

Agenda Date: October 25, 2007
Item Number: D1

Docket: UE-071898
Company: Puget Sound Energy

Staff: Douglas Kilpatrick, Senior Engineer

Recommendation

This is an informational item only; no action is required by the Commission.

Background

Following the Hanukkah Eve Windstorm of December 2006, Puget Sound Energy (PSE or the Company) hired a consultant to conduct a storm restoration and readiness review of the Company's response to this massive storm. This review was conducted by KEMA, an energy services consulting firm. In the executive summary, KEMA concludes:

PSE, its employees, and service providers performed well restoring power after this record-breaking storm. Employees at all levels overcame many obstacles caused by the sheer magnitude of the storm damage and the overwhelming volume of restoration activities. However, PSE functions were not able to respond with the same level of effectiveness previously demonstrated in more typical outage restorations. The emergency restoration plan and information processes are limited today by their ability to scale up to a storm of this size.

KEMA's approach to evaluating PSE's response to the Hanukkah Eve Storm was to compare and contrast PSE's emergency response planning and actual event actions with leading practices by other utilities. KEMA described a model storm restoration process that incorporated leading practices from the utility industry and used this as a step by step comparator to PSE's plans and actions. From this approach, KEMA was able to identify a series of problems or challenges and propose a series of recommendations for PSE to consider.

In staff's view, key deficiencies identified in PSE's planning for and restoration from storm-caused system damage boils down to three overarching issues.

1. PSE and its service providers (primarily its contractor Potelco) did not have enough personnel trained to perform system damage assessment before the storm. As a result it took too long for the company to fully determine the extent of the damage done to the system and thus the magnitude of the recovery effort it faced.
2. PSE's approach to managing restoration and recovery is decentralized and relies on paper record keeping at its multiple operations bases. For a storm of this magnitude, reliance on such a decentralized system limits the ability of the utility to redirect resources.

3. Absence of good information about the type and magnitude of system damage, along with the absence of a good centralized information management system prevented PSE from providing responsive and useful information to its customers.

Conclusion

The KEMA report provides excellent information on industry best practices in storm response planning and implementation. PSE has the opportunity to learn from this event and make modifications to its plan and systems. Staff believes that key themes for PSE to consider include:

1. ***Institutionalize the Corporate Emergency Response Plan (CERP) throughout the Company and especially within the context of its service providers.*** Symptoms of a lack of this kind of commitment displayed prior to the December 2006 storm include light attendance by Company and contractor personnel at storm training sessions conducted prior to the 2006 season. KEMA found that of 124 PSE and Potelco personnel identified for damage assessment training, only 40 percent attended. KEMA also noted that new employees receive no emergency response training at employee orientation.
2. ***Develop improved internal communications methods for making damage assessment information available to restoration managers and especially to customer service representatives.*** KEMA stated that some experienced PSE employees realized early after the storm that restoration would be protracted, however either because of optimism or perhaps for fear of being wrong such information was not communicated within PSE or to its customers.
3. ***Develop system tools and processes to ensure the Company retains robust system knowledge in the face of eventual senior leadership retirement.*** KEMA noted that operations base effectiveness in many instances was directly influenced by the local Potelco and PSE leaders working in a particular area. KEMA concluded that:

PSE is at risk of becoming more dependent on a service provider as much of the operational knowledge within PSE has been or will be lost due to attrition and reduction of operational responsibilities. As operations has migrated to the service provider, so has PSE's knowledge and capabilities.

4. ***Develop improved external communications methodologies to ensure that key customers, including the media, local governments, and other utilities get timely information.*** Local governments need this information in order to plan, open and operate aid shelters for victims, coordinate road clearing, and assist with property protection. Other utilities also affected need to know whether downed power lines have been made safe so their crews can begin their own restoration efforts, including refueling emergency

generation facilities. The media can assist with information dispersion to customers on a proactive basis, mentioning areas most acutely affected, reminding citizens to treat all power lines as live and therefore dangerous, and echoing safety information such as warnings about the potential for carbon monoxide poisoning associated with generators or combustion heating devices.