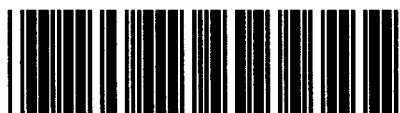




Control Number: 32182



Item Number: 17

Addendum StartPage: 0

## Questions for Workshop in Project 32182

1. If your company provided service in the areas affected by Hurricane Rita, please provide your company specific information on the number of customers affected, the minimum, maximum and average outage duration for the customers affected.

**BCEC had approximately 34,750 consumers receiving service at the time of Hurricane Rita.**

**Approximately 14,434 consumers experienced an outage due to the hurricane. (Note: Consumers experiencing a momentary outage, "blinks", are not included in this number.)**

**The minimum outage duration was approximately 1 hour.**

**The maximum outage duration was approximately 34 hours.**

**The average outage duration was 3.38 hours, calculated based upon average hours out per total number of system-wide members.**

2. Please provide information on additional non-company resources deployed in the area for the restoration effort.

**BCEC utilized one (1) distribution line contract crew and two (2) right-of-way contract crews during Hurricane Rita. These crews normally work for BCEC on a day-to-day basis.**

3. Please provide information on the types and physical quantity of facilities affected by the hurricane in your service area.

**BCEC experienced a fairly mild outage event due to Hurricane Rita. A relatively small number of poles, crossarms and conductors were broken. Trees or tree limbs falling on distribution lines caused most outages.**

- a) What percent of those facilities were replaced using existing inventory?

**100% of facilities were replaced or repaired with existing inventory items.**

- b) What percent of those facilities had to be newly procured?

**No 'facilities' were newly procured. BCEC's warehouse was replenished as needed following the hurricane.**

- c) Are the facilities replaced meet the existing standards or exceed the standards to ensure survivability in the event of another hurricane of category 4 or higher?

**Existing facilities that were damaged were replaced with materials meeting the same standards.**

4. What lessons were learned in the process that would improve restoration time or reduce cost of restoration in the future?

**BCEC experienced a fairly mild outage event due to Hurricane Rita. BCEC experienced major ice storms in 2000. Lessons learned during those ice storm restoration efforts were utilized to improve response to this storm.**

5. What, if any, additional costs would be associated with improvements from lessons learned identified above? To what degree, if any, might they be offset by more timely restoration of services?

**Prior experience in major storms has convinced BCEC that employee safety, and those of contract crews, should be weighed heavily against "more timely restoral of service".**

6. How might your company's physical infrastructure be modified or replaced to enhance its ability to withstand severe hurricanes?

**BCEC has programs in place that have decreased right-of-way clearing cycles (clearing more often), reduced distribution line construction span lengths (poles are closer together), and increasing the number of lightning arrestors, fuses and switches on the system. These programs could be increased or 'strengthened'.**

**Currently, BCEC acquires 25 ft wide distribution line easements. Trees falling from outside of the right-of-way continue to be a problem during storms, but landowners concerns and resistance limit BCEC's capacity to acquire wider right-of-ways.**

7. How does the cost of the modifications and replacements identified above compare with that of replacing storm-damaged infrastructure in the past?

**As noted in the response to #6, BCEC could increase or 'strengthen' existing programs, but trees falling from outside of the right-of-way would continue to operate protective devices and/or cause minor damage.**

**BCEC could acquire a wider right-of-way, but landowners who grow timber, those that cultivate crops, and homeowners who attach special significance to trees in their yard are very resistant to increasing distribution line right-of-way widths.**

8. Has your company modified the planning, engineering and construction practices since Hurricane Rita for deploying facilities in the Texas Gulf coast region, if so how, please provide details.

**No, BCEC has not modified the planning, engineering or construction practices since Hurricane Rita.**

9. How should the cost identified in the responses to the previous questions be recovered? Should the cost be recovered from general body of ratepayers, from the ratepayers in the affected areas, or from some other source?

**Costs should not be recovered from the "general body of ratepayers" if the intent of the question is to apply it to all consumers in the state of Texas or within large geographical areas without regard to utility service boundaries. Storm restoration costs of this nature have historically been borne by the consumers of the affected utility(ies), after contributions by Federal Agencies such as FEMA. This method has been approved by the Public Utility Commission in the past and should continue to be utilized.**

10. What changes in depreciation practices are appropriate?

**BCEC does not anticipate modifying our depreciation practices due to Hurricane Rita.**

11. Should utility standards of construction in the coastal area be upgraded? Has your company provided input or planning to participate in the activities of standard setting organizations? If so, provide details.

