ORIGINAL

MEMORANDUM

August 10, 2006

TO: DIVISION OF THE COMMISSION CLERK AND ADMINISTRATIVE SERVICES

FROM: OFFICE OF THE GENERAL COUNSEL (GERVASI)

RE: DOCKET NO. 060198-EI - Requirement for investor-owned electric utilities to file ongoing storm preparedness plans and implementation cost estimates.

Attached are documents regarding the 10-Point Initiatives by Electric Cooperatives, to be filed in the above-referenced docket.

DATE DOCUMENT SENT TO CCA 8/10/06

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Attachment
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FECA
Florida Electric Cooperatives Association, Inc.
®
2916 Apalachee Parkway
Tallahassee, Florida 32301
(850) 877-6166
FAX: (850) 656-5485

August 2, 2006

Mr. Bill McNulty
Florida Public Service Commission
2450 Shumard Oak Blvd.
Tallahassee, FL 32399

RE: Filing of 10-Point Initiatives by Electric Cooperatives

Dear Bill:

Please find enclosed responses to staff's request for data on storm preparedness initiatives by all 17 member-cooperatives of the Florida Electric Cooperatives Association, Inc. (FECA). Lee County Electric Cooperative is not a member of FECA. FECA's members voluntarily submit this information for the Commissioners' review and are confident that the cooperatives' responses will demonstrate that cooperatives have been, and will continue to be, in the forefront of addressing the effects of extreme weather events on their system.

In regards to the first initiative- a 3-year Vegetation Management Cycle for Distribution Circuits- some cooperatives have not yet gone to a 3-year cycle and may not do so because they presently clear the right-of-way 10 feet (or more) on both sides of the lines in more rural areas. A 4 or 5 year cycle will suffice in these cases because the longer re-growth period makes trimming and clearing more frequently unnecessary and more costly.

Since the individual cooperatives responded to staff's data request, FECA suggests that if you have co-op specific questions on the responses, please call the cooperative's contact person. If you have any other questions please contact me or Bill Willingham.

Sincerely,

Michelle Hershel
Director of Regulatory Affairs

ALABAMA ELECTRIC COOPERATIVE, INC.
Storm Implementation Plans

Alabama Electric Cooperative is a generation and transmission cooperative owned by sixteen distribution cooperatives and four cities. Those member-owners in Florida are:

Choctawhatchee Electric Cooperative, Inc.
Gulf Coast Electric Cooperative, Inc.
West Florida Electric Cooperative, Inc.
Escambia River Electric Cooperative, Inc.

Alabama Electric Cooperative, Inc. (AEC) serves no retail customers and owns no distribution lines. AEC owns approximately 518 miles of 115kV and 46kV transmission line in Florida. All transmission structures are either concrete, steel or wood.

AEC's response to the PSC's ten initiatives is as follows:

1) **A three-year vegetation management cycle for distribution circuits**

Response: AEC owns no distribution circuits, therefore, this initiative does not apply.

2) **An audit of joint-use agreements**

Response: AEC has a small number of attachments on its transmission structures. AEC ensures that all safety codes are met at the time of attachment. Presently, those attachments are not routinely inspected. Should a program be implemented to do so, it would cost approximately $90,000 per year. AEC could have a program in place by the third quarter of 2007 if notified in January of 2007.

3) **A six-year transmission structure inspection program**

Response: AEC presently inspects all transmission structures on a four year rotation and plans to continue that cycle.

4) **Hardening of existing transmission structures**

Response: Presently, AEC replaces decayed wooden structures with either wood, concrete or steel, depending upon the strength requirements. However, there is a $1,500-$2,000 differential in material cost from wood to concrete/steel. Presently, AEC has no plans to upgrade all structures to concrete or steel. Historical operations have not indicated this is necessary and certainly it is not cost justified.

5) **A transmission and distribution geographic information system**

Response: AEC budgets annually to add GIS information to its transmission database. This process will take several years. However, repair and restoration has not been hindered nor impeded in any way by not having this information automated.

6) **Post-storm data collection and forensic analysis**

Response: AEC has not experienced extensive storm damage in Florida. To date, data has been manually collected to perform forensic analysis as needed. Until evidence and operating history indicates a need to seek other options, AEC plans to continue its present course of action.

7) **Collection of detailed data differentiating between the reliability performance of overhead and underground systems**

Response: AEC owns no underground, therefore, this initiative does not apply.

8) **Increased utility coordination with local governments**

Response: AEC works in concert with its member cooperatives to develop communication and exchange information critical to restoration of electrical service with local government agencies. This approach has worked well, and it is planned to continue this approach. AEC will become more involved due to the member-owners' increased involvement in communications with local government agencies.

9) **Collaborative research on effects of hurricane winds and storm surge**

Response: AEC maintains membership in the Electrical Power Research Institute (EPRI), and the National Rural Electric Cooperative Association, both of which do research for the industry. AEC is certainly in favor of any effort that would lead to minimizing the impact of hurricanes on its transmission system, but would have limited funds for such research.

10) **A natural disaster preparedness and recovery program**

Response: As a Rural Utilities Service (RUS) borrower, AEC is required to have a program in place. AEC's plan is exercised and updated annually.

STORM PREPAREDNESS PLAN AND COST
Central Florida Electric Cooperative, Inc.
July 18, 2006

Introduction

Central Florida Electric Cooperative, Inc. is an electric distribution Cooperative in north central Florida, serving approximately 31,702 consumers as of year-end, 2005. The Cooperative maintains 4,060 miles of overhead distribution line, 187 miles of underground distribution line, and 12 miles of transmission line in Alachua, Dixie, Gilchrist, and Levy Counties. The Cooperative operates 15 distribution substations, purchasing power at 69 kV from Seminole Electric Cooperative, Inc., a statewide cooperative power supplier. The following will outline our current plans and cost for ongoing storm preparedness and what the estimated cost will be to comply with the 10 initiatives.

Vegetation Management Cycle

We are currently on a 4-year cycle, trimming back 10 feet back on each side of the pole line. We are averaging 734 miles of primary line a year to trim with cost an average cost of $2,053,376 a year or $8,213,500 for a 4-year cycle.

To comply with a 3-year cycle program we would have to trim 979 miles of primary line a year at a cost of $2,737,833 a year. We do not intend to comply with a 3-year cycle, if we trim back 15 feet on each side of the pole line we can achieve the same goal as a 3-year cycle.

Audit of Joint-Use Attachment Agreements

We have completed an audit of the number of cable tv attachments in 2000 at a cost to the cooperative of approximately $30,000 and a telephone attachment audit 1995 at a cost to the cooperative of approximately $25,000. To do a complete audit currently the cost is estimated to be $70,000. We are currently on an eight year cycle pole inspection program that is identifying any deficient poles also, which is costing the cooperative approximately $150,000 annually for the inspection and $300,000 to $500,000 annually to replace the deficient poles.

6-Year Transmission Structure Inspection Program

The cooperative currently has a small amount, 12 miles, of radial transmission line. We have been able to keep it under six years and try to set a goal to inspect our transmission lines once a year. The cost is negligible.

Hardening of Existing Transmission Structures

When there is a need to replace or change a pole structure we meet or exceed RUS design standards and the National Electric Safety Code requirements.

Transmission and Distribution GIS System

The cooperative is currently of paper hand drawn mapping system. The cost to convert to a digital GIS system would cost between $750,000 and $1,500,000. We are currently evaluating different systems and may implement a system in the future.

Post-Storm Data Collection and Forensic Analysis

We will perform such analysis when it warrants it.

Outage Data Differentiating Between the Reliability Performance of Overhead and Underground Systems

We currently do not split reliability indices apart between overhead and underground due to the cooperative have a low percentage of underground and not having a complete circuit underground. For those reasons the cooperative feels that we will not have an accurate comparison of reliability between overhead and underground to warrant the split of the indices.

Utility Coordination with Local Governments

The cooperative has had plans in place for years that has coordinated information between the local governments and the cooperative and has strived to improve every year.

Collaborative Research on effect of Hurricane Winds and Storm Surge

The cooperative current does not participate on any research dealing with the effect of hurricane winds and storm surge.

Natural Preparedness and Recovery Program

The cooperative has a disaster preparedness plan in place as required by RUS rules.

Any questions regarding this report contact:
Ben Dawson,
Director of Engineering
(352)-493-2511 ext. 228
bdawson@cfec.com

Implementation Plan for Ongoing Storm Preparedness
Choctawhatchee Electric Cooperative, Inc.
July 31, 2006

A. Introduction

Choctawhatchee Electric Cooperative, Inc. (CHELCO) owns and operates an electric distribution system in Northwest Florida serving portions of Holmes, Walton, Okaloosa and Santa Rosa counties. CHELCO's distribution system consists of approximately 2,769 miles of overhead and 742 miles of underground primary line.

Since 2004, CHELCO has responded to three major storms (Ivan; Dennis and Katrina.) CHELCO's restoration efforts were conducted in a manor consistent with our Disaster and Emergency Response Plan.

Contact information

For additional information contact:

Brett Shaw
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DeFuniak Springs, FL 32435
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1. Vegetation Management Cycle

CHELCO maintains approximately 2769 miles of overhead distribution lines for vegetation management. CHELCO sustains a 5-year trimming cycle, which is complemented by spot line clearance driven by 3-year visual feeder inspections. These visual feeder inspections identify concern vegetation not only within CHELCO's rights-of-way, but also dead or decaying vegetation outside those limitations which might cause damage to CHELCO's distribution facilities.

2. Audit of Joint-Use-Attachment Agreements

CHELCO visually inspects and approves every proposed joint-use pole attachment permit application prior to installation. The joint user has to meet the latest NESC codes related to vertical clearances. CHELCO's primary distribution poles are designed to a sufficient size and strength to maintain pole integrity from forces associated with joint use attachments (maximum of three) and wind loading per NESC Rule 250B and 250C. If CHELCO determines that the addition of another joint use attachment will overload the pole, the entity requesting the joint use must pay to upgrade the pole to a sufficient size.

CHELCO conducts pole attachment audits every 3 years, with the most current being completed January 2006. All attachments are logged and verified through CHELCO's GIS system.

3. Six-year transmission Inspection Program
CHELCO is a distribution electric cooperative and has no transmission facilities. CHELCO receives transmission service from Alabama Electric Cooperative.

4. Hardening of existing Transmission Structures
As stated in number 3, CHELCO does not own transmission facilities.

5. Distribution Geographic Information System
CHELCO's Geographic Information System (GIS) is a multi-faceted system that utilizes GIS, CAD, and GPS. CHELCO primarily employs ESRI's ArcGIS 9.1 suite of software with Oracle as the relational database. The system is supplemented using Arc Reader in order to maintain the GIS electric geometric network and to provide map information in the field, respectively.

CHELCO's distribution system, both overhead and underground, is maintained in the system and attributes such as identifying numbers, asset number, operational ID, conductor size, material, and phase are stored. Land base data (parcels, roads, water bodies, aerial ortho-photography, etc.) are updated from the two main counties that CHELCO partially serves: Walton and Okaloosa. CHELCO staff and contractors collect coordinates for point-based assets using submeter accurate GPS. Facility locations currently being captured with GPS include distribution poles, pad mounted transformers, and other underground distribution equipment.

Besides mapping, analysis, and reporting, GIS is also utilized to feed data to CHELCO's outage management system. Storm surge data has been collected from the counties and this data is available in assisting CHELCO during restoration planning.

6. Post-storm Data Gathering, Data Retention and Forensic Analysis
CHELCO's most recent experience with major storms came in the massive efforts to repair and restore the electric system during Hurricane's Ivan, Dennis and Katrina. Post-storm data gathering consist of a combination of CHELCO personnel physically conducting system patrols and (if communication sources are available) the utilization of CHELCO's outage management system.

