

# AUSLEY & MCMULLEN

ATTORNEYS AND COUNSELORS AT LAW

227 SOUTH CALHOUN STREET  
P.O. BOX 391 (ZIP 32302)  
TALLAHASSEE, FLORIDA 32301  
(850) 224-9115 FAX (850) 222-7560

July 27, 2006

HAND DELIVERED

Ms. Blanca S. Bayo, Director  
Division of Commission Clerk  
and Administrative Services  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

Re: Requirement for Investor-Owned Electric Utilities to File Ongoing Storm Preparedness Plans and Implementation Cost Estimates; Docket No. 060198-EI

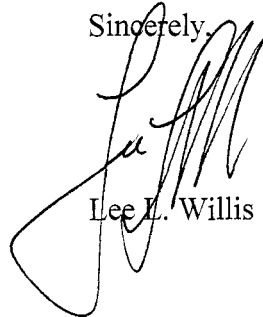
Dear Ms. Bayo:

Enclosed for filing in the above docket are the original and fifteen (15) copies of Tampa Electric Company's answers to the informal data request we furnished to Staff on July 26, 2006.

Please acknowledge receipt and filing of the above by stamping the duplicate copy of this letter and returning same to this writer.

Thank you for your assistance in connection with this matter.

Sincerely,



Lee L. Willis

LLW/pp  
Enclosures

cc: All Parties of Record (w/enc.)

DOCUMENT NUMBER-DATE

06615 JUL 27 06

FPSC-COMMISSION CLERK

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true copy of the foregoing responses to Staff's informal data request, filed on behalf of Tampa Electric Company, has been furnished by hand deliver(\*) or U.S. Mail on this 27<sup>th</sup> day of July to the following:

Ms. Mary Ann Helton  
Ms. Rosanne Gervasi  
Office of General Counsel  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

Mr. R. Wade Litchfield  
Associate General Counsel  
Florida Power & Light Company  
700 Universe Boulevard  
Juno Beach, FL 33408-0420

Mr. John T. Butler  
Squire, Sanders & Dempsey, L.L.P.  
200 South Biscayne Boulevard  
Suite 4000  
Miami, FL 33131-2398

Ms. Susan Ritenour  
Secretary and Treasurer  
Gulf Power Company  
One Energy Place  
Pensacola, FL 32520

Mr. Russell A. Badders  
Beggs & Lane  
Post Office Box 12950  
Pensacola, FL 32576

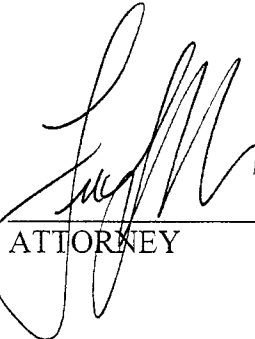
Mr. Alexander Glenn  
Deputy General Counsel-Florida  
Progress Energy Florida, Inc.  
106 E. College Avenue, Suite 800  
Tallahassee, FL 32301

Ms. S. Denise Hill  
Information Technology Specialist  
Florida Municipal Electric Association  
P. O. Box 10114  
Tallahassee, FL 32303-2114

Mr. Norman Horton  
Messer Caparello & Self  
P. O. Box 1876  
Tallahassee, FL 32302

Mr. Michael A. Gross  
Florida Cable Telephone Association  
246 E. 6<sup>th</sup> Avenue, Suite 100  
Tallahassee, FL 32303

Mr. Harold McLean  
Public Counsel  
Office of Public Counsel  
c/o The Florida Legislature  
111 W. Madison Street, Room 812  
Tallahassee, FL 32399-1400

  
\_\_\_\_\_  
ATTORNEY

**Tampa Electric Company**  
**Corrections to Commission Staff's July 14, 2006 Summary and Review of**  
**IOU Storm Preparedness Plans Matrix**

Tampa Electric has reviewed the Commission Staff's Summary and Review of IOU Storm Preparedness Plans matrix provided at the July 14, 2006 workshop between the Staff and the IOUs. The company offers the corrections provided below.

**Initiative 1**

3. As stated at the workshop, Tampa Electric's program meets the Commission's three trim-cycle requirement; therefore, it is not an alternative.

**Initiative 2**

- 1(b) As stated at the workshop, this item should be stated as follows: "Plan includes auditing all TECO owned poles and third party poles per Joint-Use contract agreements on an eight year cycle."

