12.899
7252	WESTERN	170	38.97	1,374	907,253	7,660	41	16.56	959	0	0	0	1	Yes	59.27	17.02	42.25	2,333	2,266,081	12,465	5	12.705
7262	WESTERN	171	65.11	2,526	507,384	4,387	22	8.01	324	4,940	25	1	1	Yes	75.64	8.12	67.52	2,850	632,949	6,164	2	13.186
7272	WESTERN	235	70.21	2,361	334,524	1,998	28	2.90	221	302	2	0	4	Yes	77.86	2.90	74.96	2,582	334,826	2,000	1	14.612
7282	WESTERN	99	24.67	1,447	56,501	258	22	4.98	262	0	0	0	1	Yes	34.62	5.50	29.12	1,709	216,611	2,037	2	11.092
7292	WESTERN	88	19.30	1,087	199,233	2,110	13	2.94	320	6,394	33	0	1	Yes	25.84	2.94	22.89	1,407	205,627	2,143	5.5	11.622
7302	WESTERN	0	0.04	0	0	0	3	0.50	2	0	0	0	0	No	0.61	0.50	0.11	2	0	0	0.1	9.810
7332	WESTERN	72	19.12	524	20,204	192	27	18.27	963	20,233	89	0	2	Yes	39.24	18.27	20.97	1,487	40,437	281	2.5	11.085
7342	WESTERN	34	6.34	382	274,185	2,280	47	6.84	1,520	9,603	129	1	0	Yes	14.62	6.84	7.79	1,902	499,957	4,322	2	8.267
7352	WESTERN	39	12.77	1,011	105,269	1,037	25	7.46	1,279	85,668	407	0	1	Yes	22.74	7.46	15.28	2,290	190,937	1,444	0.3	9.048
7362	WESTERN	147	22.64	1,064	23,053	127	77	15.41	2,246	36,994	114	0	2	Yes	42.45	15.75	26.70	3,310	376,187	5,031	1	14.706
7372	WESTERN	74	11.66	918	23,942	401	34	28.33	1,799	85,148	152	0	0	Yes	45.16	28.57	16.59	2,717	109,090	553	2	14.444
7402	WESTERN	0	0.02	1	0	0	0	0.01	0	0	0	0	0	Yes	1.88	0.08	1.80	1	0	0	0.5	3.754
7404	WESTERN	57	7.56	918	98,587	791	24	1.57	52	1,177	7	0	0	Yes	11.37	1.76	9.61	970	175,232	1,791	0.1	10.171
7406	WESTERN	96	16.82	1,875	298,804	2,215	10	0.58	163	0	0	0	1	Yes	22.30	1.02	21.27	2,038	587,925	6,056	2	10.152
7408	WESTERN	15	2.26	234	2,209	41	6	0.39	11	0	0	0	0	Yes	3.85	0.45	3.40	245	2,209	41	4	2.958
7410	WESTERN	3	0.26	30	0	0	0	0.00	0	0	0	0	0	Yes	2.32	0.14	2.18	30	0	0	3	3.063
7414	WESTERN	9	0.99	122	807	8	7	0.66	20	0	0	0	0	Yes	3.94	1.35	2.60	142	807	8	0.1	7.899
7416	WESTERN	75	7.17	727	75,796	338	23	1.70	45	0	0	0	1	Yes	12.04	1.91	10.14	772	75,796	338	0.1	9.798
7492	WESTERN	127	29.78	822	321,254	2,165	11	0.95	66	10,260	36	0	2	No	33.58	0.95	32.63	888	422,212	3,099	1	5.809
7512	WESTERN	88	15.21	1,220	134,137	863	31	4.26	427	12,498	108	0	1	Yes	21.97	4.26	17.71	1,647	244,908	6,083	2.5	11.146
7522	WESTERN	52	12.28	860	28,519	229	41	11.32	544	16,813	82	0	2	Yes	27.16	11.32	15.84	1,404	128,132	1,783	1	11.808
7532	WESTERN	10	1.62	105	4,045	36	9	7.69	1,073	5,038	23	0	1	Yes	14.90	11.60	3.30	1,178	9,083	59	2	10.797
7542	WESTERN	0	0.00	0	1,034	8	8	5.29	308	208,644	1,117	0	0	No	10.54	9.74	0.80	308	251,270	1,411	2	11.029
7582	WESTERN	154	33.65	2,224	201,577	2,268	15	3.62	177	0	0	0	1	Yes	42.23	3.62	38.62	2,401	201,577	2,268	1.5	10.927
7592	WESTERN	21	5.28	301	9,057	66	12	6.14	597	0	0	0	1	Yes	12.63	6.14	6.49	898	9,057	66	1	20.078
7602	WESTERN	28	3.38	204	27,985	225	31	3.10	441	1,110	5	0	0	Yes	8.99	3.22	5.76	645	29,095	230	0.1	5.802
7612	WESTERN	86	13.62	1,233	75,325	686	44	4.69	744	529	3	0	2	Yes	21.87	5.02	16.86	1,977	144,748	2,502	1	18.938
7622	WESTERN	46	10.25	951	21,890	238	19	2.49	357	1,917	18	0	0	Yes	14.46	2.49	11.96	1,308	50,187	1,575	2.5	7.903
7632	WESTERN	93	11.79	1,137	110,655	782	13	4.89	455	17,174	170	0	0	Yes	19.89	4.89	15.00	1,592	330,820	2,620	0.1	10.523
7642	WESTERN	43	9.52	958	16,214	143	18	3.62	499	17,177	107	1	1	Yes	15.90	3.62	12.28	1,457	33,391	250	2.5	7.047
7652	WESTERN	13	0.86	38	0	0	25	3.08	108	2,941	7	0	1	Yes	7.11	3.21	3.90	146	2,941	7	0.1	18.147
7662	WESTERN	75	15.48	1,129	244,082	1,468	27	6.63	779	33,923	336	0	0	Yes	26.62	6.63	19.99	1,908	352,093	3,568	1.2	12.781
7682	WESTERN	67	10.28	1,034	35,774	297	32	8.01	1,070	30,230	175	0	1	Yes	23.16	8.20	14.96	2,104	207,706	2,619	0.1	12.825
7692	WESTERN	7	1.52	117	21,399	132	7	0.51	9	0	0	0	0	Yes	3.58	0.51	3.06	126	21,399	132	0.1	1.579
7702	WESTERN	45	10.30	1,008	45,755	503	11	6.61	487	11,593	83	0	1	Yes	20.09	6.61	13.48	1,495	292,796	2,135	2	9.089
7712	WESTERN	41	9.61	737	16,543	162	5	0.99	163	12,707	74	0	1	Yes	12.32	0.99	11.33	900	167,264	1,150	0.1	4.350
7722	WESTERN	43	12.35	1,059	70,657	556	1	0.69	49	3,470	51	0	0	Yes	16.25	0.69	15.56	1,108	191,999	1,719	1	5.088
7742	WESTERN	56	18.24	1,887	43,577	508	14	1.83	272	1,755	5	0	3	Yes	24.09	1.83	22.26	2,159	45,332	513	0.5	8.995
7752	WESTERN	78	19.59	1,368	140,595	999	32	5.84	769	21,319	135	0	1	Yes	28.17	5.88	22.29	2,137	573,836	3,321	0.1	11.137
7762	WESTERN	49	12.04	1,309	68,490	515	5	0.40	66	0	0	0	1	Yes	14.85	0.40	14.44	1,375	68,490	515	0.5	6.264
7772	WESTERN	39	6.06	427	104,652	632	10	1.20	247	62,434	215	0	1	Yes	9.95	1.21	8.75	674	167,086	847	5	7.010
7782	WESTERN	80	11.67	1,069	33,588	216	11	1.05	127	0	0	1	1	Yes	16.78	1.05	15.73	1,196	46,986	1,434	1	7.224
7792	WESTERN	94	20.21	1,414	146,245	1,225	19	9.15	655	103,238	342	0	2	Yes	32.71	9.40	23.32	2,069	249,483	1,567	0.2	10.778
7802	WESTERN	29	3.91	276	11,713	121	29	5.11	718	881	4	0	1	No	12.44	5.11	7.34	994	46,783	1,137	1	11.677
7822	WESTERN	40	7.65	411	229,934	1,751	27	7.39	1,439	24,396	146	0	1	Yes	17.95	7.39	10.56	1,850	254,330	1,897	2	15.754
7832	WESTERN	124	31.45	1,876	136,194	1,112	20	9.74	1,053	37,511	220	1	2	Yes	43.70	9.74	33.96	2,929	175,793	3,889	1	12.834
7842	WESTERN	153	29.71	1,626	106,632	1,085	42	11.63	877	19,878	79	1	4	Yes	46.26	11.78	34.49	2,503	126,510	1,164	1	14.429