Post-storm, each restoration area is staffed with a coordinator, line crews and support/evaluator personnel. Crews and evaluators utilize CHELCO's GIS data in conducting the physical patrols for prompt analysis of materials needed for restoration.

7. Collection of Outage Data Differentiating Between the Reliability Performance of Overhead and Underground Systems
CHELCO currently tracks outage data in our Outage Management System with 23 predefined cause codes assigned to each outage. These cause codes in conjunction with GIS data, give the system engineer the ability to differentiate between overhead and underground outages on our system. While reliability indices are not calculated for overhead vs. underground, the data is available for calculation.

8. Coordination with Local Governments
CHELCO has a long established relationship with the governmental agencies within our service territory. CHELCO participates with local county emergency operations personnel before, during and after major storms. Coordination also includes public awareness notification through various media outlets.

9. Collaborative Research through the Public Utility Research Center (PURC) at the University of Florida
CHELCO's membership in Florida Electric Cooperatives Association, Inc. provides access to PURC data.

10. Natural Disaster Preparedness and Recovery Program
CHELCO has a well written Disaster and Emergency Response Plan that clearly details responsibilities, procedures, work assignments, restoration guidelines and general support information for use in major storms.

Storm Preparedness Report
Clay Electric Cooperative, Inc.
July 28, 2006

A. Introduction:

Utility: Clay Electric Cooperative, Inc.
Electric Customers Served: Approximately 164,000
Primary Contact: Herman Dyal, Director of Engineering

Clay's service area stretches into fourteen north Florida counties: Alachua, Baker, Bradford, Clay, Columbia, Flagler, Gilchrist, Lake, Levy, Marion, Putnam, Suwannee, Union, and Volusia. Due to Clay's service area Clay has not experienced any significant hurricane damage since Dora in 1964. However, in 2004, Clay did experience some damage from hurricane Charlie and significant damage from hurricanes Jeanne and Frances. We were able to repair the damage sustained in Charlie with our own crews, but Jeanne and Frances required assistance from outside crews. Clay had losses of over $10,000,000 for all hurricanes combined.

Clay did not experience any hurricane damage in 2005 but Clay did send crews to Alabama and Mississippi to assist other cooperatives with hurricane recovery.

B. Three Year Vegetation Management Cycle

Clay owns and operates over 8,700 miles of overhead primary distribution lines. All of our primary lines are under our vegetation management program.

Clay's vegetation management program has been developed taking into account the widely different service areas we serve. Presently Clay's vegetation management program consists of a 3-year cycle (city), a 4-year cycle (urban) and a 5-year cycle (rural) for all its distribution primary circuits. The average time for the three cycles is 3.9 years. The reason for the difference in cycle times is simply the difference between re-growth speed and trimming clearance. In the city areas we often cannot get the full 10' – 12' clearance Clay desires plus these areas often have more water and fertilizers due to residential sprinkling and fertilizing. In the remote rural areas Clay can often get the 10'-12' clearance plus much of the trees in these areas get only rain and no fertilizer. Clay also has a Pre-Cycle Vegetation Maintenance Cycle consisting of annual inspections of 25% of the distribution system circuits in the last year of their cycle for areas that may have the potential to cause an outage before the next cycle year. Clay administers a Dead/Danger Tree Removal Program with annual inspections of distribution circuits from the substation to the first down line recloser. Clay's Vegetation Management Program is managed by Professional ISA Certified Arborists and ISA Utility Specialists.

Clay's Vegetation management Program is a clear cut right-of-way maintenance program. Clay has over 8,700 miles of primary overhead distribution circuits. Approximately 25% is under 3-year cycle, 40% under a 4-year cycle, and the remaining 35% is under a 5-year cycle. On annual basis we manage approximately 2,187 mile or about 25%.

Clay also has a systematic mowing and chemical spraying cycle of three years where we mow and spray approximately 1150 miles of distribution line annually.

Clay's Vegetation Management Program budget for 2006 is $7.7 million. This budget includes right-of-way maintenance on transmission, distribution, pre-cycle maintenance, and dead/danger tree program. To move Clay's Vegetation Maintenance budget to a firm 3-year cycle on distribution and transmission, it would be a $1.7 million increase.

C. Audit of Joint-use Attachment Agreements

Clay has over 220,000 distribution poles with about 43,600 cable television company attachments and about 46,100 telephone company attachments. These attachments involve about 60,000 of our 220,000 poles. Clay is attached to about 1,800 poles owned by the telephone companies. Clay has attachment contracts with four telephone companies and ten CATV companies.

In 1988 Clay entered into a new contract with Southern Bell Telephone & Telegraph Company (37,400 attachments). This contract was negotiated on a state wide basis for the cooperatives which are members of Florida Electric Cooperative Association, Inc. This contract defines a standard joint use pole as a 40-foot class 5 wood pole as well as space allocation for the cooperative and telephone company. The contract further requires each utility to meet strength and clearance requirements of National Electrical Safety Code before attaching. This contract has since been executed by all other telephone companies we share attachments with. We are in the process of planning and scheduling an inspection and inventory of SBT & T joint use poles. We would expect to complete the inspection and inventory in 2008. At this time we have no failure history or other reason to suspect the attached poles do not meet NESC.

In 1990 Clay revised all CATV attachment contracts. All of our CATV contracts are the same. In this contract we specify attachments must meet NESC both in strength and clearance. Typical drawings showing attachment locations are attached and made a part of contract. The contract also requires before any attachment is made the CATV Company has to submit detailed plans and drawings for each attachment. These plans and drawings are to be prepared by a qualified engineer, registered and currently licensed to practice engineering in the State of Florida. Also within ten days of completion of attachments the engineer who signed the original plans and drawings must execute another form certifying

the attachments have been completed and no poles or facilities of Clay are in violation of NESC.

Clay at this time has no failure history or other reason to suspect the attached poles do not meet NESC. Clay does random inventories of these systems to detect unreported attachments.

Since Clay owns basically all the joint use poles we include joint use as part of our basic wood pole ground line inspection program. All attaching companies by contract have the obligation and responsibility to attach without violating the NESC therefore as long as Clay maintains and inspects the pole to insure it meets the strength requirements of the NESC (ex. A 40-foot class 5 pole still meets the strength requirements of the 40-foot class 5 pole as originally installed less NESC allowable deterioration before change out NESC Table 253-2). Clay has no plans to inspect attachments for compliance to NESC structural loading. This is the obligation by contract of the attaching company.

If Clay were to initiate an inspection and structural analyses program estimated costs would be $900,000 for a one time review.

D. Six Year Transmission Structure Inspection Program

Clay has about 213 miles of transmission lines. About three miles are 230 Kv radial transmission line to a large industrial customer and the rest are 69 Kv and 115 Kv radial transmission lines serving Clay's distribution substations. Construction is single pole wood or concrete with some H-Frame wood pole. Clay has no steel lattice towers.

Clay performs a ground patrol visual inspection of the transmission system every other year and any repairs needed are done on a timely basis. Clay also performs a climbing inspection of every structure on a six year cycle and repairs are made as soon as possible, but no later than the end of the year in which the inspection was performed. Defective poles, cross-arms, and insulators are replaced immediately. Clay also performs an inspection by helicopter of the entire transmission system every quarter.

During the hurricanes of 2004 Clay experienced no transmission structure failures.

E. Hardening of Existing Transmission Structures

As stated previously Clay owns and operates about 213 miles of transmission line. All of Clay's transmission lines are overhead construction. Clay's existing system has approximately 1,226 wood structures and 500 concrete structures. The 1,226 wood structures include approximately 2,171 wood poles because many of these lines are H-frame type construction. The concrete pole lines are

mostly single pole structures constructed with spun-cast concrete poles. All new transmission lines built since 1990 have been concrete pole construction. Clay presently continues to replace existing wood poles with wood poles when replacement is required.

During the hurricanes of 2004 Clay did not experience a failure of any of its transmission structures. However Clay is presently studying if a "difficult to change out" wood type structure needs to be replaced should a concrete structure be used as an economical alternative.

F. Transmission and Distribution Geographic Information System

Clay has had a distribution geographic information system since 2002. This system is also integrated with our engineering planning package, outage management system, customer information system, equipment maintenance, and automated phone answering system and vegetation management program. Clay has complete representation of its electric distribution system. All new work orders for system expansion, relocation and rebuild are done on this system. Clay is preparing to add the transmission system to the mapping system. This is scheduled to be completed in 2007.

During the hurricanes of 2004 this system allowed us to track the customers out and the progress of restoration.

However our existing system is not GPS accurate nor do we maintain actual pole inventory. We do keep track of pole but not the assemblies or attachments on the pole. At present we do not have plans to do this. In the hurricanes of 2004 we did not see this lack of data as a problem during restoration. Clay has evaluated the cost/benefit of this data in the past and found the cost/benefit to be uneconomical. The estimated cost to GPS Clay's system, gather the missing data, and place it into the mapping system would be $3,600,000. The estimated annual cost to maintain this data as Clay grows would be $200,000.

G. Post-Storm Data Collection and Forensic Analyses

Clay has a written detailed emergency operations plan for assessing and documenting system status, damage, and repairs during a major storm. In summary every substation has a Substation Coordinator assigned who is an employee of Clay and is knowledgeable of the substation and its feeders. The coordinator has field assessors assigned to him to help in the assessment, reporting, and restoration of the substation feeders. These teams working from our six district offices will initially assess the damage on each substation and feeder using a paper "Initial Line Damage Assessment Form". This is returned to the district immediately after initial assessment. A copy of this form is sent to Clay's Emergency Operations Center for overall assessment and crew assignments.

Once crews are assigned to a substation the substation coordinator and the field assessors will guide and coordinate the crews to effect the most efficient restoration of electric service. The coordinators and assessors make sure the crews complete daily the "Daily Storm Damage Restoration Report". This report describes work done by the crew that day as well as any items that will need to be followed up on after the storm restoration. This report is sent in daily to district and original is sent to Division Chief of Distribution and Transmission for filing in damage data base. After restoration is complete, these sheets are reviewed and follow-up work is scheduled. Clay also does a "lessons learned" process after the storm restoration.

Restoration progress is followed by monitoring outage management system which is updated live as service is restored and by monitoring the "Daily District Crew Assignments" form which is filled out at the end of each day by the Substation Coordinator.

This form is given to district daily with a copy going to Director of District Operations and Director of Engineering. A copy is also retained as part of damage data base collected in Engineering.

This form is also used by Member and Public Relations to assist in their community communication efforts to inform customers on the ongoing restoration work area for each day as well as notifying radio, tv, local EOCs, and Florida Electric Cooperative Association in Tallahassee of restoration progress.

The damage data base, GIS system, outage management system history, and "lessons learned" processes form Clay's basis for post storm data and forensic analysis.

H. Collection of Detailed Data Differentiating Between the Reliability Performance of Overhead and Underground Systems

Clay currently operates a GIS mapping system that is integrated with our automated Outage Management System. This system tracks and historically stores all outages on Clay's system. The data is there for this type analysis. However Clay has very few totally underground distribution feeders. Also the areas where Clay does have a lot of underground is typically in subdivisions or areas that have very little tree canopy. Clay in general acknowledges the existing underground will perform better than the existing overhead because in the recent storms we experienced little flooding and the existing underground is in areas that have minimal tree canopy. Meaningful data to make equal comparisons is not available because equal construction does not exist. With that said Clay does have the data and will begin doing some post storm analysis differentiating between overhead and underground.

I. Increased Utility Coordination with Local Governments

Clay actively participates in the development review process in the counties we serve, if the county has a review process. Clay uses this process to keep government and developers aware of our construction practices, easement needs, utility location, and vegetation management. This has proven to be a very helpful process for all parties. Clay will continue to support this and expand as counties undertake the development review process.