**Initiative 3**

4. As stated at the workshop, the estimated annual incremental cost is \$2.97 million.

**Initiative 4**

3. As stated at the workshop, the one-time incremental cost \$0.

**Initiative 5**

The overall description of Tampa Electric's initiative should be stated as follows:

TECO is in the process of implementing a new GIS system. The field assets that will be incorporated in the GIS will include all distribution, transmission, substation and lighting facilities for TECO's entire system. GIS, in conjunction with current OMS, will provide information on location and system performance. The following items will be accomplished utilizing the GIS system, OMS system, various maintenance databases, and data collected utilizing TECO and contracted labor as identified in Initiatives 5, 6, and 7.

1. TECO's plan includes forensic reviews on a statistical sampled basis.
2. TECO's plan includes forensic reviews with regard to types of materials and construction, and location
3. TECO's plan includes a review for the determination of appropriate maintenance.
4. TECO's plan includes assessment of future preventive measures where possible.

5. All of the above will be implemented by December 31, 2007.

The annual costs should reflect \$0.2 million.

**Initiative 6**

The one time incremental cost is estimated to be \$0.5 million.

**Initiative 7**

The one time incremental cost is estimated to be \$0.5 million. The annual cost is \$0 as the data collection for storm performance is integral to Initiative 6 and the day-to-day performance data collection will be integral to existing processes.

**Initiative 8**

2. This item should be stated as follows: "TECO has already implemented several initiatives through the redeployment of existing resources. Material for underground planning and education will be available yearend 2006. Participation of local government representatives for system damage reporting is scheduled for first quarter 2007."
3. This item should be stated as follows: "The incremental annual cost for the new activities is \$0.075 million."

**Initiative 9**

Tampa Electric's corrections and additions to this initiative are found in the company's responses to Staff Questions Regarding Storm Plans as Filed by the Electric IOUs provided at the July 14, 2006 workshop.

**Initiative 10**

Tampa Electric has no corrections to this initiative.

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All Initiatives (Staff: Jim Breman, Bill McNulty)  
(All IOUs):

1. Incremental cost data does not appear to be consistently stated across all utilities and all initiatives. What is the incremental annual revenue requirement for each initiative where budget increases relative to 2005 are planned for the next 10 years?
  - A. Tampa Electric has revised the table on page 22, Summary of Incremental Costs, in the company's 2006 Storm Implementation Plan to be consistent with Staff's request for the base year of incremental dollars be 2005 actual costs. The revised table is attached to this data request. Based on this revised data, the incremental annual revenue requirement for each initiative is also attached.

Summary of Incremental Costs - Revised 7-26-06  
2006 - 2015  
(\$'000)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
<u>Transmission &amp; Distribution Hardening Initiatives (1)</u>											
Vegetation Management - Distribution Circuits	\$3,972	\$6,025	\$8,139	\$10,317	\$10,627	\$10,946	\$11,274	\$11,612	\$11,960	\$12,319	\$97,191
Audit of Joint-Use Attachment Agreements	2,500	5,000	5,150	5,305	5,464	5,628	5,797	5,971	6,150	6,335	53,300
Transmission Structure Inspection Program	1,485	2,970	3,059	3,150	3,245	3,343	3,443	3,546	3,653	3,763	31,657
Hardening of Existing Transmission Structures (2)	0	0	0	0	0	0	0	0	0	0	0
Transmission and Distribution GIS (3)	0	600	206	212	218	225	232	239	246	253	2,431
Post-Storm Data Collection and Forensic Analysis (4)	100	600	103	106	109	112	115	118	122	126	1,611
Collection of Detailed Outage Data (OH vs. UG) (5)	0	500	0	0	0	0	0	0	0	0	500
Utility Coordination with Local Governments	50	75	77	79	81	83	85	88	91	94	803
Collaborative Research (6)	--	--	--	--	--	--	--	--	--	--	--
Natural Disaster Preparedness and Recovery Plan (2)	0	0	0	0	0	0	0	0	0	0	0
<b>Total:</b>	<b>\$8,107</b>	<b>\$15,770</b>	<b>\$16,734</b>	<b>\$19,169</b>	<b>\$19,744</b>	<b>\$20,337</b>	<b>\$20,946</b>	<b>\$21,574</b>	<b>\$22,222</b>	<b>\$22,890</b>	<b>\$187,493</b>

(1) 2005 actual cost is base year, escalation rate of 3% applied to annual expenditures from 2008 forward

(2) No incremental costs

(3) One time costs

(4) Assumes one storm a year where data collection and forensic analysis would occur