APPENDIX 3 FEEDER SPECIFIC DATA

(a) Feeder ID	(b) Sub Region	(c) Number of Overhead Lateral Lines	(d) Number of Overhead Lateral Miles	(e) Number of Customers served on Overhead Lateral Lines	(f) CMI for Overhead Lateral Lines	(g) CI for Overhead Lateral Lines	(h) Number of Underground Lateral Lines	(i) Number of Underground Lateral Miles	(j) Number of Customers served on Underground Lateral Lines	(k) CMI for Underground Lateral Lines	(l) CI for Underground 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 Underground portion of the Feeder Circuit	(u) Length of Overhead portion of the Feeder circuit	(v) Number of customers served by Overhead Feeders	(w) CMI for Overhead Feeders	(x) CI for Overhead Feeders	(y) Load growth since 12/31/05	(z) Peak load recorded through 12/31/06
7872	WESTERN	33	5.73	356	23,021	185	17	1.35	58	153	1	1	0	Yes	9.33	1.35	7.99	414	23,174	186	2	11.174
7882	WESTERN	50	8.88	604	39,267	315	24	3.53	247	153	1	0	1	Yes	15.07	3.56	11.51	851	39,420	316	2	11.713
7892	WESTERN	1	0.04	12	0	0	1	1.02	88	0	0	0	0	No	1.61	1.02	0.59	100	0	0	1	14.899
7902	CENTRAL	186	45.47	1,827	137,689	1,134	27	4.13	237	62,250	277	3	3	No	53.85	4.13	49.73	2,064	199,939	1,411	1	13.097
7912	CENTRAL	148	57.75	1,495	246,650	2,024	21	2.10	79	76	1	2	4	No	64.09	2.10	61.99	1,574	246,726	2,025	1	8.643
7922	WESTERN	88	14.49	983	115,395	863	28	12.66	1,054	2,425	15	0	1	Yes	31.54	14.46	17.08	2,037	171,160	2,783	1	10.940
7932	WESTERN	72	12.73	1,031	47,605	420	62	8.67	1,047	27,401	223	1	2	Yes	25.08	8.67	16.41	2,078	75,006	643	0.2	14.514
7942	WESTERN	55	5.48	531	35,158	206	27	2.59	138	10,230	12	0	0	Yes	12.47	3.20	9.27	669	45,388	218	2	11.306
7952	CENTRAL	22	9.08	182	7,812	88	3	0.23	4	0	0	0	0	No	13.01	0.23	12.78	186	141,194	643	0.5	1.510
7962	CENTRAL	48	17.33	309	54,768	392	2	0.12	1	0	0	0	0	No	18.35	0.12	18.24	310	124,678	932	0.5	1.510
8012	EASTERN	3	0.74	15	0	0	6	0.51	6	0	0	0	0	Yes	2.32	0.67	1.65	21	0	0	0.1	1.752
8032	EASTERN	43	25.07	317	80,312	703	22	10.30	27	49	1	0	3	No	41.52	10.46	31.06	344	132,305	1,048	1.2	1.964
8038	WESTERN	0	0.00	0	0	0	0	0.00	0	0	0	0	0	No	0.01	0.00	0.01	0	0	0	n/a	n/a
8062	EASTERN	126	64.24	1,346	151,115	972	49	11.03	486	23,493	111	11	3	Yes	80.77	11.11	69.66	1,832	174,608	1,083	2	13.119
8112	EASTERN	71	11.90	2,126	127,210	1,222	41	3.22	2,131	31,578	114	0	0	Yes	19.21	3.46	15.75	4,257	158,788	1,336	3	16.124
8122	EASTERN	31	5.28	221	124,068	1,993	25	12.74	1,376	33,486	200	0	1	Yes	19.65	12.75	6.90	1,597	157,554	2,193	3.75	14.506
8132	EASTERN	38	13.61	363	90,120	569	42	28.79	1,727	37,213	238	1	0	Yes	42.96	28.89	14.07	2,090	127,333	807	4	10.464
8162	CENTRAL	53	14.14	434	265,826	727	52	24.42	1,479	18,922	125	0	2	No	39.64	24.63	15.01	1,913	284,748	852	8	11.391
8172	CENTRAL	4	1.18	28	180,614	780	25	17.15	1,702	1,216,505	2,646	0	0	Yes	19.09	17.90	1.18	1,730	1,397,120	3,426	10	13.496
8182	CENTRAL	0	0.00	0	2,125	25	22	4.78	1,147	0	0	0	0	Yes	7.09	5.87	1.23	1,147	2,125	25	4	15.011
8202	EASTERN	87	24.37	1,478	113,874	992	31	5.26	577	19,314	73	0	4	Yes	31.61	5.26	26.35	2,055	133,188	1,065	1	13.088
8222	EASTERN	0	0.26	0	0	0	0	1.70	0	0	0	0	0	No	2.00	1.70	0.30	0	0	0	0.1	6.788
8232	EASTERN	0	0.01	0	77	1	0	0.00	0	0	0	0	0	No	0.02	0.00	0.02	0	77	1	0.1	5.619
8252	EASTERN	0	0.01	0	0	0	0	0.00	0	0	0	0	0	No	0.02	0.00	0.02	0	0	0	0.1	2.105
8262	EASTERN	8	3.30	1	384	6	4	2.95	7	1,120	8	0	1	No	10.11	3.28	6.83	8	1,504	14	0.1	10.176
8282	EASTERN	104	23.06	2,074	72,124	907	45	7.28	786	2,193	25	0	1	Yes	34.13	7.28	26.86	2,860	74,317	932	0.2	11.460
8332	EASTERN	94	34.38	1,871	346,020	3,095	65	20.98	1,311	125,346	910	3	0	Yes	61.95	22.26	39.69	3,182	471,366	4,005	0.5	14.449
8342	EASTERN	97	24.98	2,116	83,788	1,005	42	3.10	476	914	5	2	4	Yes	32.57	3.10	29.46	2,592	84,702	1,010	0.5	14.128
8352	EASTERN	70	13.37	1,154	1,640,657	26,363	28	2.88	1,537	2,567	59	1	1	No	16.96	2.88	14.08	2,691	1,643,224	26,422	1	13.524
8362	EASTERN	59	15.76	830	33,972	519	32	12.36	1,995	24,570	63	0	2	Yes	30.94	12.37	18.57	2,825	58,542	582	1.5	12.674
8372	EASTERN	49	7.12	681	84,740	3,496	27	11.97	2,470	2,035	30	0	1	Yes	22.61	13.17	9.44	3,151	86,775	3,526	1	15.688
8382	EASTERN	8	0.75	32	21,548	407	7	1.10	90	358	1	0	1	Yes	2.79	1.10	1.69	122	21,906	408	0.5	9.574
8392	EASTERN	62	13.40	1,250	47,083	414	16	1.89	276	17,266	97	1	2	Yes	17.84	1.89	15.94	1,526	64,349	511	0.6	12.317
8412	EASTERN	52	7.95	961	27,324	143	25	1.30	247	0	0	0	2	Yes	13.16	1.30	11.86	1,208	27,324	143	0.5	10.811
8432	EASTERN	75	13.32	1,511	6,387	69	13	0.70	198	3,256	11	0	3	Yes	15.80	0.70	15.11	1,709	9,643	80	1	7.406
8442	EASTERN	70	9.94	1,045	34,696	297	13	0.95	126	0	0	1	2	Yes	13.32	0.95	12.37	1,171	34,696	297	1	6.701