The Member & Public Relations Department has informed each Emergency Management Organization within Clay's service area of our storm restoration procedure and have made available to them various storm preparedness publications at no cost. In many of the counties Clay serves there are multiple electric service providers, so Clay has furnished each organization a Clay service area map for each county. Personal visits have been made to several of the counties which have substantial numbers of Clay members. Each organization has been made aware of Clay's commitment to keep each organization aware of Clay's storm restoration progress through daily power restoration reports which are faxed and emailed during a major storm to the officials who have been designated by each county.

J. Collaborative Research on Effects of Hurricane Winds and Storm Surge

Clay is involved with PURC through our membership in Florida Electric Cooperatives Association, Inc. and its interaction with PURC.

K. A Natural Disaster Preparedness and Recovery Program

Clay has a well developed written emergency operations plan that clearly details responsibilities, procedures and data collection forms for use in major storms.

Clay is also in the process of finalizing a vulnerability and risk assessment of all its business functions which include major storms. Clay is not an RUS borrower but Clay is following their directive on this issue because Clay feels this is a good business practice. The final report will be completed this year.

Storm Preparedness Implementation Plan
Escambia River Electric Cooperative
July 2006

A. Introduction

Escambia River Electric Cooperative is located in Santa Rosa County and serves the Northern parts of Escambia and Santa Rosa Counties. EREC serves approximately 10,100 customers with approximately 1,600 miles of distribution line and no transmission lines or structures. EREC owns all of the distribution, which operates at 12,470 V, and our generation and transmission partner owns all of the transmission and substations that are used to serve our customers.

In September of 2004, EREC was devastated from hurricane Ivan and in 2005 EREC was hit by Dennis. In both cases, EREC sustained extensive customer service interruptions, but restoration effort took 10 days for Ivan and 4 days for Dennis. EREC accomplished this by bringing more than 500 extra workers from across the United States to help with our restoration efforts.

Contact Information

For additional information contact:
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GM/CEO
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Jay, FL 32565
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B. Three-Year Vegetation Management Cycle for Distribution Circuits

Escambia River Electric Cooperative uses a 5-year vegetation management cycle for all distribution lines. The primary reason for this is that the right-of-way is cleared 10 feet on both sides of the lines making a total clearance of 20 feet. While the crews are managing vegetation on a line they look for foreseeable future problems and take care of them at that time.

C. Audit of Joint-Use Pole Attachment Agreements

Escambia River Electric Cooperative is in the process of doing an inventory of all the poles in our distribution system and creating a GIS map. As the GIS system proceeds, EREC is inspecting each pole to determine its condition, need of upgrade or replacement, and which companies have attached to it.

D. Six-Year Transmission Structure Inspection Program

Escambia River Electric Cooperative owns no transmission structures.

E. Hardening of Existing Transmission Structures

Escambia River Electric Cooperative owns no transmission structures.

F. Transmission and Distribution Geographic Information System

Escambia River Electric Cooperative has recently started the creation of a GIS map of the distribution system using ESRI ArcMap.

G. Post-Storm Data Gathering and Forensic Analysis

Detailed information about outages affecting any part of our distribution system is entered into our database of outages, analyzed, and presented in a report to our board of trustees. The same process is used for hurricanes and extreme weather events and will produce work orders, when needed, for changes to improve the system reliability.

H. Collection of Detailed Outage Differentiating Between the Reliability Performance of Overhead and Underground Systems

Escambia River Electric Cooperative collects data from every outage regardless of the nature or type of outage. This data is detailed enough to distinguish overhead or underground issues and is then used to monitor system reliability, watching for needed improvements.

I. Increased Utility Coordination with Local Governments

Escambia River Electric Cooperative operates within both Escambia and Santa Rosa Counties. Each county we serve has an emergency operation center and EREC stays in contact with each EOC when needed, or requested.

J. Collaborative Research on effects of Hurricane Winds and Storm Surges

Through membership of the Florida Electric' Cooperative Association we participate with PURC for research.

K. Natural Disaster Preparedness and Recovery Program

Escambia River Electric Cooperative has a disaster preparedness plan as required by RUS rules.

STORM PREPARDNESS IMPLEMENTATION PLAN
Florida Keys Electric Cooperative Association, Inc.
July 24, 2006

A. Introduction

Florida Keys Electric Cooperative Association, Inc. (FKEC) operates in Monroe County, Florida from the Dade/Monroe County line to the seven-mile bridge just south of Marathon. FKEC serves approximately 31,000 active accounts and operates a twenty-five megawatt power plant, 100 miles of 138,000-volt transmission lines and 689 miles of 25,000-volt distribution lines. FKEC has transmission ties with Florida Power and Light and with Keys Energy Service of Key West. FKEC purchases approximately 98% of its electric capacity and energy requirements from Florida Power and Light under the terms and conditions of the long-term contract between FKEC and Florida Power and Light.

FKEC was impacted by four separate named storms during 2005. Hurricane Dennis struck on Saturday, July 9, 2005. Only about 1,500 customers lost power, mainly in the Marathon area. All power was restored within 24 hours. Hurricane Katrina struck on August 12, 2005. At the peak of the storm, approximately 5,500 customers were without power. Electric service was restored to all customers within 24 hours. Hurricane Rita struck on September 20, 2005. Approximately 4,000 customers were without electric service at the peak of the storm. All electric service was restored within 24 hours. Hurricane Wilma struck on October 22, 2005. At approximately 7:00am, all customers throughout the entire Keys were without electric service due to a fault on the transmission system. FKEC did not attempt to reenergize the transmission system until storm conditions subsided. The transmission system was re-energized at approximately noon on the 22nd. At that time, roughly half of FKEC's customers were back in service. Electric service was restored to all customers over the next four days.

For additional information please contact
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Chief Executive Officer
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Tavernier, Florida 33070
Phone: 305.852.2431
Fax: 305.852.4794
Email: scott@fkec.com

B. Three-year Vegetation Management Cycle

FKEC currently maintains a three-year vegetation management cycle for all distribution and transmission circuits. FKEC trims to arborist standards and follows the clearance requirements specified in the National Electrical Safety Code. FKEC employs a full time Utility Forrester who is responsible for developing and implementing FKEC's trimming plan. Trees are trimmed by both in-house crews and Asplundh contract crews. All in-house and contract crews are trained to trim to arborist standards. FKEC has developed a

tree planting guide that is provided to members. FKEC has also implemented a trade-a-tree program wherein the company will provide and plant an appropriate tree for every problem tree a member allows the company to remove. FKEC is also investigating the use of tree growth retardants that will help reduce the need to continually trim fast growing tree species.

C. Transmission and Distribution Geographic Information System

FKEC is in the final stages of implementing a fully integrated GIS, CIS and outage management system. All electric facilities from the transmission system down to individual meters will be included in the system.

D. Wooden Transmission vs. Concrete Transmission Structures

FKEC does not have any wooden transmission structures. All transmission poles are either square concrete, round spun concrete or steel.

E. Post-Storm Data Gathering, Data Retention and Forensic Analysis

Data on outages is gathered daily and put into a monthly report. During a major storm, outage data is collected by both operators and an automated outage reporting system. The outage data is entered into a storm database on a continuous basis. The outage database is used to develop FKEC's storm restoration plan. As outages are cleared, they are cleared from the database. At least twice a day the database is reviewed and the restoration plan adjusted based on restoration progress. The desire and need for a more automated and real time outage management system has led to FKEC GIS, CIS and outage management project. Once complete, FKEC outage management system will merge the SCADA, GIS, CIS and automated outage reporting system.

F. Audit of Joint-Use Pole Attachment Agreements

FKEC, telephone and cable company representatives physically audit joint-use pole attachments every three years. FKEC is currently not allowing any additional attachments to some sections of our older square concrete transmission line due to loading concerns. FKEC also recently completed an inspection of telephone and cable company guys and anchors. Lists of guys and anchors in need of repair have been provided to both companies along with a request that each company repair damaged guys and anchors as soon as possible.

G. Six-year Transmission Inspection Program

FKEC inspects all 100 miles of its transmission system every year, both visually and by helicopter.

H. Collection of Outage Data Differentiation Between the Reliability Performance of Overhead and Underground Systems

Data is collected on every outage including whether it is overhead or underground. The cause of the outage, the outage duration, the number of customers affected, weather conditions and other items are collected. The action taken and material used to restore the outage is also recorded. There are no plans to change the process at this time other than to move forward toward completing the installation of the GIS system to assist in assimilating and retrieving the data.

I. Coordination with Local Governments

FKEC coordinates with all local governments as appropriate on a daily basis and during storm events.

J. Collaborative Research through PURC

FKEC participates in PURC activities related to storm hardening research through membership in the Florida Electric Cooperatives Association.

Glades Electric Cooperative, Inc.
PSC 10 Point Storm Preparedness Report
August 1, 2006

Introduction

Glades Electric Cooperative, Inc. (GEC) has approximately 16,063 consumers in the counties of Highlands, Okeechobee, Glades, and Hendry. GEC maintains approximately 2,128 miles of distribution overhead with operating voltages at 12,470 and 24,940 as well as 22.07 miles of URD. The Cooperative also maintains 84.42 miles of transmission lines operating at 69kV and 138kV.

The GEC Board of Trustees adopted a "System Restoration Plan" in 1998 that has resulted in over 90% of the GEC distribution system to have undergone complete maintenance in the last eight (8) years. It is expected that the System Restoration Plan will cycle through the entire GEC system every ten (10) years. Ground line and subsurface pole inspections were instituted in 2005 and will include all poles on the GEC system on a ten year cycle to coincide with planned System Restoration circuits each year.

1. Three-Year Vegetation Management Cycle

GEC currently trims its entire system on a three year trim cycle and has been doing so since 2003. The current three year cycle began in 2006 with a fixed cost contract for system wide trimming totaling $1,960,468.00. GEC spends an average of $75,000.00 per year in hourly trimming expense in addition to fixed price contract amounts with most of the hourly work performed on new construction projects. All trimming is done in accordance with NESC clearance requirements.

2. Audit of Joint-Use Pole Attachment Agreements

GEC audits all cable attachments every two (2) years system wide. The latest audit was performed in 2005 with 2,587 CATV attachments and 461 telephone cable attachments. All joint use poles are owned and maintained by GEC and we do not have GEC facilities on non GEC owned poles. All NESC code violations found during the audit are corrected within the same year. GEC coordinates code violation corrections utilizing facility upgrades as well as actions required by the multiple telephone and cable companies according to current joint use pole attachment contracts. There has been no known structure failures associated with joint use pole attachments. The next scheduled joint use audit is in 2007.

3. **Transmission Structure Inspection**

GEC performs aerial inspections of all transmission lines annually. In addition to the aerial inspections, all transmission structures in cane fields and agricultural areas with heavy machinery traffic are checked for broken ground wires, broken guy wires, damaged anchors, and missing guy guards annually. GEC crews and certified contractors complete maintenance on transmission lines immediately following annual inspections to correct any unacceptable conditions or potential failures on the transmission system. Typically these identified items are corrected prior to the official hurricane season each year.

4. **Hardening of Existing Transmission Structures**

GEC recently upgraded existing storm guys on approximately 49 transmission structures on a radial 69kV line that energizes two GEC substations serving 2,177 meters. Complete rebuild and relocation of three radial 69kV transmission lines (approximately 22.5 miles of line) are included in GEC's 2007 – 2010 four year work plan with an estimated cost of $5,100,000.00. These projects will improve accessibility, reliability, and strength integrity.

Additionally, the GEC four year work plan also includes re-insulating all existing transmission structures with polymer post insulators replacing wood cross arm and suspension insulator hardware. Estimate pole replacement percentages range from 30% to 70% on these same transmission circuits based on age and condition of existing wood pole structures.