(5) Annual costs dependent upon extent of research

**Transmission & Distribution Hardening Initiatives  
Annual Revenue Requirements  
(Dollars in 000's)**

	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
1 Vegetation Management - Distribution Circuits	\$3,972	\$6,025	\$8,139	\$10,317	\$10,627	\$10,946	\$11,274	\$11,612	\$11,960	\$12,319	\$97,191
2 Audit of Joint-Use Attachment Agreements	879	2,125	2,897	3,666	4,431	5,194	5,956	6,718	7,479	8,240	47,585
3 Transmission Structure Inspection Program	449	993	1,489	1,983	2,476	2,969	3,461	3,954	4,448	4,943	27,163
4 Hardening of Existing Transmission Structures	0	0	0	0	0	0	0	0	0	0	0
5 Transmission and Distribution GIS	0	338	331	323	318	315	235	239	246	253	2,597
6 Post-Storm Data Collection and Forensic Analysis	100	273	259	245	234	224	118	118	122	126	1,819
7 Collection of Outage Data (OH vs UG)	0	173	156	139	125	112	3	0	0	0	708
8 Utility Coordination with Local Governments	50	75	77	79	81	83	85	88	91	94	803
9 Collaborative Research	0	0	0	0	0	0	0	0	0	0	0
10 Natural Disaster Preparedness and Recovery Plan	0	0	0	0	0	0	0	0	0	0	0
<b>11 Total Annual Revenue Requirements</b>	<b>\$5,450</b>	<b>\$10,001</b>	<b>\$13,347</b>	<b>\$16,752</b>	<b>\$18,292</b>	<b>\$19,842</b>	<b>\$21,133</b>	<b>\$22,728</b>	<b>\$24,346</b>	<b>\$25,975</b>	<b>\$177,866</b>

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2. The order is silent regarding electric IOU reporting of progress achieved on the required initiatives after the plans have been filed. Are the IOUs planning to provide annual status reports on or by March 1 of each year on Initiatives 1-9? If not, do the electric IOUs object to such a reporting requirement?
  - A. Tampa Electric plans to provide the Commission an annual progress report on Initiatives 1 through 9 by March 1 of each year.



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3. What changes, if any, does each utility propose to each of the initiatives in the event that changes to Commission rules approved in Docket No. 060173-EI and awaiting adoption are in fact adopted?
  - A. Tampa Electric does not anticipate any changes to its initiatives if the rules currently proposed in Docket No. 060173-EI are adopted by the Commission.

Initiative 1 (Staff: Daniel Lee)

TECO:

4. Identify to what extent each type of circuit will be trimmed more frequently compared to TECO's current vegetation management plan, and the expected impact on Customer Interruptions. What part of the incremental costs is associated with labor shortages and decreased productivity, and what part is associated with increased vegetation management activity (circuit miles trimmed/time period).
  - A. Tampa Electric established estimates for the number of tree units requiring maintenance over a three-year period and the associated cost required to complete this work by analyzing historical information on vegetation management completed on distribution circuits, including feeder and lateral miles. The incremental cost represents the estimated cost of achieving the three-year cycle compared to the 2005 actual distribution vegetation management expense. While Tampa Electric has adjusted its vegetation management cost estimates for inflation, the company has not increased the estimates for possible labor shortages or decreased productivity. Instead, the company has proposed a three-year period of transition to allow time for staffing and equipment additions along with training for a sustainable and productive contract workforce.

Tampa Electric believes a positive impact on customer interruptions due to tree-related outages will result from the increased vegetation management activity to date. However, the company does not have a specific estimate as to the benefits the customers may experience during day-to-day conditions and in response to major storm activity.

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**Initiative 2 (Staff: Tony Swearingen)**

All IOUs:

1. In the utilities' plans, are all poles with attachments subject to stress calculations, or are stress calculations performed on only a subset of poles? Also, how is the distinction made as to which poles get a numeric stress calculation, which poles' stress assessments are based on professional judgment by the inspection contractor, and which poles are not stress assessed at all?
  - A. Tampa Electric will perform a load assessment screening on wood and non-wood poles as part of its eight-year groundline inspection program. This screening will separate the inspected lot into two categories: 1) poles that meet the National Electric Safety Code ("NESC") loading requirements; and 2) poles that require a more detailed loading analysis to determine compliance with NESC loading requirements. A comprehensive loading analysis will be performed accordingly. Both the screening and detailed analysis will evaluate poles with respect to NESC Combined Ice and Wind Loading (Light Zone) and Extreme Wind Loading, if applicable.

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2. How are third party pole attachment stress assessments being performed for non-wood poles? If not being performed, how is this consistent with the order requirements?
- A. As stated in Tampa Electric's filed plan and repeated at the July 14, 2006 Staff workshop, the company will conduct stress assessments on all joint use poles, wood and non-wood, on an eight-year cycle.

