

## **ELECTRIC UTILITY INFRASTRUCTURE**

### **Tampa Electric Comments**

**January 30, 2006**

Tampa Electric supports the Commission in its efforts to identify specific solutions which can improve the resilience of utility infrastructure to the effects of severe weather. In this endeavor it is critical to make sound decisions based on known facts rather than conjecture. Care in gathering data is particularly important in initiating infrastructure changes because of the enormous costs involved, the extended time required to implement system wide changes, and an overriding need not to implement changes which not only are expensive and may cause customer inconvenience, but do more harm than good. The workshop on January 23 was a good first step in gathering meaningful information and ideas for further analysis.

At the conclusion of the workshop, utilities were asked to submit comments indicating short-term and long-term recommended solutions. The following recommendations call for short-term actions that will provide a sufficient factual basis to implement long-term solutions. The end result will be a road map for cost-effective long-term improvements to the electric infrastructure in Florida.

1. **Meteorological and Infrastructure Studies**

Tampa Electric proposes that the Commission support legislative action to provide funding to the Commission for the purpose of hiring experts and managing the employment contract to provide: (1) a detailed meteorological study, and (2) an electric utility transmission and distribution infrastructure study to identify available cost-effective options to harden electric

infrastructure to withstand severe weather conditions. The objective of the study would be an assessment of current design standards from a durability standpoint and development of a road map for the cost-effective implementation of prospective design standards. The studies would be presented for review by the Commission, taking into account comments by all interested parties. The end result of this process would be a final report based on the experts' findings and the interested parties' comments submitted by the Commission to the Governor and Legislature.

2. Vegetation Management

Windborne debris is a significant threat to interruption of utility services. Utilities attempt to mitigate this threat through vegetation management programs. Numerous local governments in Florida have enacted tree ordinances which restrict in various ways the extent, frequency and effectiveness of tree trimming. Moreover, vegetation which can interfere with electric infrastructure is allowed and planted by some municipalities in utility rights-of-way. The Commission should support legislation which grants priority to cost-effective utility vegetation management programs over local tree ordinances and which prevents planting of vegetation which will likely interfere with electric infrastructure.

3. Local Government Assistance in Infrastructure Problem Identification

During the workshop, testimony was received from the Mayor of the City of Dania Beach indicating the willingness of her City to train emergency management personnel to identify apparent problems with the utility infrastructure within the City.

Tampa Electric will initiate dialog with each of the local governments in its service area to discuss the feasibility of developing an effective program for assistance in infrastructure

review. Such programs would include a specification of the types of conditions which should be reported for further inspection and correction, if necessary, by the utility. Such conditions may include, but not limited to, broken cross arms, vegetation interference, and guy wire problems. This effort will continue the partnership between local governments and utilities in improving reliability and avoiding potential trouble.

#### 4. Pole Attachment Initiative

There are significant reliability and coordination issues with respect to various attachments of foreign facilities to electric poles. These attachments include traffic lights, street lights, communication wires and cables and related facilities belonging to entities other than electric utilities. This infrastructure adds to wind resistance the pole must be designed to withstand and adds to the complexity of restoration efforts. While Tampa Electric cannot validate the data, workshop presentations indicate that as many as 20% of pole attachments are unauthorized, consequently, these unauthorized attachments add wind stress to the pole without notification to the utility. Workshop presentations also indicate there are significant considerations with respect to the future placement of these various attachments in instances where electric service is relocated from overhead structures to underground service.

Under federal law enacted in 1978 the Federal Communications Commission (FCC) is given jurisdiction to regulate pole attachments unless a state certifies and regulates rates, terms and conditions of pole attachments, and considers the rights of subscribers of cable television service in such regulation.

This Commission in response to this federal requirement sent notice of certification to the FCC. The Florida Supreme Court in Teleprompter Corp. v. Hawkins, 384 So. 2d 648 (Fla. 1980) quashed the Commission's certification saying:

Although we share the concern about federal intervention in an area the state may be better equipped to handle, such concern is not enough to extend the Public Service Commission's jurisdiction. Only the Legislature can do that.

The Commission should include electric, cable and telephone companies in dialog to consider the following: (1) the options for placement of telephone and cable infrastructure if electric facilities are relocated underground; (2) the options for eliminating unauthorized and unnoticed attachments to electric poles; and (3) whether the Commission should seek jurisdiction from the Legislature to regulate pole attachments.

5. Educating Customers with Respect to Undergrounding Options

During the workshop Gulf Power Company provided copies of booklets it has developed to educate customers on the pros and cons of undergrounding and the available options to accomplish underground service.

Tampa Electric will develop similar materials to assist its customers in making decisions with respect to undergrounding.

6. Storm Surge Flood Zone Maps

It is important to continue accessing and improving information that will assist in making critical decisions about electric infrastructure and emergency management. One such source of information is maps indicating flood zones in coastal regions due to storm surges.

Tampa Electric will supply the Commission a map of its coastal service area showing potential flood zones from storm surges using the best available data. The Commission should support legislation providing funding for the production of more detailed storm surge flood zone maps with improved granularity and detail which will be very helpful in emergency management and utility infrastructure planning.

7. Technology Pilot Program

During the workshop a presentation was made by the Homac Companies of new electric products which may prevent storm damage. One such product was a breakaway connector designed to separate certain distribution wires which are struck by flying debris so that the wire does not damage the pole or the customer's service.

Tampa Electric proposes to design an experimental program of installation of an appropriate sample of such devices and to test the effectiveness of damage mitigation and long term day-to-day reliability under normal operating conditions.