Exhibit No. ___ (DEK-3)
Dockets UE-072300/
UG-072301/UG-080064
Witness: Douglas Kilpatrick

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, v. PUGET SOUND ENERGY, INC., Respondent.	DOCKET UE-072300 DOCKET UG-072301 *(Consolidated)* DOCKET UG-080064

TESTIMONY OF

DOUGLAS E. KILPATRICK

ON BEHALF OF THE STAFF OF WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Memorandum dated January 30, 2008
Re: Staff summary of PSE's response to KEMA's December 2006 Windstorm Report

May 30, 2008

Memorandum

January 30, 2008

To: Commissioners

Cc: Chris Rose, Dave Danner, Gene Waas

From: Doug Kilpatrick, Senior Engineer

Re: Staff summary of PSE's Response to KEMA's December 2006 Windstorm Report

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The following table summarizes PSE's actions on the KEMA recommendations:

Rec. #	Issue	PSE action	Timing of action	Staff comment
4.4.1	Enhance personnel use for storm response	Accepted	Implemented for 2007 storm season	Appears fully implemented.
5.4.1	Categorize the storm	Accepted	Implemented for 2007 storm season	Appears fully implemented.
6.4.1	Enhance damage assessment capabilities and technologies	Accepted	Partially implemented for 2007 storm season	Enhanced level of staffing only. Technology improvements being piloted.
7.4.1	Institute consistent accountability for executing the storm plan between PSE and its contractors	Rejected		Expectations between PSE and contractors are being clarified in training sessions only, no contract revision anticipated.
7.4.2	Formalize local area coord. & transmission restoration activities.	Accepted	Partially implemented for 2007 storm season	Local area coord. plan should include specific coord. with local governments..
8.4.1	Create a scalable communications strategy	Accepted	Implemented for 2007 storm season.	Ties communications levels to storm levels from 5.4.1.
9.4.1	Formalize a customer escalated call process	Accepted	Implemented for 2007 storm season.	Unclear implementation strategy. PSE should provide more information.
9.4.2	Use local phone network in front of company interactive voice response unit ("IVRU").	Accepted in concept	Partial adoption by end of January 2008. Further cost/benefit analysis to start in 2008.	No clear timeline presented for analysis and decision making.
10.4.1	Establish enterprise-level outage management processes	Considering	Contracted with KEMA to define system parameters and costs.	PSE should report this study outcome to UTC and describe decision matrix and timing.
10.4.2	Develop business & info process flows for outage management	Partially accepted	Tied to 10.4.1. Further study required.	PSE should report study outcome to UTC.

10.4.3	Enhance existing technology & systems to close functionality gaps	Partially accepted	Tied to 10.4.1. Further study required.	PSE should continue to report progress to UTC.
10.4.4	Build out new outage management architecture	Considering	Tied to 10.4.1	Decisions should be reported along with those for 10.4.1
10.4.5	Develop a phased implementation plan for an outage management system	Considering	Will consider only after study in 10.4.1 is complete.	PSE should continue to report progress to UTC.
11.4.1	Refine the existing Potelco contract to add planning and training requirements.	Rejected	PSE believes existing Potelco contract includes necessary specificity.	Work order was created for Potelco employees to charge time for storm training/orientation.
12.4.1	Enhance logistics for storm restoration support	Accepted	Implemented for 2007 storm season	Appears fully implemented.
12.4.2	Document materials management policies and processes use in December 2006 storm	Accepted	Implemented for 2007 storm season	Appears fully implemented.
13.4.1	Consolidate actions and recommendations that came from internal storm debriefings	Accepted	Developed master task list from debriefings.	List is not specific as to dates for implementation or further study.
14.4.1	Enhance transmission vegetation management policies	Partially accepted	Solicited proposal from contractor to evaluate existing practices. PSE working on legislative and regulatory solutions.	PSE should report the outcome of the contractor work. PSE should provide more specificity regarding potential regulatory or legislative initiatives.
14.4.2	Develop and maintain transmission system access roads	Accepted	Initiated work on consolidating info for transmission access points.	PSE should report to UTC when this project is complete.
14.4.3	Evaluate T&D hardening opportunities	Accepted	PSE reviewing hardening opportunities.	PSE should report to UTC when this project is complete.

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.

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 recommendations for PSE to consider.

At the commission's October 25, 2007, open meeting, PSE Executive Vice President and Chief Operating Officer Bert Valdeman presented the Company's response to KEMA's report in a series of PowerPoint slides. In general, Mr. Valdeman stated that PSE had focused on initiatives in five areas:

- **Process improvements** – including grading storms by severity and providing more damage assessment training for employees and contractors.
- **Customer communications** – enhanced call taking capacity and customers' messages delivered through web posting and bill stuffers.
- **Technology solutions** – including simplifying input to their customer database (CLX), piloting handheld data collection devices for damage assessors and improving web-based outage information.
- **System hardening** – involving vegetation management and access road improvements.
- **Local government coordination** – including assigning PSE personnel to work in county government EOCs and hosting pre-storm season meetings with local governments.

In his five PowerPoint slides, Mr. Valdeman painted a broad picture for the commission of what PSE had done to date and what it was planning to pursue in the future. The commission requested a more thorough explanation of PSE's response to the KEMA report, in writing, specifying exactly which recommendations PSE was adopting, which it was not and how it intended to implement any changes. On November 29, 2007, PSE submitted its reply report.