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3. What are the electric IOUs' plans for dealing with instances of unauthorized pole attachments once they are identified, especially when such attachments found on the basis of an audit creates a safety or reliability condition?
  - A. Once Tampa Electric has identified an unauthorized attachment, several actions will occur. First, a stress assessment will be conducted for the pole to determine if it is capable of handling all of the attachments, including the identified unauthorized attachment. Second, all clearance requirements for the pole will be reviewed. If the pole does not comply with Tampa Electric's construction standards, due to the unauthorized attachment the appropriate third party attacher will be contacted and given the option of either paying to bring the pole into compliance with Tampa Electric's standards or vacating the pole. If the party decides to remain on the pole and pay for any required upgrades, the pole will be brought into compliance and the attachment will be recorded in our databases for future billing and assessments. Finally, an invoice will be sent to the third party attacher for past attachment fees dating back to the last audit of the pole or installation date of the pole, whichever is more recent.

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Initiative 3 (Staff: James McRoy, Jim Breman)

All IOUs:

1. What is the timeframe for implementation of the six-year transmission inspection program?
  - A. Tampa Electric has implemented the six-year transmission inspection program. Above ground structure inspections on approximately one-sixth of the transmission system were completed in May 2006.

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2. What is the level of detail in the inspection records or database that will be maintained?
- A. Tampa Electric maintains inspections records that include:
- o Pole(s)
  - o Insulators
  - o Switches
  - o Conductors
  - o Static wire(s)
  - o Crossarms
  - o Guys and anchors
  - o Ground wire(s)
  - o Hardware
  - o Access roads, gates and fencing
  - o Encroachment
  - o Other

Tampa Electric currently manages inspection records in an Access database and requires contractors to provide inspection reports in a compatible format. The company plans to migrate this data from the Access database into the GIS system in 2007.

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**Initiative 4 (Staff: James McRoy, Jim Breman)**

All IOUs:

1. Are the utilities' level of planned hardening as identified in their plans likely to change or remain the same assuming the current proposed rule revisions to Rule 25-6.034, etc. are adopted?
  - A. Tampa Electric does not anticipate any changes to its hardening plan as a result of the adoption of Rule 25-6.034. Tampa Electric's current construction standards meet or exceed the requirements of the NESC Combined Ice and Wind Loading (Light Zone) and NESC Extreme Wind Loading if applicable.



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2. For the substation hardening that is included in the plans, what are the wind speed standards of new distribution and transmission substations, including perimeter fencing and buffer landscaping as well as the assets within the fence?
  - A. All current and future Tampa Electric substations are constructed to meet or exceed the requirements of the NESC Combined Ice and Wind Loading (Light Zone) and Extreme Wind Loading as applicable by structure height. Perimeter walls are built to withstand 125 mph winds and control houses are built to withstand 150 mph winds. Buffer vegetation is selected with consideration of mature height. Only vegetation with a mature height less than the height of the perimeter wall or fence is installed.

**Initiative 5 (Staff: Sid Matlock)**

All IOUs:

1. For recording information for forensic analysis of storm damaged distribution and transmission equipment following a hurricane, how extensively do electric IOUs plan to cover the total population of all damaged property? Cite publications or internal studies to support the plans.
- A. Hurricane damaged distribution and transmission equipment will be sampled in order to achieve at least a 90 percent confidence level for the forensic analysis. It is neither practical nor necessary to perform a detailed examination and analysis of every structure damaged. It should be noted that intact structures must also be analyzed for comparison to the failed structures.

Tampa Electric has solicited proposals from nationally known consulting firms to establish and implement a forensic analysis plan. The proposals incorporate sampling methods to provide the data necessary for the analysis. Sampling rates will likely vary based on the type of facility and the nature of the damage in an area. For example, critical bulk transmission facilities that fail will get proportionately more attention. On the other hand, an area where damage appears to be due to a consistent cause will require fewer samples to support the conclusion.

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2. If the utility envisions using sampling data, what is the correlation between the sample size and the budget indicated for this initiative?
  - A. The budget for the initiative consists of two major components. The first component is the preliminary work to establish the plan and baseline data. This will also include implementing any necessary modifications to the GIS system to accommodate the plan and establishing retainers to mobilize consulting engineers as a storm threatens.

The second component is the investigation and analysis cost. This cost will be incurred on a time plus expenses basis. The latter will vary proportionately to the sample size, which will be a function of the size and severity of the storm and damage.

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3. For distribution and transmission assets, how do the electric IOUs plan to assess appropriate maintenance activities and to evaluate storm hardening options? If missing from the plans, should the plans be modified to include these items?
  - A. As part of the post-storm forensic analysis, Tampa Electric will evaluate the impact of prior maintenance activities on system damage within a geographic area. Therefore, the effectiveness of various maintenance practices will be assessed and the results incorporated in future maintenance plans.