8452	EASTERN	35	5.83	247	17,030	194	55	7.75	712	1,165	5	1	1	Yes	15.87	7.75	8.12	959	18,195	199	0.1	12.960
8472	EASTERN	114	17.77	2,162	49,085	522	25	3.11	499	0	0	1	2	Yes	27.82	3.11	24.72	2,661	49,085	522	1	9.093
8482	EASTERN	53	10.81	645	36,082	485	24	1.11	57	589	1	1	2	Yes	15.54	1.11	14.43	702	36,671	486	0.2	16.838
8492	EASTERN	29	3.16	264	13,793	158	14	1.29	116	2,970	6	0	0	No	6.17	1.29	4.87	380	16,763	164	0.6	14.489
8512	EASTERN	51	14.26	873	101,722	1,124	50	11.98	1,738	869	12	1	0	Yes	29.83	12.42	17.41	2,611	107,036	1,437	3	13.295
8522	EASTERN	74	16.77	1,212	23,677	267	51	18.51	1,895	37,980	278	1	2	Yes	40.91	19.43	21.48	3,107	64,901	3,789	4	19.739
8532	EASTERN	25	3.44	149	37,794	794	32	3.06	1,625	2,243	52	0	1	No	7.30	3.07	4.23	1,774	40,037	846	2	12.333
8542	EASTERN	28	1.72	240	39,619	534	19	1.81	3,106	26,754	147	0	0	Yes	5.16	1.81	3.35	3,346	514,469	4,025	4	11.241
8552	EASTERN	20	3.52	300	144,617	1,215	22	4.72	1,401	2,075	25	0	0	Yes	11.63	4.75	6.88	1,701	165,727	3,355	2	17.498
8562	EASTERN	78	12.07	1,171	25,985	319	48	10.10	1,222	149,545	1,174	2	1	No	27.89	10.15	17.74	2,393	175,530	1,493	0.6	13.702
8572	EASTERN	117	23.29	1,963	26,527	240	37	5.09	492	15,145	133	2	2	Yes	32.72	5.09	27.62	2,455	280,257	5,384	0.5	13.404
8592	EASTERN	0	0.46	14	0	0	11	0.35	1	0	0	0	0	Yes	1.85	0.39	1.46	15	0	0	1	6.085
8602	EASTERN	101	21.23	1,225	90,910	618	45	20.00	1,309	21,801	82	3	2	Yes	45.74	20.00	25.74	2,534	112,710	700	4	12.901
8612	EASTERN	49	13.00	557	32,172	432	16	4.84	76	0	0	5	0	Yes	22.14	4.84	17.30	633	81,608	1,159	1	14.534
8622	EASTERN	89	16.61	807	23,376	188	36	11.00	622	24,292	184	1	1	Yes	34.01	11.00	23.01	1,429	47,668	372	3	12.820
8642	EASTERN	40	5.26	676	17,520	324	34	9.68	1,158	20,527	133	0	0	Yes	18.01	9.68	8.33	1,834	38,047	457	1	8.029
8672	EASTERN	31	6.90	308	130,361	806	51	23.52	1,830	130,031	533	0	2	Yes	33.03	23.52	9.51	2,138	260,392	1,339	3	13.784
8682	EASTERN	56	10.58	1,230	51,250	472	34	9.41	1,960	5,478	33	1	2	Yes	22.62	9.41	13.21	3,190	56,728	505	4	13.863
8702	EASTERN	70	17.86	1,873	33,050	273	16	0.76	86	4,800	20	0	2	Yes	21.60	0.76	20.84	1,959	113,366	2,091	0.5	12.596
8712	EASTERN	80	15.43	1,389	48,986	543	15	1.61	112	0	0	0	4	Yes	20.59	1.61	18.98	1,501	48,986	543	0.5	17.713
8722	EASTERN	122	28.01	2,097	157,970	1,017	19	1.32	197	0	0	1	4	Yes	30.73	1.32	29.41	2,294	157,970	1,017	0.5	12.113
8732	EASTERN	89	21.05	2,141	391,765	2,544	21	1.59	238	0	0	5	2	Yes	24.82	1.69	23.13	2,379	391,765	2,544	1	17.531
8782	EASTERN	37	6.46	259	3,442	39	36	2.64	231	1,826	14	0	1	Yes	12.02	2.65	9.37	490	5,268	53	1.5	14.120
8792	EASTERN	165	37.51	2,684	25,928	203	30	3.98	347	512	8	4	1	Yes	46.10	4.04	42.07	3,031	26,440	211	1.5	16.150
8802	EASTERN	84	20.13	1,374	36,132	331	38	14.51	1,224	24,674	405	2	4	Yes	38.11	14.51	23.59	2,598	286,745	3,333	0.2	16.215
8812	EASTERN	73	17.08	1,285	113,444	802	59	10.70	1,386	31,934	229	0	2	Yes	31.54	10.70	20.84	2,671	145,378	1,031	3	16.145
8822	EASTERN	97	23.43	1,561	142,811	1,107	51	9.00	1,410	0	0	0	4	Yes	35.34	9.00	26.34	2,971	1,013,574	12,599	2	16.334
8842	CENTRAL	19	2.97	235	64,477	738	67	14.90	1,011	3,076	20	0	0	Yes	20.14	14.92	5.21	1,246	67,553	758	3	16.476
8852	EASTERN	85	20.37	1,524	82,018	888	14	1.27	141	0	0	2	3	Yes	24.87	1.27	23.61	1,665	82,018	888	0.1	13.186
8872	CENTRAL	22	5.69	319	20,132	137	30	6.44	502	4,045	43	0	0	Yes	14.22	6.44	7.78	821	34,942	2,333	2	13.460
8882	CENTRAL	33	4.92	1,274	29,332	1,539	86	12.02	3,249	12,177	53	0	1	Yes	19.91	13.10	6.80	4,523	407,439	6,537	2	17.213
8892	CENTRAL	30	5.09	509	8,596	86	47	10.03	1,983	174,934	929	1	0	Yes	18.17	11.03	7.15	2,492	183,530	1,015	2.5	15.712
8932	CENTRAL	126	38.22	1,365	70,568	716	23	6.66	237	2,907	8	1	1	Yes	49.52	6.66	42.86	1,602	73,475	724	6	10.598
8942	CENTRAL	13	1.49	32	1,359	13	4	0.23	4	435	2	0	0	No	3.65	0.23	3.43	36	1,794	15	6	3.888
8952	EASTERN	8	7.42	1	0	0	1	0.21	0	0	0	0	0	No	8.09	0.21	7.88	1	0	0	0.1	0.477
8962	EASTERN	59	12.89	1,194	55,502	703	42	12.86	1,524	4,067	26	1	2	Yes	28.66	12.86	15.80	2,718	59,569	729	1	10.446
8972	EASTERN	86	23.45	2,394	38,972	355	20	13.59	492	15,011	89	0	2	Yes	47.10	13.67	33.42	2,886	53,983	444	2	10.133
8982	CENTRAL	17	2.24	88	2,573	33	34	19.03	1,672	3,013	77	0	0	Yes	24.86	19.03	5.83	1,760	5,586	110	8	16.621
8992	CENTRAL	0	0.00	0	0	0	0	0.00	0	0	0	0	0	No	0.00	0.00	0.00	0	0	0	2	11.607
9042	CENTRAL	70	9.72	540	45,191	430	74	29.76	2,483	26,422	162	0	0	Yes	41.89	29.84	12.05	3,023	71,613	592	3.5	16.761
9052	CENTRAL	46	8.45	1,177	49,769	314	34	4.71	687	347	2	0	0	Yes	19.60	4.74	14.86	1,864	50,116	316	0.5	11.839
9082	CENTRAL	9	2.92	80	1,604	9	22	7.80	1,232	76,376	619	1	0	Yes	14.23	8.45	5.78	1,312	77,980	628	2	16.222
9092	EASTERN	5	2.38	7	2,485	14	0	0.00	0	0	0	0	0	No	4.92	0.00	4.92	7	2,485	14	0.1	0.205