5. **GIS**

GIS is not currently in place at GEC but is expected to begin implementation in 2007 at a cost estimated around $1,000,000.00. GIS mapping is included in the GEC four year work plan beginning in 2007. Existing outage management software (DataV) and customer database (SEDC) are compatible with current GIS packages available to GEC.

6. **Post Storm Data Collection and Forensic Analysis**

GEC retains the services of McLean Engineering Services and Mickey Harrelson P.E. for consulting and failure analysis. The services of these entities were used extensively during the 2004 and 2005 hurricane season. Post storm assessments and recommendations are provided to GEC during and after storm repairs. Identified weaknesses and recommendations made by the consultants are addressed by the Cooperative.

GEC has recently completed straightening approximately 8,014 distribution poles and backfilled with crushed rock that were directly impacted by the hurricanes of 2004 and 2005.

7. Collection of Outage Data Differentiating Between the Reliability Performance of Overhead and Underground Systems

GEC's current outage management system provides detailed reports of every individual outage. URD found on the GEC distribution system accounts for 1.03% of the entire system and is directly affected by conditions related to the overhead distribution and transmission facilities. Reliability comparisons between URD and overhead distribution is not feasible for GEC due to the small percentage of URD on the GEC system.

8. Coordination with Local Governments

GEC has an active Business Development department that maintains active communication with all city, county, and state governmental bodies in the GEC service territory. Each county EOC coordinator and disaster planning agency is provided a copy of the GEC Emergency and Disaster Preparedness Plan annually. GEC updates emergency contact numbers, media contact numbers, and local government contact numbers before each official hurricane season begins. GEC participates in mock disaster and emergency drills in the counties and cities it serves.

GEC provides power restoration assistance through manpower, equipment, and backup emergency generation for the City of Moore Haven. In previous storms, the Cooperative has served the City of Moore Haven utilizing load management diesel generation until normal service is restored. This has proven to provide quick and reliable power restoration to the City immediately after a storm passing.

GEC has prearranged agreements with the Sebring Airport Authority and the Sebring International Raceway for staging areas and office accommodations in the event of disaster.

9. Collaborative Research on Effects of Hurricane Winds and Storm Surges

GEC is involved with PURC through its membership and affiliation with Florida Electric Cooperatives Association, Inc. and their interaction with PURC. GEC also recognizes the fact that the southern portion of its territory located in Glades and Hendry counties are subject to storm surges from Lake Okeechobee in the event of a breech in the Herbert Hoover Dike. This dike is owned and maintained

by the Army Corps of Engineers and all information concerning integrity of the dike is dependent upon their communication of such.

10. Natural Disaster Preparedness and Recovery Program

GEC implemented an Emergency and Storm Disaster Recovery Plan in 1999. This plan has evolved into a detailed and effective program since its inception as it has been utilized and improved through a number of tropical disasters and emergencies. The plan is updated annually with all GEC employees given the opportunity to input improvements. Contents of the plan include, but not limited to, pre storm preparations, post storm power restoration, business continuity involving restoration or relocation of networks and servers, office facilities, equipment, and current employees. Updated copies are furnished to all local Emergency Operations Centers in the four counties served by GEC (Highlands, Okeechobee, Glades, and Hendry) on an annual basis before the official start of hurricane season. The GEC Emergency and Storm Disaster Recovery Plan is currently being used as a template by the National Rural Electric Cooperatives Association to assist other electric cooperatives nationwide develop similar plans.

On Going Storm Preparedness

Gulf Coast Electric Cooperative, Inc.

July 31, 2006

A. Introduction

The Gulf Coast Electric Cooperative main office is located in Wewahitchka, Gulf County, Florida approximately seventeen miles inland from the Gulf of Mexico. The cooperative''s district office is located in Southport, Bay County, Florida approximately thirteen miles inland from the Gulf. The cooperative serves electricity to 20,098 customers in Gulf, Calhoun, Bay, Washington counties, with a few customers in Walton and Jackson counties in the central panhandle of Florida. Gulf Coast Electric''s distribution system is composed of power distribution line operating at 14.4/24.94kV with one substation operating at 7.2/12.47kV, both aerial and underground. Gulf Coast receives power from the Alabama Electric Cooperative''s transmission system operating in Andalusia, Alabama. The transmission voltage is rated at 115kV.

Since 1994, Gulf Coast has experienced Hurricanes Alberto, Erin, Opal, Allison, Frances, Ivan and Dennis. Except for Hurricane Opal, the said storms created widespread outages associated with wind, lightning and falling trees. Power restoration was within the normal storm procedures. As Opal approached, our generation and transmission power supplier de-energized our source voltage until the storm abated. Power restoration was completed in three days.

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B. Three-Year Vegetation Management Cycle

Gulf Coast owns and operates about 2500 miles of overhead primary distribution lines. We strive to cut all our ROW on a 5-year cycle. According to the particular line construction specifications, we cut between 20 feet to 30 feet width, ground to sky. Gulfco''s ROW program is managed by Certified Arborist personnel. We also utilize contractors for our clear-cut ROW maintenance program.

Gulf Coast is working progressively into a systematic herbicide spraying program. Our plans are to spray 12 to 18 months behind our mowing program. Estimated ROW clearing costs are roughly $750,000 to $1,000,000 annually to cut 100% on a 5-year program. It is cost prohibitive for our members to cut 100%. Gulfco cuts on a selective basis to maintain a respectful systematic program.

C. Transmission and Distribution Geographic Information System

Gulf Coast has a GIS section within the Engineering Department and has mapped its electrical distribution system. Our mapping system is operated by ESRI, ArcExplorer and AutoCAD Autodesk. Features include Consumer data, Phase (conductor), Arrestor, Substation, Device, Primary (conductor), Transformer, Switch, Secondary (conductor), Transmission (I.D.) Open, Pedestal (type), Regulator, Pole, Light, Leader, Guys, Capacitor, Road-edge, Roads, Subbndry (substation boundary), Water, Plss data. All information is available for viewing by our personnel on lap top or desk top computers. This is a seamless mapping system that is user friendly and easy to operate.

D. Wooden Transmission vs. Concrete Transmission Structures

Gulf Coast owns no transmission lines. We purchase our power from Alabama Electric Cooperative, Inc. and receive our power at our seven substation sites.

E. Post-Storm Data Gathering, Data Retention and Forensic Analysis

Gulf Coast''s Hurricane and Disaster plan calls for implementing Phase V of the plan. Damage assessment begins here with Systems Operations alerting the Statewide Association and contractors to the possible need to use outside help (Statewide Emergency Assistance Plan). Post-Storm Data Gathering, Data Retention and Forensic Analysis is done in conjunction with Systems Operations, Engineering and Member Services. Our employees are assigned their specific damage assessment duties which are reported to the Manager of Operations and Engineering. The incoming data is then processed and retained in our company records.

F. Audit of Joint-Use Pole Attachments Agreements

Gulf Coast agreements are with BellSouth Telecommunications, Inc. and GT Com. The agreement defines a standard joint use pole as a 40-foot class 5 wood pole as well as space allocation for the cooperative and telephone companies. The contract further requires each utility to meet strength and clearance requirements of the current National Electrical Safety Code before attaching. An application for permission to make attachments must be submitted to the owner from the other party before attachments are made. The latest field audit between Gulf Coast and BellSouth was done in November, 2004. As of December 31, 2005, BellSouth is attached to 14,928 of Gulf Coast poles and Gulf Coast is attached to 16 BellSouth poles.

The CATV companies we have agreements with are Comcast, Mediacom and Time Warner. All CATV joint attachments must meet the strength and clearance requirements of the National Electrical Safety Code before attachments are made. We are currently looking at field auditing our CATV joint attachments.

Quarterly pole line inspections are done for newly constructed jobs. The inspections encompass all pole line construction criteria. General inspections are currently done on an eight-year cycle.

G. Six-year Transmission Inspection Program

Gulf Coast owns no transmission lines. We purchase our power from Alabama Electric Cooperative, Inc. and receive our power at our seven substation sites.

H. Collection of Outage Data Differentiating Between the Reliability Performance of Overhead and Underground Systems

Gulf Coast Electric maintains an ""Outage"" database that stores all outages on the Gulfco system. The database can track the history of particular events and customer problems. The database can differentiate overhead and underground outages and problems. Our outage database is not integrated with our GIS mapping system, however, the two do compliment each other and data can be generated to pair the two for analysis and performance differences. Gulfco''s general comparisons of overhead and underground are mainly aesthetic. We do not experience much flooding, but lightning affects both overhead and underground. Overhead lines are subject to problems with tree canopy, but underground outages are a longer duration.

I. Coordination with Local Governments

Gulf Coast actively participates in Storm and Disaster Preparedness and Recovery with the county EOC''s that we serve. Bay County EOC serves as the area''s Telecast source in the event of disaster. We do send a cooperative delegate to the Bay County EOC for the duration if activation should occur. This delegate holds direct communication with all local government officials as well as EOC personnel.

J. Collaborative research Through the Public Utility Research Center (PURC) at University of Florida

The cooperative is a member of the Cooperative Research Network, however, has no program with PURC. We are interested in being affiliated with PURC as soon as we can arrange contact with them.

Hurricane Preparedness Plan
Okefenoke Rural Electric Membership Corporation
August 2006

Vegetation Management Cycle

Okefenoke Rural Electric Membership Corporation (OREMC) is on a 3-year vegetation management cycle. We utilize contractors and OREMC personnel to maintain a minimum 10 feet clearance on each side of all distribution circuits. Where practical, OREMC maintains 15 feet clearance to further improve reliability.

Audit of Joint-Use Attachment Agreements

Updated pole attachment agreements for all attaching companies, with the exception of Bell South - Florida, have been executed over the last couple of years. Negotiations are ongoing with Bell South - Florida. We are scheduled to begin audits for all attachments by the end of 2006. Audits for attachments are planned to be conducted on a 5-year cycle thereafter.

All attachments are required to comply with NESC requirements. With the exception of the Bell-South agreements, the permitting process for new attachments requires the licensee to have a registered professional engineer certify that attachments are of sound engineering design and fully comply with the latest edition of the NESC.

Transmission Structure Inspection

OREMC does not own any transmission.

Hardening of Existing Transmission Structures

OREMC does not own any transmission.

Distribution Geographic Information System

OREMC uses an automated ESRI based GIS system. The system conversion from an Auto-Cad based system was completed in 2003. The data brought into the new system through the conversion was general in nature, and included items such as conductor size and type, transformers, protective devices, capacitors, regulators, etc. As new additions are designed on the system, additional data such as pole information and pole-top construction assemblies are stored and maintained in the database.

OREMC also utilizes an integrated voice response system which automatically records the outage when the customer calls in by recognizing the customer's phone number

which is stored in the database. The phone number is linked to the map location for the customer, which provides immediate indication for the outage location.

Additionally, OREMC has an outage management system which analyzes all the outages that have been reported. The system then makes a prediction of the protective device that has opened due to the fault on the system.

Post-Storm Data Collection and Forensic Analysis

Post-storm assessment teams composed of linemen, servicemen, staking engineers, system engineers, and other personnel familiar with the electric system will be assigned by geographic areas to make the damage assessment. Normally, the response level will be directly related to the number of consumers out and the geographic and physical parameters of damages.

Localized damage will normally be reported by two-way radio or cell phone. Crews can be quickly dispatched to the site, and repairs can be made in a timely manner. Extensive and widespread damage must be reported in a more formal manner to a central location. Analysis can then be made by operations and engineering personnel of the appropriate sequence for restoration of the outage system.

Collection of Detailed Outage Data Differentiating Between the Reliability Performance of Overhead and Underground Systems

OREMC tracks all consumer-hours out, and this data is broken down into nine categories. Underground primary and underground secondary are two of the nine categories.