**BCEC does not anticipate modifying our construction practices as a result of Hurricane Rita.**

**BCEC has supplied input into the activities of standard setting organizations. We have provided input to USDA Rural Utility Service (formerly Rural Electric Administration) directly, and to IEEE for the "National Electric Safety Code" and OSHA for 'safety standards' through organizations of which BCEC is a member.**

**Please respond to the following questions if your company sustained more than minimal damage from Hurricane Rita.**

1. Please provide the following information regarding transmission lines damaged by Hurricane Rita.

Total number of lines in the system and the number of lines sustaining damage

**BCEC has 32 transmission line sections. One (1) line section sustained minor damage.**

Total number of structures in each type before the hurricane and the number of structures replaced or replaced by voltage class

**BCEC had one (1) 69kV transmission crossarm damaged as a result of the storm.**

Wood single-pole	<b>2,108 Existing - 1 Damaged</b>
Wood (other)	<b>193 Existing - 0 Damaged</b>
Steel single-pole	<b>1 Existing - 0 Damaged</b>
Steel lattice	<b>16 Existing - 0 Damaged</b>
Steel (other)	<b>1 Existing - 0 Damaged</b>
Concrete single-pole	<b>277 Existing - 0 Damaged</b>
Concrete (other)	<b>2 Existing - 0 Damaged</b>

Total number of feet/miles of conductor and amount repaired and amount replaced by voltage class

**BCEC has 36.5 miles of 138kV transmission line, 163.4 miles of 69kV transmission line and 3.8 miles of 69kV transmission line operated at 12.5kV. BCEC did not have any transmission conductor damaged as a result of the storm.**

2. Please provide the following information regarding distribution lines (feeders) damaged by Hurricane Rita.

Total number of lines in the system and the number of lines sustaining damage

**BCEC has 108 distribution feeders. Most feeders sustained minor damage to taps off of the main line. Approximately 5 feeders sustained damage to the main line.**

Total number of structures in each type before the hurricane and the number of structures replaced or replaced by voltage class

Wood single-pole	<b>113,794 Existing - 12 Damaged</b>
Wood (other)	<b>0 Existing</b>
Steel single-pole	<b>0 Existing</b>

Steel lattice	<b>0 Existing</b>
Steel (other)	<b>0 Existing</b>
Concrete single-pole	<b>1 Existing - 0 Damaged</b>
Concrete (other)	<b>0 Existing</b>

Total number of feet/miles of conductor and amount repaired and amount replaced by voltage class

**BCEC has 5,734 miles of 7.2/12.5kV distribution line. Approximately 430 feet of distribution conductor was replaced as a result of the storm.**

3. Please provide the following information regarding transmission only substations damaged by Hurricane Rita.

Number of substations sustaining damage and total number of substations in system

**BCEC has 5 transmission only substations. None sustained damage as a result of the storm.**

Number of substations sustaining control house damage due to:

Flooding	<b>0 Stations</b>
Wind	<b>0 Stations</b>
Flying debris	<b>0 Stations</b>
Other	<b>0 Stations</b>

Number of substations sustaining damage to other equipment (including underground wiring) due to:

Flooding	<b>0 Stations</b>
Wind	<b>0 Stations</b>
Flying debris	<b>0 Stations</b>
Other	<b>0 Stations</b>

4. Please provide the following information regarding distribution substations damaged by Hurricane Rita.

Number of substations sustaining damage and total number of substations in system

**BCEC has 26 distribution substations and 4 distribution meter points. None sustained damage as a result of the storm.**

Number of substations sustaining control house damage due to:

Flooding	0 Stations
Wind	0 Stations
Flying debris	0 Stations
Other	0 Stations

Number of substations sustaining damage to other equipment (including underground wiring) due to:

Flooding	0 Stations
Wind	0 Stations
Flying debris	0 Stations
Other	0 Stations

5. Please provide the number of distribution substations that were:

Unable to serve load due to damage to the station from Hurricane Rita

**BCEC has 26 distribution substations. All substations were able to serve load during the storm.**

Unable to serve load solely because of transmission line outage from Hurricane Rita

**Three (3) distribution substations were unable to serve load due to a transmission outage. Two (2) substations were out due to an outage on BCEC owned transmission facilities and the duration of this outage was less than 2 hours. One (1) substation was out due to an outage on AEP/SWEPCO owned transmission facilities and the duration of this outage was approximately 3 hours.**

6. Please describe the extent of any damage sustained by each utility power plant (if applicable).

**BCEC does not own or operate any power plants.**

7. Please describe any damage sustained by the transmission/distribution control center.

**BCEC did not sustain any damage to the transmission/distribution control center as a result of the storm.**

8. Please describe any damage sustained by the communication system (voice and data) that impacted the restoration after the storm.

**BCEC did not sustain any damage to the communications system as a result of the storm. However, 2 radio towers were without power during the storm: the Daingerfield tower was out for approximately 1 hour due to a backup generator problem; and the Ripley tower was out for less than 3 hours.**