APPENDIX 3 FEEDER SPECIFIC DATA

(a) Feeder ID	(b) Sub Region	(c) Number of Overhead Lateral Lines	(d) Number of Overhead Lateral Miles	(e) Number of Customers served on Overhead Lateral Lines	(f) CMI for Overhead Lateral Lines	(g) CI for Overhead Lateral Lines	(h) Number of Underground Lateral Lines	(i) Number of Underground Lateral Miles	(j) Number of Customers served on Underground Lateral Lines	(k) CMI for Underground Lateral Lines	(l) CI for Underground 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 Underground portion of the Feeder Circuit	(u) Length of Overhead portion of the Feeder circuit	(v) Number of customers served by Overhead Feeders	(w) CMI for Overhead Feeders	(x) CI for Overhead Feeders	(y) Load growth since 12/31/05	(z) Peak load recorded through 12/31/06
9112	EASTERN	83	43.53	1,002	247,759	1,823	19	1.90	139	3,510	18	4	3	No	46.59	1.90	44.69	1,141	354,265	4,132	0.5	8.067
9122	EASTERN	19	6.97	239	33,060	175	6	0.66	15	0	0	1	4	No	8.36	0.72	7.64	254	67,745	684	1	17.544
9132	CENTRAL	82	12.64	846	99,643	820	68	11.83	1,360	165,810	508	0	0	No	26.63	12.20	14.43	2,206	265,453	1,328	1	15.397
9142	CENTRAL	106	19.83	1,707	300,590	1,834	41	4.26	453	1,675	15	0	0	Yes	27.22	4.56	22.65	2,160	607,625	7,847	1	14.263
9152	CENTRAL	76	15.31	1,238	104,551	1,019	45	3.64	496	5,792	16	1	0	Yes	21.13	3.64	17.49	1,734	110,343	1,035	1.5	10.062
9162	CENTRAL	51	13.66	792	68,393	826	13	2.40	331	270	5	0	1	No	17.85	2.40	15.44	1,123	68,663	831	0.5	5.835
9172	CENTRAL	47	13.28	1,368	138,701	2,685	24	10.01	792	42,800	276	0	1	Yes	26.67	10.01	16.66	2,160	181,501	2,961	0.5	9.660
9182	CENTRAL	277	108.73	2,952	144,832	1,683	24	3.60	234	16,576	37	1	3	Yes	119.03	3.60	115.43	3,186	355,868	4,961	4	16.650
9202	EASTERN	67	32.69	670	107,567	946	9	0.96	37	0	0	3	2	Yes	38.44	0.99	37.44	707	116,027	1,651	0.5	5.868
9212	EASTERN	145	81.00	1,663	99,675	977	22	1.50	63	0	0	5	3	Yes	87.17	1.50	85.67	1,726	99,675	977	1	10.130
9222	EASTERN	61	20.95	900	36,807	514	31	2.06	99	0	0	1	3	Yes	28.75	2.06	26.69	999	36,807	514	1.2	9.280
9232	CENTRAL	92	23.82	1,643	91,663	891	18	1.95	206	2,682	16	3	0	No	27.04	1.95	25.09	1,849	94,345	907	2	8.737
9242	CENTRAL	58	15.88	730	72,925	1,006	42	7.45	801	86,776	335	0	3	Yes	26.90	7.45	19.45	1,531	159,701	1,341	3	11.209
9252	CENTRAL	85	17.83	1,347	52,844	588	40	14.45	762	63,451	266	0	2	Yes	36.83	14.58	22.25	2,109	116,295	854	1.4	17.601
9292	CENTRAL	38	11.65	1,472	72,345	630	7	0.96	81	0	0	0	0	Yes	15.50	1.06	14.44	1,553	72,345	630	0.5	13.062
9312	CENTRAL	55	13.72	1,888	55,118	739	18	0.99	262	7,253	44	0	0	Yes	17.21	1.05	16.17	2,150	383,961	5,207	0.1	12.702
9322	CENTRAL	46	8.07	1,131	75,714	854	30	2.78	835	759	23	0	1	Yes	13.25	2.81	10.45	1,966	76,473	877	0.2	14.646
9332	CENTRAL	45	10.22	1,055	328,449	1,587	27	4.01	394	4,358	42	0	3	Yes	16.57	4.04	12.52	1,449	387,563	2,305	0.1	8.709
9342	CENTRAL	55	8.83	1,081	97,454	875	17	1.08	177	4,081	18	0	0	Yes	13.59	1.11	12.49	1,258	101,535	893	0.5	12.869
9352	CENTRAL	56	12.15	1,446	49,360	392	20	2.83	419	18,774	101	0	0	Yes	18.69	2.83	15.86	1,865	68,134	493	0.1	11.808
9362	CENTRAL	68	14.14	1,559	137,107	1,498	22	0.72	158	0	0	0	0	Yes	18.02	0.72	17.31	1,717	137,107	1,498	0.5	11.602
9372	CENTRAL	67	13.44	1,434	195,677	1,312	7	0.14	8	0	0	0	2	Yes	15.64	0.14	15.50	1,442	195,677	1,312	0.2	7.839
9382	CENTRAL	51	8.29	850	67,183	366	15	0.66	334	0	0	0	0	Yes	11.16	0.66	10.50	1,184	67,183	366	0.5	6.980
9402	CENTRAL	37	4.01	794	18,069	163	38	1.67	1,888	37,440	150	0	0	Yes	9.49	2.03	7.47	2,682	55,509	313	5	9.599
9412	CENTRAL	53	8.02	846	153,689	2,086	30	1.85	1,262	338	1	0	1	Yes	12.57	2.12	10.45	2,108	154,027	2,087	0.5	8.843
9422	CENTRAL	36	4.54	594	16,400	198	14	0.38	224	11,270	23	0	0	Yes	7.01	0.38	6.63	818	27,670	221	1	11.720
9462	CENTRAL	86	20.08	1,857	102,594	899	46	12.96	965	54,870	265	0	1	Yes	36.40	12.96	23.44	2,822	413,808	4,077	2	13.901
9472	CENTRAL	55	14.34	1,029	382,962	3,107	50	24.37	1,236	5,050	28	1	3	No	41.79	24.37	17.42	2,265	408,512	3,635	2	12.481
9492	CENTRAL	47	6.94	565	42,545	302	31	3.01	649	764	12	0	1	Yes	12.55	3.17	9.38	1,214	43,309	314	0.5	13.501
9522	EASTERN	248	145.83	1,561	908,133	6,354	17	3.57	42	1,320	15	16	2	No	151.98	3.66	148.31	1,603	1,055,326	7,972	1	7.013
9532	CENTRAL	25	2.17	145	175,300	1,086	36	11.85	2,331	203,388	997	0	0	Yes	17.36	11.92	5.44	2,476	506,438	3,833	1	16.185
9562	CENTRAL	52	5.78	710	159,766	250	36	3.05	637	1,665	10	0	0	Yes	11.01	3.42	7.59	1,347	491,866	3,090	0.5	10.948
9572	CENTRAL	10	2.90	416	24,059	219	67	7.81	2,493	61,639	287	0	0	Yes	13.50	8.36	5.13	2,909	903,847	3,525	1	14.854
9582	CENTRAL	0	0.02	0	0	0	0	0.00	0	0	0	0	0	No	0.02	0.00	0.02	0	0	0	0.1	12.973
9592	EASTERN	112	109.98	737	155,258	651	32	15.53	317	969	4	9	4	No	134.55	15.56	118.99	1,054	291,426	1,733	1	4.499
9602	CENTRAL	52	9.76	624	200,400	1,667	26	8.57	917	10,402	46	0	2	Yes	19.57	8.57	11.01	1,541	210,802	1,713	3	14.397
9612	CENTRAL	86	17.44	1,568	261,263	3,016	34	3.40	699	3,535	17	0	1	Yes	23.28	3.40	19.87	2,267	264,798	3,033	0.1	11.474
9622	CENTRAL	84	11.48	939	86,324	801	26	2.02	422	5,432	61	0	0	Yes	16.36	2.02	14.34	1,361	91,756	862	0.2	11.683
9632	CENTRAL	37	4.27	228	1,009	12	13	0.48	24	1,378	3	0	1	Yes	6.06	0.48	5.58	252	2,387	15	1.5	14.596
9662	CENTRAL	35	10.23	238	14,539	142	3	1.21	10	444	4	0	1	No	13.57	1.25	12.32	248	14,983	146	0.5	2.209
9672	CENTRAL	177	45.67	1,974	128,885	1,598	22	9.60	503	1,227	9	1	2	No	58.38	9.60	48.79	2,477	130,112	1,607	2	13.333
9682	CENTRAL	108	33.86	1,627	100,754	1,515	42	14.15	1,069	4,379	41	1	2	Yes	50.49	14.22	36.27	2,696	175,256	4,253	2	15.984
9692	CENTRAL	0	0.00	0	0	0	0	0.00	0	0	0	0	0	Yes	0.69	0.00	0.69	0	2,275	65	1	0.301
9702	EASTERN	2	0.31	0	0	0	0	0.00	0	0	0	0	0	No	3.43	0.00	3.43	0	0	0	0.1	4.363
9792	CENTRAL	117	34.97	2,512	124,597	1,831	23	7.46	783	4,527	20	1	0	Yes	46.80	7.46	39.33	3,295	129,124	1,851	7	14.869
9802	EASTERN	22	12.53	182	6,503	64	1	0.04	0	0	0	4	0	No	15.50	0.04	15.46	182	6,503	64	0.1	1.064
9812	CENTRAL	89	38.83	986	90,643	1,036	51	17.97	884	17,576	140	3	2	No	61.36	17.97	43.39	1,870	108,219	1,176	6.5	10.651
9828	CENTRAL	21	7.55	203	2,292	15	3	0.16	7	0	0	0	0	No	11.25	0.16	11.10	210	10,082	220	1	1.454
9832	EASTERN	225	117.90	2,329	1,033,339	7,597	25	1.33	77	0	0	10	5	No	121.54	1.33	120.21	2,406	1,033,339	7,597	0.5	14.290
9912	EASTERN	0	0.15	5	0	0	2	0.08	6	491	1	0	0	No	1.57	0.08	1.49	11	491	1	0.1	3.251
9934	EASTERN	8	0.96	244	2,603	24	10	1.00	166	75	1	0	0	Yes	4.27	1.09	3.19	410	2,678	25	n/a	n/a
9964	EASTERN	21	1.46	170	9,623	71	8	0.24	33	0	0	0	0	Yes	3.49	0.24	3.24	203	9,623	71	n/a	n/a