Increased Utility Coordination with Local Governments

OREMC participates in local government pre-disaster planning meetings when notification of such meetings is given. OREMC also works with local government officials to assist in any way possible.

Collaborative Research on Effects of Hurricane Winds and Storm Surge

OREMC currently is not engaged in such research. However, the Florida Electric Cooperative Association (FECA) is a signatory to the memorandum of understanding with Florida's other utilities and the PURC, and will benefit from research.

A Natural Disaster Preparedness and Recovery Program

OREMC has a natural disaster response plan as required by RUS rules.

Voluntary Response of Peace River Electric Cooperative to the 10 Point Storm Initiatives Plan of the Florida Public Service Commission

July 2006

A. Introduction

Peace River Electric Cooperative provides electric power to members located in Brevard, DeSoto, Hardee, Highlands, Hillsborough, Manatee, Osceola, Polk Sarasota, and Indian River Counties. The electric cooperative provides electric service to approximately 34,500 customers in the counties listed above. The Cooperative does own 138,000 and 69,000-volt transmission lines with distribution voltages of 25,000 and 12,470 volt distribution system. Peace River Electric purchases all of its wholesale power from Seminole Electric Cooperative.

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B. Five-Year Vegetation Management Cycle

Peace River Electric Cooperative has attempted to maintain a three year vegetation management cycle; however, after hurricane Frances it was evident that this was not enough. The trimming of trees is in accordance with guidelines promulgated by Rural Utilities Service (RUS) which is a division of the United States Department of Agriculture. Peace River Electric Cooperative consistently monitors the growth and the need for additional trimming on an as needed basis.

C. Transmission and Distribution Geographic Information System

Peace River Electric Cooperative has a GIS department that has mapped its electric system. The entire system was inventoried and mapped using a GPS prior to the hurricanes. The information included all overhead and underground facilities outside of the substations, including the age of the equipment if it was available. The Engineering Department uses AutoCAD for all new installations and the GIS department incorporates the data into the GIS maps. The GIS maps have been used in prior hurricanes.

D. Wooden Transmission vs. Concrete Transmission Structures

The original transmission system was a mix of square concrete poles, steel poles, and wooden poles. In the last 6 years, all transmission line additions have been with spun concrete. Any additions or replacements will be either spun concrete or steel.

E. Post-Storm Data Gathering, Data Retention and Forensic Analysis

a. Data on outages is gathered daily and put into a monthly report. This same procedure is used during and after a hurricane. Peace River Electric Cooperative is in the process of installing a new Outage Management System that will improve data collection and provide more accurate analysis of outage information.

F. Audit of Joint-Use Pole Attachment Agreements

The Cooperative's overhead electric distribution system has a little over 60,000 poles. The Cooperative retains ownership of these poles.

The poles may have a number of attachments including phone, cable television, and fiber optic. When a pole is initially installed, it is designed for all future attachments; therefore, when a request for an attachment is made new, calculations are generally not made.

G. Six-year transmission Inspection Program

Peace River Electric Cooperative owns approximately 16.80 miles of transmission lines and has in place a six (6) year inspection program.

H. Collection of Outage Data Differentiating Between the Reliability Performance of Overhead and Underground Systems

As stated above, the new OMS system will allow Peace River Electric Cooperative to provide better and more accurate data to review the reliability of overhead vs. underground.

I. Coordination with Local Governments

Peace River Electric Cooperative works hand and glove with all local governments including, but not limited to, EOC, Police, Sheriff and Fire departments. On and annual basis, Peace River Electric Cooperative hosts a meeting with the EOCs in its service area to share information and develop improved plans for storm preparedness.

J. Natural Disaster and Recovery Program

Peace River Electric Cooperative has an approved Emergency Response Plan as required by RUS.

Seminole Electric Cooperative
Storm Implementation Plans

Seminole Electric Cooperative is a Generation and Transmission Cooperative, owned by 10 Florida Distribution Cooperatives:

Central Florida Electric Cooperative, Inc.
Clay Electric Cooperative, Inc.
Glades Electric Cooperative, Inc.
Lee County Electric Cooperative, Inc.
Peace River Electric Cooperative, Inc.
Sumter Electric Cooperative, Inc.
Suwannee Valley Electric Cooperative, Inc.
Talquin Electric Cooperative, Inc.
Tri-County Electric Cooperative, Inc.
Withlacoochee River Electric Cooperative, Inc.

Seminole owns no distribution facilities. Seminole's transmission system is relatively small, consisting of approximately 200 line miles of 230kV lines and approximately 140 line miles of 69kV lines. The 230kV lines are all on steel or concrete structures, whereas the 69kv lines are on wood poles. The oldest wood pole line dates back to the late 60's and the remainder were all built in the early 80's. Our response to the proposed Public Service Commission 10 initiatives for ongoing storm preparedness are predicated on the above:

1) **A 3 year Vegetation Management Cycle for Distribution Circuits** – This imitative does not apply to Seminole since we own no distribution facilities.

2) **An Audit of Joint-Use Attachment Agreements** – Seminole has no joint-use attachments on any of our 230kV facilities. The 69kv lines can be audited and evaluated for potential overload conditions beginning in 2007 at an estimated cost of $100,000.

3) **A 6-year Transmission Structure Inspection Program** – Seminole could institute a 6-year program in 2007, wherein at least 1/6 of the system would be inspected and evaluated annually. This cost is estimated to be $75,000 per year.

4) **Hardening of Existing Transmission Structures** – Seminole could implement a program for replacing wood poles with steel or concrete whenever a pole condition requires it to be replaced. This pole for pole change out would add approximately $1500 in material cost only at each pole location. To implement a program to replace all wood poles with steel or concrete would create a huge financial impact to our Members (greater than $12,000,000) and can not be cost justified at this time. Such a program, if required, should be spread out over a long period, such as 10 to 15 years.

5) **A Transmission and Distribution Geographic Information System** – Seminole's limited transmission–only system does not warrant a GIS system. We believe our storm restoration process is not hindered by not having a GIS system, nor that it would be improved with the addition of a GIS system. Having not explored this avenue before, we have no current cost estimate to implement a GIS system for Seminole.

6) **Post-Storm Data Collection and Forensic Analysis** - Our history of storm damage has been extremely limited. We have been able to manually collect data and perform forensic analyses as needed. As stated above, this has been successfully done without having a GIS system.

7) **Collection of Detailed Outage Data Differentiating Between the Reliability Performance of Overhead and Underground System** – As Seminole owns no underground facilities, this initiative would not apply to us.

8) **Increased Utility Coordination with Local Governments** – Seminole already has open communication with various local governments however, since we do not own distribution facilities nor do we serve any retail load, our communications are somewhat limited. We do agree with this initiative and could easily increase our coordination as may be needed. This can be accomplished quickly with virtually no cost impact.

9) **Collaborative Research on Effects of Hurricane Winds and Storm Surge** – Seminole has a very limited transmission–only system and as a non-profit entity has limited funds for research. While we would be in favor of this initiative, we would anticipate the vast majority of the funding be provided by the investor-owned utilities.

10) **A Natural Disaster Preparedness and Recovery Program** – As required by the Rural Utilities Service (RUS), Seminole already has such a program in place and could readily provide a copy to the Commission.

Storm Preparedness Report
(Florida Public Service Commission 10 Point Hurricane Plan)
Sumter Electric Cooperative, Inc.
August 1, 2006

A. Introduction:

Sumter Electric Cooperative, Inc. (SECO) serves seven (7) counties in north central Florida. These counties are: Citrus, Hernando, Lake, Levy, Marion, Sumter and Pasco. SECO's service territory is approximately 2,000 sq. miles and there is no direct exposure to costal environments. SECO currently serves 152,000 customers and is experiencing an 8.7% per cent growth rate. SECO has approximately 4,500 miles of overhead distribution lines and 2,000 miles of URD. SECO's overhead system is comprised of approximately 150,000 poles with a median age of 17 years.

SECO is primarily a "Transmission Dependent" utility. Progress Energy of Florida (PEF) is SECO's primary transmission service provider. However, SECO does own approximately 72 miles of 69kV transmission lines.

In August and September of 2004 SECO experienced direct hits from Hurricanes Frances and Jeanne. SECO experienced a glancing blow to the south and eastern portions of its service area from Hurricane Charley on August 13th 2004.

During Hurricane Frances, 103,482 of SECO's customers experienced outages. 83 of SECO's 148 main distribution circuits were interrupted. SECO used its own work forces as well as approximately 760 outside employees to repair the significant damage to the system. The damage was primarily caused by falling trees. The total restoration time for Hurricane Frances was 7 days. However, service had been restored to 90% of SECO's load within 3 days after the storm.

The damage from Hurricane Jeanne was less severe than from Frances. This lesser damage may be attributed to the natural tree pruning experienced from Hurricane Frances. At the peak of the storm, 67,842 SECO customers experienced outages. 70 of the 148 main distribution circuits were interrupted. SECO did experience some difficulty in obtaining the number of outside personnel used during the Hurricane Frances restoration process. This was due to the continuing clean up from Hurricane Ivan in Florida's panhandle. SECO used approximately 310 outside personnel to assist with Hurricane Jeanne restoration. The 100% restoration time for Hurricane Jeanne was 5 days, again with 90% of the load on-line within 3 days.

In 2005 SECO was not directly impacted by any hurricanes. However, SECO sent line personnel to assist with restoration efforts in Alabama, Mississippi, Louisiana, and South Florida.

B. Vegetation Management Cycle:

SECO has been on a three (3) year cycle for trimming all its distribution lines and transmission circuits since 1996. However, the hurricanes of 2004 emphasized the need to re-think our approach. Even though we had been on a three (3) year trim cycle, trees were the primary cause of hurricane related outages. In addition, trees were the primary cause of outages in daily operations. These two facts indicated that SECO may need to make significant changes to its existing trimming philosophy, policies and/or procedures.

SECO contracted an independent consultant, ACRT (Appraisals, Consultants, Research, Training) to assess the current condition of SECO's system, evaluate trimming specifications and identify areas for improvement. ACRT reported that SECO had only 2% of its trees in contact with conductors. This is well below the industry average of 10%. Although the "Contact Rate" was very good, ACRT recommended three significant modifications to SECO's present policy:

1. Clearance Distance: SECO had used a fixed clearance distance specification for maintenance trimming. Since the clearance distance was not determined by the tree species, some trees would grow into the conductors before the next trim cycle. ACRT recommended that clearance distance should be determined by the species of the vegetation since growth rates vary widely. This species-specific clearance would provide for an actual three year clearance.
2. Increase Tree Removals: Since SECO's vegetation management contract was based on clearance distance there was no incentive to remove trees. Therefore, SECO's removal rate was very low. ACRT recommended that SECO implement a tree removal program focused on trees in the 4"-10" dbh class. These trees are small and the removal and trim cost is almost equal. However, the one-time cost of removal is much more cost effective than repeated payments for cycle trimming.
3. Contracting Methodology: SECO had used a per-circuit bidding system. ACRT recommended that SECO implement a "Unit Based" maintenance contract for vegetation management. They also recommended the addition of "Work Planners" to obtain removal permission from customers and "Post Auditors" for quality control.

SECO implemented all of ACRT's recommended changes in 2006. In addition, SECO has found that since the 2004 hurricanes, its customers are more receptive to tree trimming and removal. Utilizing SECO's newly revised policies and procedures, coupled with increased customer acceptance for tree trimming, SECO started to trim its first distribution circuit in May 2006. This circuit is approximately 115 miles in length. On this one circuit, SECO will remove approximately 1300 trees in the 4"-10" dbh class. This is proof-positive that the modifications to the program are working. Three years ago, SECO did not remove a single tree from this circuit.

It is SECO's intention to continue with the implemented changes, as well as maintaining its three year maintenance trimming program for both distribution lines and transmission circuits.