Likewise, areas where storm hardened designs have been constructed will be evaluated for effectiveness. Other damaged areas will be analyzed to determine what level of hardening would have been required to reduce or eliminate damage.

**Initiative 6 (Staff: Sid Matlock)**

All IOUs:

1. How does each electric IOU plan to capture and incorporate geographic-specific weather data into its forensic reviews (wind speed, surge, lightning, etc)? How does this effort to gain such data tie into Initiative 9? What are the cost estimates for such data gathering and forensic modeling?
  - A. In performing the forensic analysis, an engineering consultant will examine weather data from the National Hurricane Center, the National Weather Service, and other sources such as Tampa Electric's subscriptions to the National Lightning Detection Network and private weather services. Meteorological consultants may also be brought in as needed.

This data forms the basis for the analysis of structure loading due to hurricane winds, tornadic activity and surging water. It is likely that the data will be available to the collaborative research effort proposed in Initiative 9.

The estimated costs vary widely and depend on the size and severity of the storm and resulting damage. These costs could range from \$50,000 to \$200,000 per storm event. There will also be up front implementation costs to establish the plan and baseline data, and make any required modifications to the GIS system to accommodate the plan. These costs are estimated to be \$500,000 at this time.

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2. How does each electric IOU's plan allow the utility to improve its ability to evaluate storm hardening options?
  - A. Tampa Electric will utilize all of the information discussed in its plan to continually evaluate and assess its construction and maintenance standards. This includes the results of its eight-year wood pole inspection program, eight-year joint use pole audit, six-year transmission structure inspection program, the results of the forensic analysis performed on post storm data, and the data comparing the performance of the overhead system to the underground system.

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**Initiative 8 (Staff: David Jopling, Connie Kummer, Bill McNulty)**

All IOUs:

1. What are the incremental costs of each of the proposed programs for this initiative?
  - A. Several of the programs identified in Tampa Electric's plan for Initiative 8 will be facilitated by redeployment of existing resources. These include directing a focused effort toward communities to secure a more effective vegetation management practice, providing timely and accurate data to assist communities with decisions on undergrounding utility systems, participating in long range planning efforts where system hardening measures could be considered and providing additional personnel to serve at local Emergency Operations Centers ("EOC") during storm restoration.

Tampa Electric will have two new programs for this initiative: 1) the training and utilization of local government representatives to identify and report damaged electrical facilities to the company; and 2) the development and dissemination of educational material related to underground facilities. It is anticipated these activities will be ongoing with a combined incremental cost of \$75,000 annually.

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2. Are the cost proposals too low to effectively implement the programs described? Given the proposed incremental costs identified for Initiative No. 8, how can the proposed programs for local government coordination be funded sufficiently to address the new requirements of the many communities who may be seeking underground conversions, the need for increased tree trimming outside of right of ways, and the use of right of ways for initial installation and conversion of facilities as required in the Commission proposed rules?
  - A. See the company's response to Question No. 1 for Initiative 8. Additionally, each community will have different needs and will likely require different responses at different times. However, the company will monitor the volume of requests, make resource adjustments where necessary and accomplish its plan for this initiative.



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3. Please provide the following information: (a) The name of each local government that has contacted the utility in the past 24 months regarding the conversion of its facilities from overhead to underground; (b) the name of each local government that has requested and paid for a binding cost estimate in the past 24 months; (c) the status of the negotiations between the utility and each local government listed in (a) and (b); and (d) an estimate of the conversion costs for each local government listed in (a) and (b) (for example, see FPL's response to Staff's June 9 Data request in Docket No. 060150-EI).
- A. Tampa Electric has been contacted by the City of Tampa and the City of Oldsmar to explore the possibility of undergrounding portions of their electrical systems; however, no local government has requested an evaluation of undergrounding its entire system. The chronological order of the partial system inquiries as well as other undergrounding discussions is listed below.

**City of Tampa**

- o Davis Island - Since 1999, Tampa Electric has participated on a task force to study the undergrounding of electrical facilities in this geographic area of Tampa. The study was completed and a copy was provided to the Commission. The project is still active as periodic discussions continue.
- o Union Station Underground Meeting - After the 2004 hurricane season, Tampa Electric participated in a Tampa Bay area meeting to discuss undergrounding from a statewide perspective. This effort was led by local government representatives from Hillsborough County, Pinellas County, City of Tampa, City of Clearwater and City of St. Petersburg.
- o Kennedy Boulevard - Between 2004 and 2005, Tampa Electric participated with the City in exploring the undergrounding of utilities to a portion of this major thoroughfare. A cost estimate was provided. To date, no actions have occurred.
- o 40<sup>th</sup> Street - In 2006, Tampa Electric provided the City an estimate for undergrounding utilities as part of the widening project of 40<sup>th</sup> Street.
- o City of Tampa workshop - In 2006, Tampa Electric participated in a workshop led by Council Woman Linda Saul-Sena that examined utilities within the City and future undergrounding programs/plans.
- o City of Tampa Franchise Negotiations - Franchise negotiations between Tampa Electric and the City of Tampa began in 2005 and are ongoing. Discussions about undergrounding electrical service in general and specific dialogue concerning the expansion of the company's underground network in the downtown area have occurred.