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 14, 2008

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 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).

The MOU has a term beginning March 1, 2006 and ending May 31, 2009, and may be renewed by mutual agreement of the Project Sponsors and PURC. In serving as the research coordinator for the Project outlined by the MOU, PURC manages the work flow and communications, develops work plans, facilitates the hiring of experts coordinates with research vendors, advises the Project Sponsors and provides reports for Project activities.

At its initial meeting, the Steering Committee identified four primary research areas, namely the economics of undergrounding, the measurement and analysis of hurricane winds at a granular level, best practices in vegetation management, and improved materials for distribution facilities. The Steering Committee decided

to initiate research on the first two topics, to hold a workshop on the vegetation management topic, and to look to vendors to conduct research on improved materials.

This report summarizes the work completed on the Steering Committee's areas of focus, with detail about specific accomplishments and activities from March 2007 through February 2008.[1] Sections II through IV provide information on the undergrounding research, wind research, and vegetation management workshop respectively. The budgeted dollars shown for each project are allocated on a percentage basis to each of the Project Sponsors as outlined in the MOU. PURC's budgets for work completed in 2007 are listed as Appendix A. 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.

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 under ground. 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 recent hurricane damage in Florida found that underground systems may be particularly susceptible to storm surge.

While there are numerous studies on undergrounding electric infrastructure, missing from this work was a comprehensive survey of what is known and what is not yet known, current analyses of Florida cases where overhead facilities have been moved underground, and a methodology that can be used to consistently estimate the costs and benefits of specific undergrounding proposals in Florida. The Steering Committee elected in 2006 to undertake a study of undergrounding overhead facilities to help fill these gaps in the existing research. The project is divided into three phases: Phase I conducts the comprehensive survey; Phase II analyzes Florida undergrounding cases; and Phase III develops a methodology and a computer model for projecting undergrounding costs and benefits for specific undergrounding proposals.

The Steering Committee issued an RFP for this research in late 2006 and, based on its knowledge of power delivery systems, expertise in risk management and

[1] PURC's February 2007 report provides details for work prior to March 2007. It is available on PURC's web site and the FPSC's web site (www.purc.ufl.edu and www.floridapsc.com/utilities/electricgas/eiproject/).

reliability issues, and proven ability to analyze the complex utility issues, InfraSource Technology (now Quanta Technology) was selected as the vendor by the Steering Committee in November 2006. InfraSource began work in December 2006.[2] The budget for Phase I of this project was $40,000. The budget for Phases II and III was $220,000, although additional travel costs have been incurred for meetings.