C. Audit of Joint-use Attachment Agreements:

SECO has approximately 150,000 distribution poles on its system. SECO allows both cable television (CATV) companies and telephone companies to attach to these poles. Presently SECO has approximately 41,500 CATV attachments and 31,000 telephone company attachments on its distribution poles. SECO attaches its facilities to approximately 150 Embarq (a.k.a. Sprint) poles.

Whenever a joint-use attachment request is made to SECO, an engineering representative determines the feasibility of the request. They go to the location, verify that SECO owns the pole and then they ensure that the existing structure will provide both the necessary clearance and strength requirements dictated by the National Electric Safety Code (NESC). If either of these conditions is not met, the requesting utility must pay for the necessary make-ready costs prior to SECO constructing the facility upgrades.

To ensure on-going NESC compliance, SECO performs periodic inspections with each of the contracted joint-use utilities. This quality control step is performed to ensure that unlicensed attachments are not made on the system and facilities meet the NESC codes. In addition, since SECO owns the vast majority of the joint-use poles, the poles are inspected per SECO's ground-line inspection program to ensure the poles are sound.

D. Hardening of Transmission Structures and Inspections:

SECO's 69kV transmission system consists of both wooden and concrete structures. The transmission system design is in accordance with the NESC extreme wind standards. SECO anticipates that future transmission structures (including replacement of existing structures) will be concrete or light duty steel.

SECO has implemented a five (5) year climbing and ground-line inspection cycle for its transmission structures. In 2005 SECO completed this inspection on roughly one-half of its structures. 28 wood structures were identified for replacement. All 28 structures will be replaced with spun-concrete poles. The remaining portion of the system will be inspected in 2006. In addition to ground-line and climbing inspection, SECO also performs a thermographic patrol of its structures. This patrol is conducted every 18 months. SECO plans to continue with the climbing, ground-line, and thermographic transmission inspections on the present cycles.

E. Transmission and Distribution Geographic Information System (GIS):

In 1996 SECO began the process of performing a complete field inventory of all its distribution (overhead and underground) and transmission facilities. Each facility (asset) was inventoried and mapped using the Global Positioning System (GPS). SECO also performed a complete "Drive Out" of all of the roads within its service area so they could be accurately depicted on the mapping system. The accuracy of the facility locations are within +/- 1 meter. This process was complete in 2002. All field inventory and mapping was completed and all the information resided in SECO's ACAD system.

In 2002 SECO purchased a suite of new computer products from General Electric (GE). This purchase included a new Geospatial Information System (GIS) system, an electrical design system, and an outage management system. The new GIS system was the first to come on-line. SECO was able to import all of its asset and mapping information into this system from the ACAD system. All asset information is currently stored in this system.

SECO utilizes the GE "Design Manager" (DM) program to design all new additions, upgrades and removals (retirements) from its electric system. The DM program is integrated with the GIS program. This integration allows for all system changes to be exported from the DM program directly into the GIS. This allows for assets to be accurately tracked and mapped in the GIS system.

The third component in the GE suite of products is the outage management system, "PowerOn". PowerOn utilizes the GIS system to predict, track, and document outages. This system is also linked to the Supervisory Control and Data Acquisition (SCADA) system, the automated phone system and the internet based "Storm Center" (www.secostormcenter.com). This integration allows for the rapid prediction of failed field devices that likely caused the outage.

In addition to the GE suite of products, SECO implemented a "Storm Center" program in 2006. This program allows SECO's customers, Emergency Operations Centers (EOC), and the news media to view current outages in both a graphical and tabular format as well as outage history summaries. The internet based "Storm Center" also provides SECO's customers with the ability to report an outage, check on its status, and view their individual outage history.

F. Post-storm Data Gathering, Data Retention and Forensic Analysis:

The majority of the outages experienced during the hurricanes of 2004 resulted from falling trees or tree limbs. SECO only lost 662 poles cumulatively through hurricanes Charlie, Frances, and Jeanne. This represents a pole damage rate of only 0.4%. Based on this damage rate and the obvious root cause of trees, SECO did not feel that a forensic analysis was warranted.

Although SECO has not used forensic analysis to predict damage, past storm data is analyzed very closely internally. Prior to a hurricane's landfall SECO uses an internally developed damage/manpower prediction model that utilizes anticipated wind strength, duration and area impacted to predict restoration times versus available manpower. After every major storm event SECO reviews the type and amount of damage experienced and uses this information to make changes to its design practices as well as updating the prediction model. Additionally, SECO uses a "lessons learned" approach to update its emergency restoration plan in order to seek continuous improvements in all related processes.

G. Collection of Outage Data Differentiating Between the Reliability Performances of Overhead and Underground Systems:

SECO tracks reliability data in its outage management system, "PowerOn." SECO uses industry and FPSC standard indices to track its electrical system reliability performance. These indices include "System

Average Interruption Frequency Index (SAIFI)", "Customer Average Interruption Duration Index (CAIDI)" and "System Average Interruption Duration Index (SAIDI)". Although SECO tracks these indices separately for the transmission and distribution systems, interruptions are not further segregated by overhead and underground. Tracking these indices by overhead and underground would not be valuable. Very little of SECO's distribution system is purely overhead or underground. Therefore, even if the interrupted device was overhead, it is very likely that underground devices would be impacted too. The converse is also true.

H. Coordination with Local Governments:

SECO maintains a close working relationship with Marion, Lake, Sumter and Citrus counties. These four (4) counties constitute the majority of SECO's service territory. This relationship includes obtaining the necessary permits for the construction of facilities, obtaining vegetation management permits, and various types of interactions with county staff.

In preparation for disaster response, SECO actively participates in county sponsored "Dry Runs". These activities provide valuable interaction between SECO and county Emergency Operation Center (EOC) officials. When an actual emergency is imminent, SECO designates specific representatives to staff full-time positions at the county EOC. These representatives act as SECO's official representative to the county ESF-12. In addition the SECO representative acts as a valuable communication conduit between county officials and SECO. In 2004 all four (4) county EOC's were extremely complimentary of the support provided by SECO.

I. Collaborative Research Through the Public Utility Research Center (PURC at the University of Florida):

SECO has not previously been involved with the PURC. However, through our Statewide organization (Florida Electric Cooperative Association) SECO plans to participate in PURC activities.

J. Natural Disaster Preparedness and Recovery Program:

SECO has a written disaster preparedness plan as required by the Rural Utility Service (RUS) which is updated annually or sooner if required.

Storm Preparedness Implementation Plan
Suwannee Valley Electric Cooperative Inc.
August 2006

Introduction

Suwannee Valley Electric Cooperative Inc. serves approximately 24,000 consumers in Suwannee, Lafayette, Hamilton, and Columbia Counties. The Cooperative operates a 12,470 and 24,940 volt distribution system. The transmission serving the distribution system is owned and operated by Progress Energy and FPL. Seminole Electric Cooperative contracts our transmission service through Progress Energy and FPL and is our provider of wholesale energy.

During 2004, Hurricanes Frances and Jeanne affected our service area with minor damage to the system. Outage count for both Hurricanes was approximately 60% and 40% respectively and restoration time of 4 and 2 days respectively.

For further information contact:

Kurt Miller
Director of Engineering
P.O. Box 160
Live Oak, FL 32060
Phone: 386-362-2226
Fax: 386-364-5008
Email: kurtm@svec-coop.com

1. Three-Year Vegetation Management Cycle

The Cooperative trims its entire system on a four year cycle. The 20 foot right away is cut by contracted services. It would be cost prohibitive to our members to trim on a three year cycle.

2. Audit of Joint-Use Pole Attachment Agreements

The last audit we had approximately 2,500 poles with cable or phone attachments. A new audit of NESC violations will be done in 2007. All violations will be corrected.

3. Transmission Structure Inspection

The Cooperative owns 5 spun concrete transmission structures which are inspected every 8 years.

4. Hardening of Existing Transmission Structures

The Cooperative's 5 spun concrete structures are 4 years old and require no hardening.

5. GIS

The Cooperative's entire system is in a GIS database and, we use an automated mapping system to display data. The system is update daily as work orders and maintenance activities are completed.

6. Post Storm Data Collection and Forensic Analysis

Outage reports are generated for every outage on our system. The outage report requires the following information: cause of the outage, corrective actions taken, and any recommended action(s) to prevent a recurrence of the outage. These reports are archived. When a major outage event occurs, utility staff convenes to analyze the causes and recommend equipment and/or operational changes necessary to avoid similar outages in the future.

7. Collection of Outage Data Differentiating Between the Reliability Performance of Overhead and Underground Systems

Data is collected on every outage including whether it is overhead or underground, the cause of the outage, duration, number of customers affected, weathers conditions, if equipment, animals, or vegetation was involved, utility mapping coordinate and a few other items. The action taken and material used is also recorded. There are no plans to change the process at this time other than to move forward toward installing an Outage Management System to assist in assimilating and retrieving the data.

8. Coordination with Local Governments

We do not coordinate with city/county governments on a daily basis with regard to vegetation management, however we do respond to special requests when necessary.

With regard to storm preparedness and recovery we are active participants in the local emergency operations center (EOC) before, during and after storm.

9. Collaborative Research on effects of Hurricane Winds and Storm Surge

We currently are not engaged in such research. However, the Florida Electric Cooperative Association (FECA) is a signatory to the memorandum of understanding with Florida's other utilities and the PURC, and will benefit from research.

10. Natural Disaster Preparedness and Recovery Program

We have an Emergency Response Plan as required by RUS rules. This plan is exercised once a year and updates are made accordingly.

Talquin Electric Cooperative, Inc.
Storm Preparedness
July 26, 2006

Introduction

Utility: Talquin Electric Cooperative, Inc. (Talquin)
Electric Accounts Served: approximately 52,838
Primary Contact: Bobby Kimbro, Director of Engineering & Operations Services

Talquin has not experienced a "direct hit" by a hurricane since Kate in 1985. However, Talquin has been affected by minor hurricanes and tropical storms through the years. Additionally, Talquin crews have assisted other cooperatives whenever called upon.

1. Three Year Vegetation Management Cycle

Talquin has an aggressive vegetation management program based presently on a 3.7 year trimming cycle. Our goal is to achieve a three-year trimming cycle, which is estimated to cost approximately $548,000 per year over the cost of the 3-year cycle. In addition to trimming, Talquin has a selective herbicide program in effect. Our goal is to treat selected areas once every two years; however, currently we are treating these areas on an annual basis. Another program Talquin uses consists of treating the soil around selective trees with "tree growth regulators" to slow the growth of trees located near power lines.

2. Audit of Joint Use Pole Attachment Agreements

Talquin's last audit of joint use facilities was completed in 2004. Joint users have to file an attachment permit with Talquin in order to make new attachments and are required to comply with NESC requirements. A system wide audit is planned for on a five-year cycle.

3. Six Year Transmission Structure Inspection Program

Talquin has an eight-year inspection cycle with minor repairs being completed during the inspection process. Our inspection program costs approximately $35 per pole. We inspect approximately 125 transmission poles per year at an annual cost of $4,375.

4. Hardening of Existing Transmission Structures

Talquin owns and operates a transmission system comprised of 75 miles of overhead lines operating at 69kV consisting of 998 poles. Talquin feeds 6 of its 23 substations from the 69 kV transmission lines. 918 poles are wood and 80 poles are concrete. All new construction and pole replacements are done with concrete poles.

5. Transmission and Distribution Graphical Information System

At the present time, Talquin does not have a GIS system in place for its electric facilities. We are currently converting our consumer information and billing system to a new computer system, and we will be taking a closer look at a GIS system in the near future to tie our information system with a mapping package. The estimated cost to implement a GIS system will be approximately $975,000.