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**City of Oldsmar**

- o For the past few years, Tampa Electric has been working with the City of Oldsmar on undergrounding various segments of the City's downtown redevelopment area. The company has provided two bids and estimates, both have been approved by City Council.

No local government listed above has requested and paid for a binding estimate of conversion costs. With the exception of Davis Island, the estimates given were primarily provided on a verbal basis. As previously mentioned, the Davis Island estimate was given to the Commission.

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4. What are the timelines for implementation for the programs identified in Initiative No. 8?
- A. As stated in Tampa Electric's 2006 Storm Implementation Plan, several components of this initiative are underway. First, the importance of increased vegetation management practices has been integral to franchise renewal discussions. Second, the company has participated in community discussions and evaluations concerning the undergrounding of utility facilities and is at the beginning stages of that process with a city in the service area. Third, redeployment of resources to local EOCs has been factored into the company's current emergency preparedness plan filed with the Commission on June 1, 2006.

Concerning new activity for this initiative, communication material to facilitate undergrounding discussions is under development and planned for completion by fourth quarter 2006. Also, in the third quarter 2006, Tampa Electric's Community Affairs personnel will begin to communicate with local communities the company's desire to utilize government representatives to identify and report damaged electrical facilities to the company. Once the level of community participation is determined, the development and facilitation of a training course for local government representatives will commence and be tailored to the commitment level of the community. Tampa Electric anticipates initial local government participation by first quarter 2007.

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5. What metrics can be provided to show activity levels today versus projected that would support the idea that increase coordination with local governments is planned (e.g. number of community meetings, number of contacts made, number and type of education seminars, number of outreach employees or FTEs, etc.).
  - A. Tampa Electric will identify and report on activity levels related to the company's overall increased coordination with local governments. Specifically, the company will track the number of community meetings with local governments related to storm preparation, vegetation management and activities related to undergrounding of utility facilities. Additionally, the company will identify the local government interest and commitment level of participation toward finding and reporting damage on Tampa Electric's electrical system. The number of educational seminars and training activities associated with damage reporting will be included as a metric.

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14. See Page 18 of Plan. Plan says TECO will increase its effort toward effective vegetation management as part of a coordination plan with local governments. What is TECO doing now? What additional resources will TECO assign to this effort? What types of discussions have occurred and what has been the result?
  - A. Tampa Electric has met with representatives from local city and county governments to discuss tree ordinances related to proper tree planting and accepted utility industry pruning practices. The company has interest in influencing the local government's adherence to ordinances related to proper tree planting, which if complied with, will reduce future vegetation conflicts and related maintenance requirements. All parties have agreed that improved communication to the communities served will be required to achieve this objective. The company intends to pursue community education collaboratively with both cities and counties through different mediums including print, internet, community television and public training offered through the local County Extension Office. Company resources involved to date include Line Clearance Department leadership, Community Affairs representatives and Corporate Communications. The company anticipates these same resources will continue to be utilized to facilitate this collaborative effort.

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15. See Page 18 of Plan. Plan says TECO works closely with local governments to share information about underground. Does TECO initiate discussions or wait to be asked? What type of information is available? What types of education material is under construction?
  - A. Tampa Electric is currently developing literature similar to Gulf Power's literature that will educate customers on the benefits and drawbacks of underground service, the costs associated with underground service, and a detailed description of the process involved in obtaining underground service. Tampa Electric has historically provided this information upon request and has participated in joint meetings or discussions on the topic. In addition, Tampa Electric's Standard Electrical Service Requirements can be found on the company's web site. This document describes in detail the requirements associated with obtaining and installing underground service.

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16. See Page 18-19 of Plan. Regarding local involvement in reporting problems, what kind of training will be offered? When will training begin? Has TECO approached local governments about their participation in training? How would local input be channeled through TECO's system?
- A. See the company's response to Question No. 4 for Initiative 8. Tampa Electric has not approached local governments to date. This process will begin during the third quarter 2006. Once participation levels have been determined, training will begin and the reporting mechanism will be established.