Phases I and II have been completed and copies of the reports are available on PURC's web site and the FPSC's web site. These reports summarized the body of knowledge on the costs and benefits of undergrounding and analyzing four recent undergrounding cases in Florida. Completed in February 2007, Phase I found that existing studies consistently concluded that the conversion of overhead electric distribution systems to underground is costly and that these costs are in excess of the quantifiable benefits, except in rare cases where the facilities provide particularly high reliability gains or otherwise have a higher than average impact on community goals. According to the Phase I report, "This conclusion is reached consistently in many reports, always by comparing the initial cost of undergrounding to the expected quantifiable benefits. No prior cost benefit study recommends broad-based undergrounding, but several recommend targeted undergrounding to achieve specific community goals." The Phase I research found no studies that examined whether projected costs and benefits of undergrounding turned out to be accurate.

Phase II examined four specific undergrounding project case studies in Florida and was completed August 2007. Emergent observations from the case study analysis included:

- Cost per circuit mile vary widely based on a variety of factors
- Cost per customer vary widely based on both the cost per circuit mile and the amount of high density housing;
- Little data is available from the case studies on the impacts of undergrounding on non-storm reliability and hurricane performance, but the evidence suggests that the undergrounding had little impact on non-storm reliability and that hurricane reliability of underground systems is not perfect due to storm surge damage;
- There is very limited data on cost and benefits of undergrounding for these projects, whereas information is available about project description and project cost.

Further application of this work will take place in early 2008 with the completion of Phase III. Phase III develops and tests an *ex ante* methodology and computer model to identify and evaluate the costs and benefits of undergrounding specific facilities in Florida. The draft model will be completed in March 2008 and testing of the model will begin at that time.

[2] Quanta Technologies purchased InfraSource in 2007 and is now completing the project. The project team remains unchanged.

III. Wind Data Collection

Appropriate hardening of the electric utility infrastructure against hurricane winds requires: 1) an accurate characterization of severe dynamic wind loading, 2) an understanding of the likely failure modes for different wind conditions, and 3) a means of evaluating the effectiveness of hardening solutions prior to implementation.

The Project Sponsors are addressing the first requirement by contracting with the University of Florida's Department of Civil & Coastal Engineering (Department) and WeatherFlow to establish a granular wind observation network. There are currently 21 devices installed and reporting data. An additional 14 will be installed and operational by the end of February 2008 and a total of 50 devices are expected to be installed and working by the end of March 2008. Appendix B contains a map of the current and planned devices. This network of devices will capture the behavior of the dynamic wind field upon hurricane landfall.[3] Once a hurricane occurs and wind data is captured, forensic investigations of utilities infrastructure failure, conducted by the utility companies, can be overlaid with wind observations to correlate failure modes to wind speed and turbulence characteristics.

Appendix C contains the two reports that have come from this research. In response to an inquiry, the research team considered whether the data collected could be used to assess the potential for wind generation in Florida. Their January 2008 report titled "Use of WeatherFlow wind observing network for wind energy research" concludes that the network of devices can be useful for identifying locations where further research on wind generation might be productive. Their report incorporates a December 2007 report on the status of the placement of the wind measurement devices. Appendix D contains the project budget.

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 project consisted of a workshop, held on March 5-6, 2007, that included vegetation management experts, utility arborists, FPSC staff, and PURC. The workshop report is available on PURC's web site and the FPSC's web site. The workshop participants' conclusions included:

[3] The devices capture wind direction, wind speed, temperature, and barometric pressure 24 hours a day, 365 days a year.

1. It is impractical to eliminate all tree-related outages during hurricanes of high-wind events.
2. Communication with and education for the public on all aspects of vegetation management as it relates to reliable utility operations is crucial.
3. Vegetation management programs must have access to adequate and consistent financial resources.
4. There is a need for training, recruiting, and retaining highly qualified, skilled tree crews.
5. Utilities should continue to monitor and patrol critical distribution facilities such as major feeders and feeders that serve critical infrastructure such as hospitals, police, and fire/rescue.
6. Storm preparation and restoration logistics are critical to timely and effective storm recovery
7. Cooperation between utilities and government at multiple levels is also important.
8. A dedicated tree forensic program can help provide data to make better use of resources in the future.

The budget for this project was contained in the February 2007 PURC report.

V. Conclusions

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. Costs have been incurred according to the funding schedule set by the Steering Committee. This year, costs incurred have been towards research in the initiatives of granular wind research, undergrounding research, vegetation management, and PURC's coordinating work. The Steering Committee is currently considering next steps in these research areas.

The benefits of the work realized from the time of the last report (February 2007) to the time of this report include increased collaboration and discussion between members of the Steering Committee, greater knowledge in the area of vegetation management during storm and non-storm times, greater knowledge and significant archived data from wind collection sites and further understanding of wind during storm and non-storm events in the State of Florida, and more knowledge about hurricane and damage modeling towards further understanding of the costs and benefits of undergrounding. The Steering Committee has determined that PURC's coordination role should continue throughout the remainder of the effort.

Appendix A. PURC Budgets for 2007

RESEARCH COORDINATION FOR ELECTRICITY INFRASTRUCTURE HARDENING

Phase III - commencing January 1, 2007 and ending June 30, 2007

Undergrounding Study			
Personnel			
PURC Faculty (5 weeks)	$ 14,000.00		
Grad Student (5 weeks)	$ 3,300.00		
Administrative (2 weeks)	$ 2,800.00		
		$ 20,100.00	
Wind Study			
Personnel			
PURC Faculty (2 weeks)	$ 5,600.00		
Grad Student (3 weeks)	$ 1,980.00		
Administrative (4 weeks)	$ 5,600.00		
	$ 13,180.00		
Travel			
Steering Committee meetings (1)	$ 130.00		
	$ 130.00		
		$ 13,310.00	
Vegetation Management			
Personnel			
PURC Faculty (2 weeks)	$ 5,600.00		
Grad Student (2 weeks)	$ 1,320.00		
Administrative (1 week)	$ 1,400.00		
	$ 8,320.00		
Travel			
Vegetation Management Workshop	$ 797.19		
	$ 797.19		
		$ 9,117.19	
Miscellaneous			
Global Crossing Conference Calls		$ 1,320.00	
Subtotal		$ 43,847.19	
University Overhead (25%)		$ 14,615.73	
Total		$ 58,462.92	

Faculty Activities
Drafting work plans for wind study, vegetation management, and materials
Drafting RFP for wind study
Drafting report from vegetation management workshop
Reviewing undergrounding reports
Drafting report for FPSC
Organizing and managing weekly conference calls
Attending meeting with FPSC staff or sponsors
Managing PURC staff working on project

Graduate Student Activities
Editing RFP for wind study
Participating in and taking minutes for weekly conference calls
Maintaining PURC work plan for overseeing projects
Serve as scribe for vegetation management workshop
Drafting report from vegetation management workshop

Administrative Activities
Developing budgets
Proofreading all materials
Taking minutes on conference calls
Organizing conference calls and meetings
Developing all administrative documents, such as contact lists and invoices

APPENDIX 4

RESEARCH COORDINATION FOR ELECTRICITY INFRASTRUCTURE HARDENING

Phase IV - commencing July 1, 2007 and ending December 31, 2007

Undergrounding Study		
Personnel		
PURC Faculty (6 weeks)	$ 16,800.00	
Grad Student (5 weeks)	$ 3,300.00	
Administrative (2 weeks)	$ 2,800.00	
		$ 22,900.00
Wind Study		
Personnel		
PURC Faculty (2 weeks)	$ 5,600.00	
Administrative (2 weeks)	$ 2,800.00	
		$ 8,400.00
Travel		
Tallahassee Meeting	$ 300.00	
		$ 300.00
Miscellaneous		
Global Crossing Conference Calls		$ 2,500.00
Subtotal		$ 34,100.00
University Overhead (25%)		$ 11,366.67
Total		$ 45,466.67