6. Post Storm Data Gathering & Forensic Analysis
With the use of Talquin's SCADA system, we can determine which circuits have maintained power during the storm. At the substation, those circuits with protective devices that have tripped due to a fault will be patrolled and the damaged sections of lines isolated to restore power along the circuits. In Talquin's Emergency Restoration Plan, critical loads and medical needs are addressed as a priority that will need to have service restored to first. Crews are dispatched out of four district offices throughout our four county service area. Outside contractors will have one of Talquin's employees with the crew at all times, to ensure someone is familiar with the system. Each time a repair is made the crew advises the dispatcher of the work completed so a new location can be assigned to that crew. A list of the work being performed is documented in the "Dispatcher's Log" with the location and duration of the outages. After restoration is complete, a "lessons learned" is conducted among the staff involved in the restoration to provide input of what things worked well, what things need improving, and what needs to be added to our plans.

7. Collection of Overhead vs Underground Outage Reliability Data
Currently, Talquin has 3,886 miles of overhead distribution lines and 335 miles of underground distribution lines. Normally, we do not experience any problems with the underground facilities during a major storm; however, during Hurricane Dennis the area around the coast at Shell Point in Wakulla County suffered water damage to transformers and secondary pedestals due to a 10-foot storm surge. The outage time for the underground system along the coast extended more than 2 days longer than the time it took to restore the overhead lines. The damage to the underground system along the coast involved resetting equipment that had been washed away. Locations where underground equipment is located had to be filled-in or re-graded with an estimated cost of $163,000. It only took 3 hours to restore the overhead facilities along the coast including patrolling the lines. Referring to an article in the Tallahassee Democrat on September 12, 2005, a major hurricane hitting our area would cause as much as a 39-foot storm surge.

8. Increased Utility Coordination with Local Governments
During major storms or emergency events, Talquin coordinates closely through the Gadsden and Leon County's Emergency Operations Centers (EOC) with all appropriate governmental agencies, including police, fire and public works crews, to achieve rapid and safe recovery. Talquin's liaison to the EOC actively participates and maintains a continuous presence in the EOC during activations and exercises. Talquin representatives also are available to the other county EOC's 24/7. In addition to participating in exercises with the county's EOC, Talquin exercises its own Emergency Restoration Plan on an annual basis.

9. Collaborative Research Through Statewide Cooperative Association
Talquin also works closely with the Florida Statewide Cooperative Association in the event of a storm that may be threatening Florida so efforts can be coordinated to assist other cooperatives in restoring power. The coordination of efforts among the

cooperatives extend nation wide when needed. The statewide association will assist us in contacts for increasing the work force and making arrangements for housing and feeding crews in the event of a major hurricane so our restoration efforts and resources can be maximized.

10. National Disaster Preparedness and Recovery Program

As required by the Rural Utility Services (RUS), Talquin filed an Emergency Restoration Plan with RUS on December 19, 2005.

STORM PREPAREDNESS PLAN
Tri-County Electric Cooperative, Inc.
Madison Florida
July 17, 2006

1. Introduction

This report provides responses to specific questions related to the ongoing efforts of Tri-County Electric Cooperative to prepare for severe weather events and other disasters. Tri-County Electric serves approximately 17,200 customers in Jefferson, Madison, Taylor and the northern half of Dixie County. Tri-County Electric's service area is approximately 2,228 square miles. Tri-County Electric's system consists of 14 miles of 115 kV transmission line, 3,064 miles of distribution line of which 161 miles consists of underground facilities, 14 substations and 1 distribution metering point. Tri-County Electric is also responsible for the maintenance of two radial 69 kV transmission lines which total 34 miles. The transmission lines are owned by Seminole Electric Cooperative. The transmission lines to which Tri-County Electric are interconnected are owned by Progress Energy of Florida. However, Tri-County Electric's power suppliers are Seminole Electric Cooperative and Southeastern Power Administration.

In 2004, Tri-County Electric's service area was impacted by four named storms.

Tropical Storm Bonnie made landfall in Taylor County on August 12, 2004 without any major damage. Tri-County Electric experienced scattered outages throughout the day and into the overnight hours. Power was fully restored by the midday on August 13.

Hurricane Frances made landfall on Saturday night, September 4 on Florida's east coast. It had been downgraded to a tropical storm when it began to affect Tri-County Electric's service area early Sunday morning on September 5, 2004. Tropical Storm Frances' path tracked a little west of Tri-County Electric's service area. Tri-County Electric's employees worked throughout the storm restoring power. We lost power to our substation located in Steinhatchee, Florida when a pole fell on the radial 69 kV transmission line. The Steinhatchee substation was without power from approximately 10 P.M. Sunday evening (September 5, 2004) until late Monday (September 6, 2004) afternoon. At one point during the storm in the early hours of September 6, (Monday), we estimated approximately 90% of our consumers were without electric service. By late Monday night, September 6, Tri-County Electric had restored power to approximately 75% of the major feeders and approximately one-half of the consumers had power restored. Tri-County Electric had

restored power to 100% of our consumers by 4 P.M. on Friday, September 10. Although the storm struck on Sunday, we did not receive assistance from outside sources until Wednesday. Tri-County Electric received assistance from cooperatives located in North Carolina and South Carolina.

Hurricane Ivan made landfall on September 16, 2004 on the west coast of Florida and into Alabama. The circumference of this storm was so large that the western edge of Tri-County Electric's service area was affected by the winds on Friday, September 17, 2004. Fortunately, the outages we experienced were relatively short in nature and we did not sustain any structural damage to our system. There were a small number of our consumers who did not have their power restored until Saturday, September 18, 2004.

Hurricane Jeanne was the last storm to affect Tri-County Electric's service area during the 2004 season. Hurricane Jeanne made landfall on Florida's east coast on Sunday, September 26, 2004. Tri-County Electric's service area began to be affected by winds around 5:00 P.M. Sunday afternoon. Tri-County Electric's employees worked until approximately 10 P.M. when the wind speed began to exceed 40 MPH. Hurricane Jeanne was downgraded to a tropical storm but Tri-County Electric's service area was directly in the path of the storm. Tri-County Electric may have experienced a few more outages with Hurricane Jeanne than we did with Hurricane Frances but both storms were so close in size and strength when they hit our service area that it was hard to make any type of distinction. Tri-County Electric completed restoration of power to our consumers by Friday, October 1, 2004. Tri-County Electric received outside assistance Thursday, September 30, 2004. Tri-County Electric received assistance from cooperatives in Mississippi and Louisiana.

In 2005, Tri-County Electric was spared the brunt of any major storms. We experienced only a few outages from Hurricane Dennis. Tri-County Electric provided assistance to Alabama, Louisiana and Mississippi following Hurricanes Katrina and Rita and to south Florida following Hurricane Wilma.

2. Vegetation Management Cycle

Tri-County Electric had cut and trimmed right-of way at a very low rate until the latter months of 2001. At that time, Tri-County Electric set a goal of cutting and trimming the entire system within a three-year program. It cost Tri-County Electric over $3,000,000 to complete the program. During 2004, we began to re-cut our system. We were only able to cut slightly more than 600 miles in 2004 due to the affects of the storms that hit our system and the fact that our contract crews responded to assist other companies who sustained more severe damage. In 2005 the right-of-way contract crew was

released for approximately 4 months to help in Mississippi. Less than 500 miles was cut in 2005. During the first six months of this year, we have cut and trimmed 218 miles. We have just asked the contractor to add a second crew so we can get back on track. We would like to see our system rotate to a 5-year cycle. A five-year cutting and trimming program combined with our spraying program on our main feeders would allow Tri-County Electric's system to stay balanced in need and cost.

2. Joint-use Attachment Agreements

Tri-County Electric has a joint-use attachment agreement with each company that has attachments to our facilities. We currently have agreements with two telephone companies and six cable television companies. These eight companies are attached to 7,900 of Tri-County Electric's poles. All accounts are current. We believe some of our contracts need to be reviewed for cost change as well as a recount of the attachments. We have not had any complaints concerning these companies and there have been very few code violations involving these companies. When a code violation is found, we correct the violation and if necessary, we bill the telephone or cable company responsible for the violation. We do not charge for violations we may have created. The telephone or cable television companies can be slow to remove their attachment(s) when it is necessary to replace a pole. We usually cut the top out of the old pole and leave it until they relocate their facilities to the new pole. It often takes repeated reminders about this type of situation.

3. Transmission Structure Inspection Program

Tri-County Electric inspects the transmission line annually. However, as our employees go about their daily duties, they will check the transmission lines (when they are working in these areas) and note if anything needs to be fixed or repaired. We currently have 12 miles of 115 kV transmission line on H-frame construction. This line has 114 structures, which equals 228 wooden poles. There is a two-mile extension off of this line built with single concrete poles. There are 24 concrete poles on this line. The two 69 kV transmission lines which are owned by Seminole Electric Cooperative (maintained by Tri-County Electric) is built on single wooden poles. There are a total of 264 structures on one line and 148 structures on the other line. To date we have only changed out a few of the wooden poles on our 115 kV line and none of the concrete poles. On the 69 KV lines, we have changed out several poles due to woodpecker damage. In addition, three poles have been replaced due to vehicle accidents and one pole was replaced during the 2004 hurricane season.

4. Hardening of Existing Transmission Structures

Other than the annual inspection and repair of any problems found during the inspection Tri-County Electric has no immediate plans to make any major improvements to the transmission system. Seminole Electric Cooperative has discussed the cost of changing the wooden poles to concrete poles as the need arises because of the woodpecker damage on these lines. Tri-County Electric has also talked about replacing the poles on the old H-frame line with single concrete pole construction due to the age of the H-frame line. However, we have not reached a final decision. Seven of Tri-County Electric fourteen substations are radial fed with the remaining seven being loop fed by Progress Energy of Florida. It would be cost prohibitive to loop feed the seven radial fed substations at this time.

5. A Transmission and Distribution Geographic Information System

Currently Tri-County Electric does not have a GIS system for their maps. We continue to use paper map detail mapping. However the paper maps are up-to-date and new detail truck maps were provided in 2003 and are changed every 5 years. Tri-County Electric does have circuit maps and interruption maps on computer using AutoCAD Map. All of the interruption devices have been numbered in the field. Since the storms in 2004, Tri-County Electric has upgraded its dispatch group with a new IVR Porsche System and is utilizing Porsche's new outage GIS map system based on the various counties 911 address systems. The system also upgraded our telephone system from 12 lines to 24 lines, which is available to all of our consumers in the four counties we serve as a local call. Tri-County Electric is planning to upgrade the mapping system in the near future with a GIS FM System.

6. Post-Storm Data Collection and Forensic Analysis

The system dispatchers at Tri-County Electric maintain a record of each outage. This record reports the interruption device number, the name of consumer who called to report the outage, the time and date off, the time and date on, the duration of the outage, the number of consumers affected, the outage classification and the cause. The outage is classified into one of the following four classifications: Severe Storms (Named Storms), Planned Outages, Other Outages and Source Outages. The individual reports are calculated at the end of each month and the General Manager presents the report to the Board of Trustees. If there have been any extensive or major outages during the month, those are reported in detail to the Board of Trustees. These monthly reports are combined and averaged for the year and sent to Rural Utilities Service (RUS) on the RUS Form 7, which is an annual report of the Cooperative as required by RUS. RUS requires that

Cooperatives report on their annual reporting forms the average amount of time a consumer is out for the year as well as the five-year average. At this time RUS does not require a Cooperative to report their outage time in the CAIDE, SAIDE format, but this will probably be required by RUS in the near future.

Tri-County Electric maintains records along with our outage time that notes the substation and device name and/or number. This report also notes the nature or cause of the outage. We track the number of outages within the area. If we note an unusually high number of outages within an area, we investigate the cause. If corrections are needed, we do so. If the crew working in the field reports or recommends changes to reduce the number of outages or to reduce the outage work time, their recommendations are reviewed and if justified, the changes are implemented.