**Initiative 9 (Bill McNulty)**

All IOUs:

1. What is the status of the Memorandum of Understanding?
- A. The status of the Memorandum of Understanding ("MOU") is as follows:
  - o The Memorandum of Understanding has been signed by all the project participants.
  - o Parties to the MOU include the University of Florida's Public Utility Research Center and seven project participants.
  - o The project participants include Florida Power and Light Company, Progress Energy Florida, Tampa Electric Company, Gulf Power Company, Florida Public Utilities Company, the Florida Municipal Electric Association and the Florida Electric Cooperatives Association



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2. What are the committee's research objectives?
  - A. Concerning the research objectives of the steering committee, the MOU is a vehicle by which PURC will assist the project participants in coordinating research on hardening the electric infrastructure to better withstand and recover from hurricanes. Specific objectives of the MOU are to: (1) increase awareness among the project sponsors of research being done at universities on the effects of hurricane winds and storm surge; (2) helping researchers become better aware of the research needs of the project sponsors; (3) develop a research agenda; and (4) coordinate the development and implementation of research projects as needed.

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3. What are the research projects which have been identified, planned, and/or initiated by the committee or any individual member?
  - A. The MOU establishes a steering committee as a project management and oversight group comprised of one member designated by each of the project sponsors. The steering committee, with mutual consent of PURC, will determine the scope of the work to be done by PURC. The steering committee's first meeting is tentatively scheduled for August 21, 2006 at which time the group will begin to identify and plan future research projects.

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4. What is the timeline for implementation for committee tasks, committee projects, and individual projects?
- A. At this juncture, the timeline associated with the coordinated effort of the utilities is as follows:
- o The MOU is a three-year agreement with a project period beginning March 1, 2006 and ending May 31, 2009.
  - o The MOU specifies that PURC will commence the performance of the project promptly after the effective date of the MOU.
  - o Phase I of the agreement was a workshop held June 9, 2006 in Gainesville, the purpose of which was to provide a forum in which utility managers and hazard research professionals discussed means to prepare Florida's electric infrastructure to better withstand and recover from hurricanes.
  - o The steering committee will identify future phases of the project and provide PURC with feedback on PURC's work on this project.

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5. The incremental costs associated with this initiative are either not identified or appear too low to support any significant research projects. Please explain the funding for this initiative, particularly in relation to the needs for research related to wind speed hardening and overhead/underground performance/cost. Does the implementation of the Commission's proposed rules in Docket No. 060173-EI change the plan funding amounts?
- A. As stated in the June 14, 2006 workshop:
- o The MOU provides that the PURC, in addition to coordinating research efforts, will perform the administrative functions for the project, including financial management, logistics, production and distribution of documents, and produce reports.
  - o Prior to the initiation of individual phases of the project, PURC will provide the steering committee with a proposed budget covering that work.
  - o The steering committee will decide the scope of the individual phases of work, with PURC's mutual consent, and must approve the budgets for and organize financing of the work.
  - o Each project sponsor will pay PURC its share of the project costs approved by the steering committee.

The steering committee has scheduled a tentative date of August 21, 2006 to establish the next steps for future phases of work. Budgets for future phases of the project will be developed at that time. It is not anticipated that Docket No. 060173-EI will have an impact on funding.

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Initiative 10 (Tony Swearingen)

All IOUs:

1. When were the utilities' natural disaster and recovery plans last updated?
  - A. Tampa Electric completed the update of its natural disaster and recovery plan in May 2006.

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2. How often are these plan updated?
  - A. At a minimum, Tampa Electric updates its natural disaster and recovery plan annually. This occurs before the start of every storm season.

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3. What have been the major changes to these plans based on the increased hurricane impact concerns? Are more changes still needed?
- A. Tampa Electric has adopted the Incident Command System ("ICS") plan for its natural disaster and recovery plan. ICS is widely used by local, state and federal governmental organizations as well as the private sector. The company believes that this plan affords the proper structure to respond to any emergency it may face and that no major changes are required at this time.

The Company's main focus on an ongoing basis is ensuring that all employees are assigned and trained to conduct their emergency assignments and have prepared themselves in advance of storm season to support their critical roles in a time of emergency. The company also focuses on renewing agreements with local and foreign providers of emergency services and suppliers that have been previously identified to support such a response.

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**All Initiatives (Staff: Jim Breman, Bill McNulty)**  
**(All IOUs):**

1. As part of Question 1, Staff requested that the incremental annual revenue requirement data for 2006 through 2015 provided in this response be calculated using base year actual 2005 revenue requirements, not budgeted 2005 revenue requirements.
  
- A. See the company's response to Question 1 for All Initiatives of Staff Questions Regarding Storm Plans as Filed by the Electric IOUs. Tampa Electric has adjusted its response to reflect 2005 actual costs as the base year.