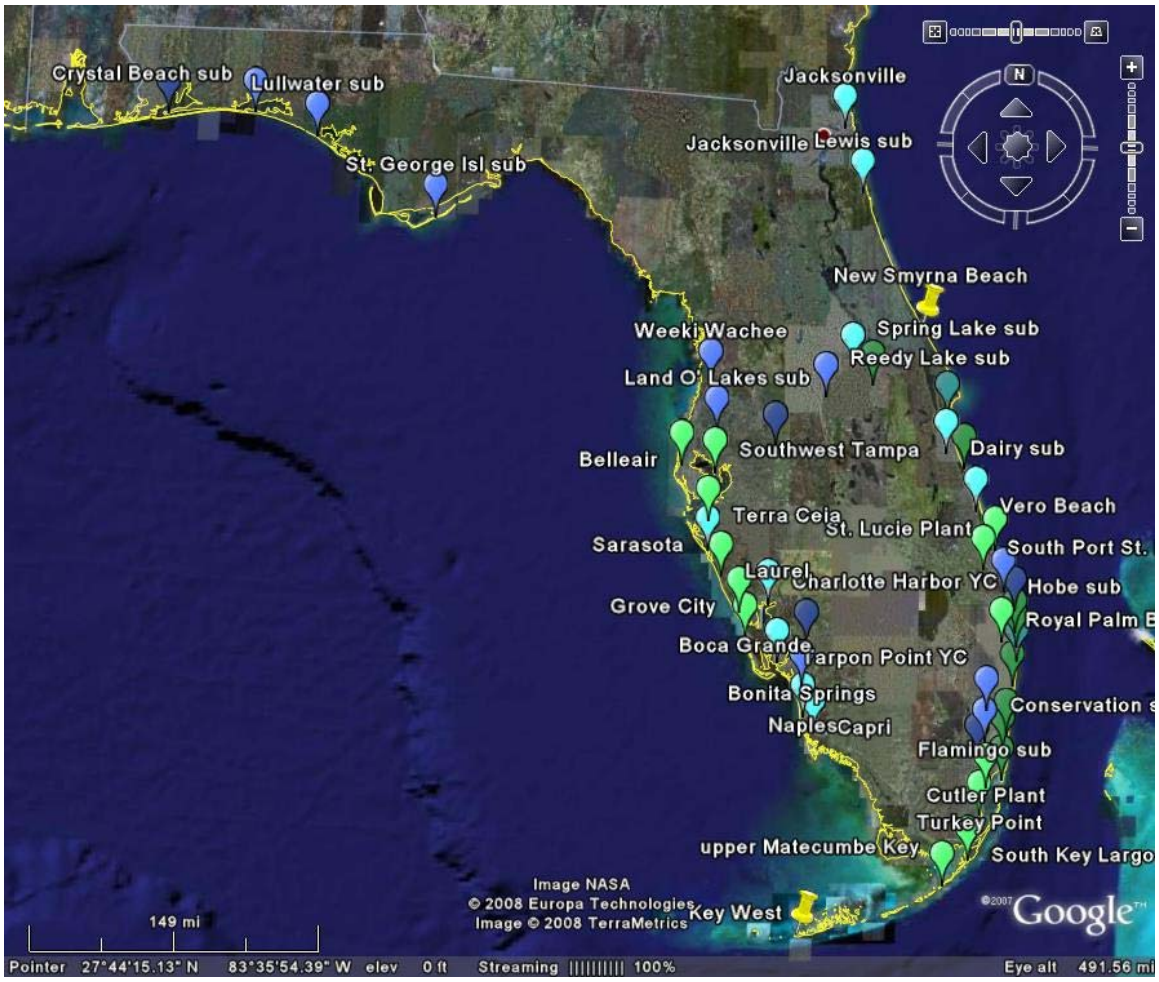
Faculty Activities
Examining and editing reports on case studies
Examining and editing reports on ex ante methodology
Examining and editing reports on work plan for testing ex ante methodology
Investigating hurricane models
Performing background research on hardening issues
Drafting report for FPSC
Plan steering committee meeting for early 2008
Organizing and managing weekly conference calls
Attending meetings with FPSC staff or sponsors
Managing PURC staff working on project

Graduate Student Activities
Participating in and taking minutes for weekly conference calls
Maintaining PURC work plan for overseeing projects

Administrative Activities
Proofreading all materials
Taking minutes on conference calls
Organizing conference calls and meetings
Developing all administrative documents, such as contact lists and invoices
Developing budgets
Financial management

APPENDIX 4

Appendix B: Map of Wind Measurement Devices, March 2008 (projected)



(Source: Dr. Kurt Gurley)

APPENDIX 4

Appendix C. Reports on Wind Data Research

Use of WeatherFlow wind observing network for wind energy research

Kurt Gurley, University of Florida
Jay Titlow, WeatherFlow
January 24, 2008

The WeatherFlow (WF) wind observing network is currently being installed in Florida, consisting of 21 operational stations and more coming online in February. A summary of the status of that wind observing network begins on page two for reference.

This wind observing network is being considered for use as a source of information for studies regarding wind energy generation. This document is a summary of our views on the usefulness of the WF data network for this purpose in Florida.

It is clear that final decisions on the efficacy of wind power generation at a given location will require more detailed wind data at a given location than can be provided by the WF sites. However, the WF data can provide an important resource for a first-layer analysis of regions in Florida worthy of additional consideration.

The proper placement of wind turbines requires detailed knowledge of sustained wind magnitude, direction, and turbulence in the regions under consideration. First-level analysis involves the determination of the year-round sustained winds in order to assess the feasibility of wind power generation from these winds. Unfortunately, existing public domain archives (NWS, NODC, etc.) do not represent coastal regions well due to sparse placement of observation stations. Coastal region wind flow is particularly diverse, exhibiting strong variability in sustained wind speed in the transition from the coast to even a few miles inland due to sea breezes and other phenomena specific to coastal wind flow. The existing databases that classify the suitability of winds for power generation do not have the resolution to adequately describe this variability. It is possible that an evaluation of the suitability of a location based on observations made even a few miles inland can miss substantially higher sustained winds at the shoreline.

One of the main motivations for the creation of the WF network is to study these coastal wind flow patterns and quantify the coastal transition features. Preliminary analyses of WF data from the northeast region of the coastal U.S. clearly demonstrate that shoreline winds may be well suited for power generation, even when the predominant wind classification in that region does not support that conclusion (due to a lack of necessary observational resolution when making the classification).

The final placement of wind turbines will require a more thorough analysis of winds than can be offered by the WF network (e.g. at multiple elevations at the same location). However, the existing and still expanding network along the coast of Florida represents a significant new source of information to identify regions worthy of further study. Specifically, these WF sites provide year-round wind information in critical locations where the transitional wind behavior from ocean to inland is not well understood and

poorly documented. After a sufficient period of data collection, this new WF network may indicate wind generation opportunities not yet recognized.

APPENDIX 4

Status of Wind Observing Network for Florida Utilities

Originally distributed December, 2007

Project Summary

WeatherFlow has partnered with the University of Florida and the Florida utilities consortium to design, install, and maintain a wind observation network to collect high quality meteorological information during tropical storms and hurricanes. Measuring the overland ground-level wind behavior during landfall provides information that is useful to utility companies in the process of hardening their infrastructure (power distribution, housing, emergency facilities, etc.) against hurricane wind loads. The wind network reports data to an online database in real-time 24 hours a day, 365 days a year.