7. Collection of Detail Outage Data Differentiating Between the Reliability Performance of Overhead and Underground Systems

As stated in question 6, Tri-County Electric does keep a detailed record of each and every outage. The system dispatcher usually records if the outage is an underground facility. We do not differentiate between overhead and underground in our reporting. This type of differentiation has never been a requirement. However, based upon experience, we can tell you that areas along the Gulf, you will experience problems if salt water enters the underground pad-mount transformers as well as the rocky soil of these areas. One other thing concerning outages involving underground facilities is the difficulty of locating the fault, the travel time to get the right equipment to do the job and time for repairs can often be double or even triple the outage time as compared to overhead. These factors in addition to the cost of the underground facilities which are more than double the cost of overhead facilities is one of the primary reasons Tri-County Electric's system is 95% overhead facilities.

8. Increased Utility Coordination with Local Governments

Through the years, Tri-County Electric has taken pride in the fact that we work well with the local county governments in the counties within our service area. We have reported and worked with all four of the local county emergency management offices during major storms and with the Florida Electric Cooperative Association, Inc., statewide office, which in turn coordinates with the emergency management office. We have set up emergency communication lines with the local law enforcement agencies within the four counties. Along with this, we have given management's cellular telephone numbers to the various county officials. We have worked

out an arrangement with the sheriff's department in two of the counties and the road department in one of the counties we serve for radio communications in all of our vehicles in case of emergencies (this works very well). We have assisted the county emergency management office with some of their projects such as installing emergency sirens throughout various locations.

9. Collaborative Research on effects of Hurricane Wind and Storm Surge

Tri-County Electric has not done any formal research within these areas. However, we do construct our facilities according to RUS standards and guidelines. RUS has done extensive research on wind speed, ice weight and water pressure with storm surge and floods before publishing the construction standard book. This research is ongoing not only in Florida, but throughout the country. Tri-County Electric has learned by previous storms what is the most effective for our system. For example, around coastal areas, we have increased our insulation levels on high voltage distribution structures. In fact, we are using 55 kV insulators on a 25 kV system within one-half mile of salt water because of spray contamination. We do not set pad-mount transformers at ground level in areas that have a history of flooding. There are a number of changes we have made as we experience various storms. The no name winter storm of 1993 with its storm surge taught us several lessons.

10. A Natural Disaster Preparedness and Recovery Program

Tri-County Electric is a RUS borrower. Therefore, we had an "Emergency Restoration Plan prepared and in place before the deadline set by RUS in their ruling concerning disaster preparedness.

Storm Preparedness Implementation Plan
West Florida Electric Cooperative Association
July 2006

1) A 3-year Vegetation Management Cycle for Distribution Circuits

West Florida Electric Cooperative Association ("WFEC") serves 27,000 members in five counties located in North West Florida. WFEC maintains approximately 3200 miles of distribution lines. WFEC sustains a 4 to 5 year trimming cycle which is complemented by spot line clearance driven by annual feeder inspections. WFEC implemented an aggressive ground to sky trimming approach with 85% of the distribution system being trimmed. At the time of trimming the ground vegetation is mowed. The annual expense for the right-of-way program is approximately $1,250,000. Contractors along with in-house crews perform these functions.

2) An Audit of Joint-use Attachment Agreements

WFEC has a five-year hazard recognition and pole inspection cycle. Joint use facilities are inspected and any exceptions to NESC requirements are reported and corrected.

3) A 6-year Transmission Structure Inspection Program

WFEC does not own, operate or maintain any transmission facilities. Alabama Electric Cooperative provides all requirements power to WFEC.

4) Hardening of Existing Transmission Structures

Same as #3 above.

5) A Transmission and Distribution Geographic Information System

West Florida Electric's Geographic Information System (GIS) is a multi-faceted system that utilizes GIS and GPS. West Florida Electric primarily employs ESRI's ArcGIS 9.1.suite of software with Patterson & Dewar's PDMap GIS suite of extensions. The data is currently stored in a Microsoft Access personal geodatabase. The system is supplemented using Partner Software's Map Viewer.

West Florida Electric's distribution systems, both overhead and underground, and landbase are maintained in the ArcMap personal geodatabase. Features such as consumer data include attributes like circuit number, substation, section number, engineering section, meter, and member separator. Landbase includes roads, streams, lakes, railroads, counties, and cities. The landbase data is supplemented by ortho-photos from labins.org. West Florida Electric's staff is currently in the process of collecting and correcting data

for the GIS. Coordinates for point feature assets are collected using sub-meter GPS and ESRI's ArcPad. Facility assets being captured include poles, consumers, transformers, devices, and structures. West Florida Electric plans to uses the GIS for outage management, work order system, and engineering analysis in the near future.

6) Post-Storm Data Collection and Forensic Analysis

The main contributors to outages during a major storm are: trees or limbs falling on lines or poles, wind causing poles to fall or snap, wind blowing or tree limbs pushing conductors together, flying debris, and direct lightning strikes. These are tracked by WFEC's outage management system. WFEC will also measure the total impact and severity of the storm by the major pieces of equipment that are replaced. Labor is also tracked as well as the total number of members out of power and the total duration of the member's outage.

7) Collection of Detailed Outage Data Differentiating Between the Reliability Performance of Overhead and Underground Systems

Same as #6 above.

8) Increased Utility Coordination with Local Governments

WFEC has a good working relationship with Holmes, Jackson, Calhoun, and Washington Counties and their EOCs in regard to storm preparations. Maps are provided to the counties in regard to service territories and emergency phone numbers and contacts.

9) Collaborative Research on effects of Hurricane Winds and Storm Surge

WFEC currently is not engaged in such research. However, the Florida Electric Cooperative Association (FECA) is a signatory to the memorandum of understanding with Florida's other utilities and the PURC, and will benefit from research.

10) A Natural Disaster Preparedness and Recovery Program

WFEC has a natural disaster response plan as required by RUS rules.

PSC INFORMATON REQUEST
10 POINT HURRICANE PLAN
JULY 18, 2006

1. Vegetation Management Cycle for Distribution Circuits

WREC maintains over 150 overhead feeder circuits that comprise ~ 7,000 miles of line. The current trim cycle is between four and five years. A few feeders, due to the type of soil conditions, have been cut more often because of a faster growth rate in those particular areas. Specific areas, according to customer service issues, outage reports and other statistics are trimmed in spots.

A very aggressive vegetation management program has been adopted over the last few years that is inclusive of problem tree removal, increased horizontal and vertical clearances and under-brushing to ground level. Our most recent contract with our Right of Way Maintenance provider includes specific standards for obtaining a maximum amount of clearance between trees and conductors. Currently, we are obtaining up to twenty feet lateral clearance wherever possible. If we are successful with maintaining this practice, our current goal of a three-year trim cycle may be expanded to a four-to-five year program. This, in turn, may allow us to spend more time on those fast growth/problem tree areas mentioned earlier, and ultimately should promote a more cost effective approach to customer service issues relating to vegetation clearance.

2. An Audit of Joint-Use Attachment Agreements

All requests for joint use attachments are pre-approved. Part of the pre-approval process is an inspection of the existing pole to determine clearances, strength and overall state of the pole, guying requirements, and other NESC related conditions. A detailed audit of the system is completed every five years. WREC employees and a representative from the joint use company identify every attachment on each pole. At that time, any previously unknown safety or maintenance issues are addressed.

3. Transmission Structure Inspection Program

WREC owns, operates and maintains fifty-three (53) miles of transmission line with voltages of 69 and 115 KV.
All of the transmission feeders are patrolled annually by walking, riding, or aerial means. The aerial patrol after our system was exposed to hurricane force winds in 2004 included infrared photography of all structures, insulators, connections, and switches as a part of a total video recording of the lines and equipment.

There are 317 wood and 350 concrete structures within the system. All wood structures were inspected and treated by Osmose in July of 2003. In 2005/2006 ***all insulators*** were replaced on 180 structures in close proximity to the coast.

Additionally, as a part of the insulator change-out program, all of our electronic switchgear has been replaced. This upgrade will allow a greater level of flexibility within our system to change feeds, isolate faults, and interact more efficiently with other transmission voltage providers.

4. Hardening of Existing Transmission Structures

Future plans (within 3 – 5 years) include replacement of 45 wood poles with either steel or spun concrete. A minimal amount of line is located off main transportation arteries and this replacement includes a physical relocation of the system to more accessible areas.

5. Transmission and Distribution GIS

The Cooperative's GIS utilizes an ESRI based geo-data-base. The map data is built and maintained by use of a software work order based interface (Partner). The ESRI data can be further manipulated and utilized using the utility software package known as ORIGIN.

Each pole and equipment location, along with every wire span, is uniquely stored with the geographical location, RUS record unit accounting information, and various other data fully describing the asset.

Due to the flexible and compatible SQL format design of the GIS database, the information can be integrated into many other software applications. The electric infrastructure can be viewed using various tools based upon the needs of the user. From simple "map viewing" to complex flow tracing, printing and asset queries are accomplished

using ESRI, ORIGIN, and PARTNER tools. Also the geo-database is used to create "models" for the Cooperative's Outage Management System (OMS) and Engineering Analysis programs (Milsoft).

The Cooperative's IVR system extends the integrated interface and allows real-time customer outage input and predictive analysis to enhance restoration response.

6. **Post-Storm Data Collection and Forensic Analysis**

The Cooperative's Emergency Restoration Plan has been developed over many years of experience with storms on our own system as well as our mutual aid to other utilities within the Southeastern U.S. It is standard practice to discuss our procedures post-storm or at least annually, and make changes as they are appropriate. After the 2004 season, the plan was again changed to reflect some new procedures mainly in the areas of evaluation of damage and information accumulation to allow early decisions about the type of crews that would be needed. Our priority list of accounts was re-evaluated and county authorities were consulted to help us develop a plan that will hopefully accomplish the most within the shortest amount of time. A totally new tagging system was developed as a result of these meetings and discussions that should enhance recovery efforts and insure a safer environment for contract crews that may not be familiar with our service area.

7. **Collection of Outage Data Differentiating Between the Reliability Performance of Overhead and Underground Systems**

Outage information is collected through the Outage Management System and compiled by Engineering according to pre-established categories. It is then analyzed by the Superintendent of System Reliability and discussed with the appropriate supervisors, managers and department heads. Trends and particular problem areas are examined, solutions are determined and repairs are implemented.

System SAIDI data is compiled for major underground related outage causes such as primary and secondary cable, terminators and elbows. Each outage is stored uniquely in a SQL database. This allows for great flexibility in building queries for various types of reports.

8. **Increased Utility Coordination with Local Governments**

It is standard practice to assign a competent employee to each of the Emergency Operations Centers within our service area during the storm and recovery phase. We have selected experienced people in each of these areas, equipped them with the necessary computer and communications equipment and most have had some amount of experience working within the EOC's. All have participated in training activities that enhance their knowledge of County Government requirements and how to interact with the appropriate Cooperative personnel.

After the storm season of 2004, we invited the County emergency managers to our corporate facility and discussed our handling of the storms and solicited suggestions from all of them concerning possible improvements. Each year we participate in all hurricane drills and related public programs in an effort to educate ourselves, build better relationships with local authorities, and to help the public understand how restoration of power will be accomplished.

9. Collaborative Research on Effects of Hurricane Winds and Storm Surge

WREC has historically developed and implemented specifications that meet or exceed industry standards. Our Specifications and Drawings Manual is a culmination of many years of engineering designs, including trial and error field experience. The Engineering Department consists of fourteen employees, three of which are Professional Engineers. These employees monitor trends in design, work practices, tools and equipment in efforts to stay abreast of changes in the industry.

10. A Natural Disaster Preparedness and Recovery Program

WREC maintains a current Emergency Recovery Plan as mandated by R.U.S. rules and regulations.