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**Initiative No. 1: Three Year Vegetation Management Cycle for Distribution Circuits**  
All IOUs

2. What method will the electric IOUs use to assure that no feeder or lateral goes untrimmed (or at a minimum evaluated for trimming and determined to not require trimming), whether under cycle trimming or reliability trimming?
- A. Tampa Electric's current vegetation management approach assumes full circuit maintenance is performed once assigned to a contractor workforce, including feeder and laterals. Circuits will be kept track of in a database and include information on time since last trim and reliability based information. This database will eventually be supported by a GIS. The database will support the development and maintenance of an annual distribution vegetation management plan which will be overseen to ensure three-year cycle maintenance is achieved.

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Initiative No. 5: A T&D Geographic Information System (GIS)

All IOUs

3. How will each electric IOU sample a geographic area for storm related data and what kind of data will be captured?
  - A. After a storm event and safe travel can be accomplished, Tampa Electric will deploy damage assessors. Patrols will be conducted on the ground and from the air. When practical, these assessors will collect data to support forensic analysis, as well as service restoration, their primary mission.

The initial assessment will provide information needed to then deploy teams focused on the forensic process. At a minimum, the following types of information will be sampled:

Overhead

Pole/Structure – Height/class and type of pole, age (birth mark), guying, framing type, equipment, conductors, equipment, soil conditions, type of damage (pole leaning or pole broken) and likely cause of damage.

Underground

Type of equipment (transformer, switchgear, cable, etc), type of damage and likely cause of damage.

Additionally, sample data will be collected from intact structures in the same area. General observations as to the condition of non-utility facilities in the area can also provide information that is valuable to the post-storm analysis.

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**Initiative No. 8: Increased Coordination with Local Government**  
All IOUs

4. Provide copies of presentations that the utility uses to explain to customers and to local government undergrounding options available to government entities, qualifying groups, and developers?
  - A. To date, Tampa Electric has not used formal presentations with government entities when discussing conversions from overhead electrical service to underground. However, as part of Initiative 8, the company is developing material to assist with undergrounding discussions which will be available by the fourth quarter 2006.

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5. What does the utility plan to do to coordinate community undergrounding projects with other utilities such as communication providers, gas utilities, etc.?
  - A. Tampa Electric has participated in and led several joint trenching projects with developers in the past with mixed results. The company will continue to consider and improve its joint trench installation process as communities request new underground facilities or overhead to underground conversions. This process incorporates the installation of other utilities (gas, cable, telephone, etc.) in a common trench. Having a single crew install all of the utilities can save money on installation costs, reduce installation times, minimize disruption to properties and reduce damage to other utilities.

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Initiative No. 9: Collaborative Research  
All IOUs

6. Part of Written Question No. 3. Staff distributed two proposals of research projects that could be considered as an initial starting point for the IOUs. Do these proposals represent a reasonable starting point? What specifics can be provided prior to mid-August 2006 regarding a proposed or Committee approved research project, including description of project, objectives, schedule, etc?
- A. It is the role of the steering committee to determine the scope of the project as outlined in the MOU with PURC.
- o The steering committee will begin meeting with the benefit of the dialogue from the June 9, 2006 hardening workshop held in Gainesville.
  - o The two research project proposals forwarded by staff at the informal meeting on July 14, 2006 are among the several areas of interest for potential future research identified during the June 9<sup>th</sup> workshop.
  - o The steering committee will consider the two proposals provided by staff when they meet.
  - o A tentative date of August 21, 2006 has been set for the first steering committee meeting.

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7. In the event any utility is planning to conduct individual research separate from the Committee, but perhaps in conjunction with local universities, what is the nature of the research, what overlap does it have with collaborative research, and what applicability or benefit does such research hold for other utilities in Florida, if any?
  - A. Utilities may from time to time engage in individual research to further the development of storm resilient electric utility infrastructure and technologies that reduce storm restoration costs and outages to customers, particularly where the research is intended to address circumstances unique to a utility. Currently, Tampa Electric does not have plans to conduct such research separate from the efforts of the steering committee through PURC. However, this type of individual utility research can be brought before the steering committee. The MOU then provides a way for utilities to coordinate these efforts with other utilities to avoid possible duplication of efforts, to share information, and to share costs associated with research activities that are of broad interest to the industry.

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**Initiative No. 10: Natural Disaster Preparedness and Recovery Program**  
All IOUs:

8. Please provide Commission with the most up-to-date natural disaster preparedness and recovery program available in the event the utility has already done so.
- A. Tampa Electric submitted an up-to-date natural disaster preparedness and recovery program with its 2006 Storm Implementation Plan filed June 1, 2006.