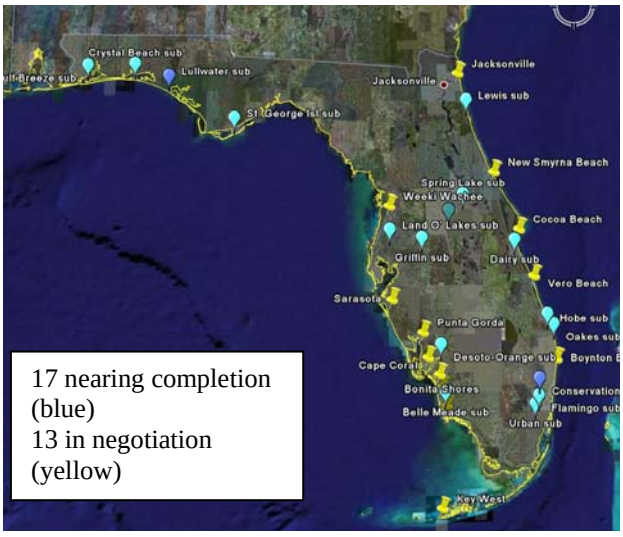
Locations for the fixed sites are selected in cooperation with the University of Florida wind engineering team, and include utility properties, such as substations as well as other state and private property. The instruments are mounted on either existing commercial communication towers or on customized concrete poles designed and installed to support the wind instrumentation.

Current and Future Stations

To date WeatherFlow has 21 stations in Florida that are now providing data to the Florida utilities. Two more locations are ready to receive instrumentation, and 15 more are currently awaiting delivery and installation of the concrete pole and instruments. This brings the total number of stations that will be operational by early spring to at least 38. The two figures below show the currently operational stations (green icons) and the stations nearing completion (blue icons). An additional 13 locations are in various stages of negotiation, and more locations are still being identified. A reasonable projection for functional stations by the 2008 hurricane season is 50.

Data Archive Tool

The online database that houses the real-time reported wind, temperature and pressure from each station has recently been updated with an archive retrieval tool. This allows users within the WeatherFlow data-use agreement to access all past data collected by any site in the network. For example, utilities in the southeast can call up and save all data from coastal stations as Hurricane Noel passed Florida in late October.



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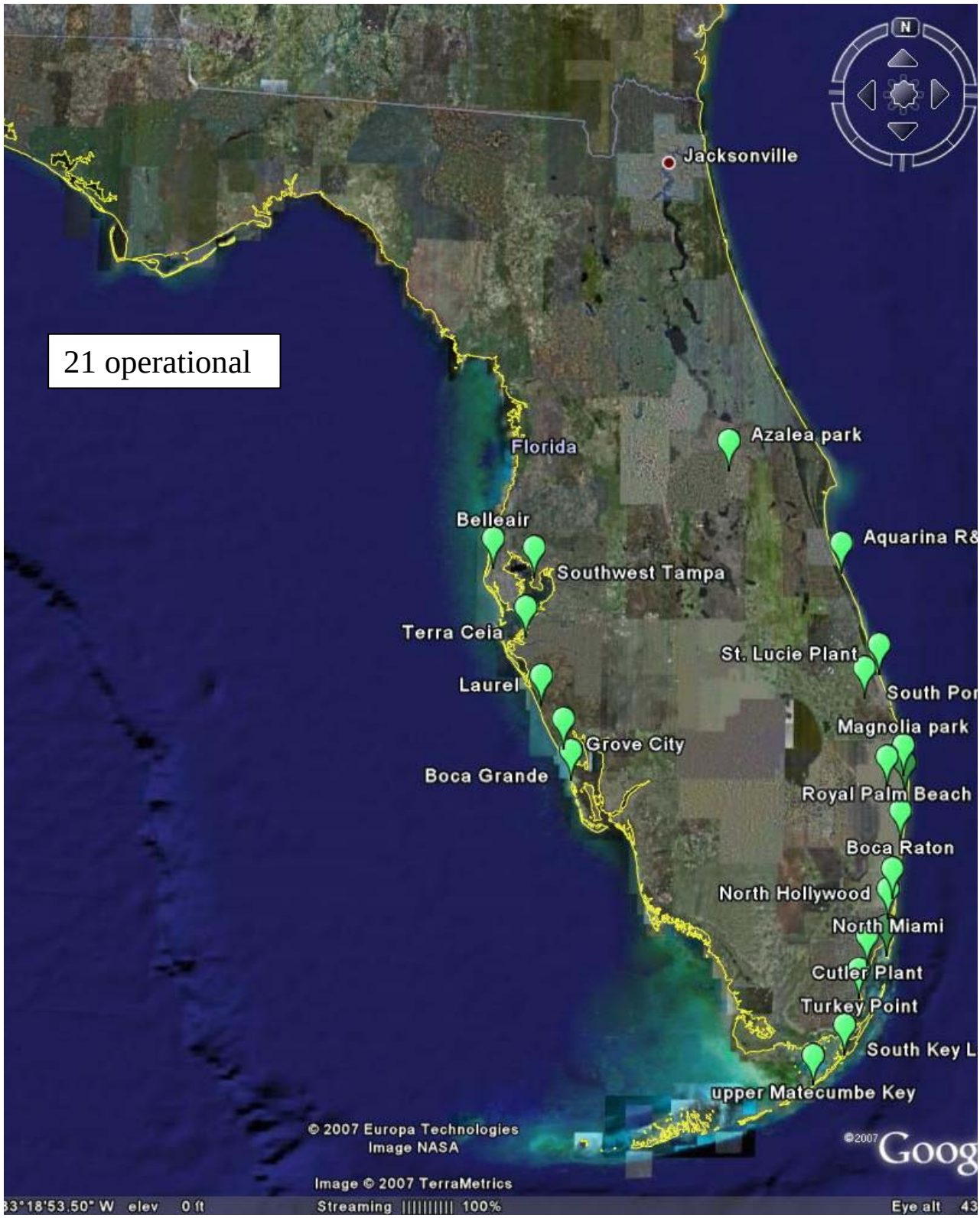
21 operational
Jacksonville
Azalea park
Florida
Belleair
Aquarina R&
Southwest Tampa
Terra Ceia
St. Lucie Plant
Laurel
South Por
Magnolia park
Grove City
Boca Grande
Royal Palm Beach
Boca Raton
North Hollywood
North Miami
Cutler Plant
Turkey Point
South Key L
upper Matecumbe Key
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Streaming 100%
Eye alt

APPENDIX 4


Crystal Beach sub
Lullwater sub
St. George Isl sub
Jacksonville
Jacksonville
Lewis sub
New Smyrna Beach
Spring Lake sub
Weeki Wachee
Reedy Lake sub
Land O' Lakes sub
Cocoa Beach
Griffin sub
Dairy sub
Vero Beach
Sarasota
Hobe sub
Punta Gorda
Oakes sub
Desoto-Orange sub
Boynton B
Cape Coral
Bonita Shores
Naples
Conservation
Belle Meade sub
Flamingo sub
Marco Island
Urban sub
Key West
17 nearing completion (blue)
13 in negotiation (yellow)
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©2007 Google
140 mi
27°56'43.21" N 83°19'43.87" W elev 0 ft
Streaming 100%
Eye alt 459.6

APPENDIX 4

Appendix D. Wind Data Research Budget for the One Year Agreement with UF

Category	**Description**	**Budget**
Personnel	Students, faculty, lab technicians, fringe	$75,000
Equipment	Hurricane simulator parts and operation, hardware for data collection (poles, etc.)	$72,000
Travel	Site visits, installations	$10,000
Subtotal		$157,000
Indirect cost	25% of expenditures	$39,250
Total Budget		$196,250