PSE's Response Report:

In its response to the KEMA report, PSE indicated on a point-by-point basis whether it accepted KEMA's recommendation fully, is considering the recommendation, partially accepted the recommendation or rejected the recommendation as not necessary.

I. PSE stated it was accepting the following recommendations:

4.4.1 Expand the company emergency response capability through enhanced personnel utilization.
5.4.1 Develop a storm categorization methodology and tailor aspects of the Company Emergency Plan to the various levels of storms.
6.4.1 Enhance the damage assessment capability and process to provide better and faster estimates of restoration times and resource requirements.
7.4.2 Formalize local area coordination and transmission restoration priority activities.
8.4.1 Create an integrated corporate and local communication strategy that is scalable to storm severity.
9.4.1 Formalize a customer escalated call process.
9.4.2 Use local carrier phone network in front of PSE's Consumer LinX customer information system and the interactive voice response unit ("CLX/IVRU") to enhance call-taking capacity and capabilities.
12.4.1 Enhance logistics to better support the number of crews supporting the restoration.

12.4.2 Document material management policies and processes created to support storm levels.
13.4.1 Ensure the existing post-storm actions and recommendations are consistent with the leading practice model presented in this report.
14.4.2 Aggressively develop and maintain cross country transmission access roads.
14.4.3 Evaluate hardening opportunities for both transmission and distribution.

PSE delivered emergency response assignments to 667 of its employees in 2007 (*Recommendation 4.4.1*). Through October 2007, it had trained 75 percent of those staffers and had plans to follow up with the 25 percent who didn't make the initial training. Notably the company indicated that 90 percent of its damage assessors had attended initial training courses and the remaining 10 percent were being contacted directly by the company emergency planning manager. Going forward the company plans to conduct annual emergency training and orientation for its assigned responders. PSE also increased the number of damage assessors from 79 in 2006 to 179 in 2007 (*Recommendation 6.4.1*). The training for these damage assessors included more information and a practice session on completing new damage assessment forms that will be used in storm response.

PSE did not report how many damage assessors its prime contractor, Potelco, has assigned, or whether these persons received training on use of the new damage assessment form. PSE should ensure that Potelco require its assigned staff to take annual training, including use of PSE-developed forms.

PSE has instituted a methodology whereby it will categorize storms into one of three levels: regional, significant, or major (*Recommendation 5.4.1*). Categorization of storms will trigger varying levels of response, including whether PSE will open its Emergency Operations Center ("EOC"), begin mobilizing employees with emergency response assignments and develop and issue press releases about potential storm damage (*Recommendation 8.4.1*). This appears to fully implement these recommendations.

Commission staff noted that within PSE's operations actions plan for major storms, the company is committing a complete assessment of storm damage within 48 to 72 hours. The report is unclear about two aspects of this stated objective. First, the timing aspect is unclear. Is PSE committing to damage assessment within 72 hours of the start of a storm or 72 hours after cessation of the major event? Second, it is not clear whether this commitment includes providing messaging to customers by the end of that time period on estimated restoration times. This is important because state and federal emergency managers have instructed citizens for years that they should be prepared to be on their own for up to 72 hours in the event of a major disaster. This includes providing one's own food, water and shelter during that period ("3 Days/3 Ways" is such a campaign). As an outage reaches the 72 hour mark, customers may begin to run out of these essentials. If PSE has to take its damage assessment information (gathered presumably by the end of 72 hours) and still run it through a process to establish restoration estimates and develop customer messaging, it could be another working day until customers get information they need to make decisions about whether to remain at their location or seek shelter elsewhere. PSE should commit to provide an initial restoration determination to its customers within 72 hours of initial storm impact. This information must be specific enough that customers can decide what actions to take to mitigate their own situation. In addition, PSE should provide outage/restoration reports to the commission within 24 hours of initial storm impact and follow

up with daily status reports until outages are resolved. This information will be used by commission staff who provide support to the State EOC as part of Emergency Support Function 12 (ESF12) – Energy. UTC support for ESF12 includes gathering and reporting outage information plus analyzing and consulting on energy-related data and policy issues at the EOC.

PSE has formalized a local area coordination plan (*Recommendation 7.4.2*) that identifies sites where it may pre-stage equipment and resources in the event of a widespread event. The document provided as an attachment to the report notes that many of the identified sites are owned by third parties and authorization for their use would have to be obtained. Not included in this listing is whether PSE is working with the local governments (we assume mostly counties) so that they are aware of and supportive of the concept, can perhaps assist in contacting owners for use permission and have sufficient information ahead of time in order to consider whether the local government itself might wish to co-locate some of its resources at these sites as well. PSE should commit to coordinating this pre-planning with local governments and inform the commission when it is complete.

PSE formalized the customer-escalated call process it used in December 2006 (*Recommendation 9.4.1*). This process came about after customers, frustrated by lack of actionable information on the expected duration of the 2006 outage, requested that their call be escalated to a supervisor or other corporate contact. PSE states it has identified a "communications lead" for each of its operating bases, but it is not clear just how or when this position gets activated. In addition, PSE says that logistics to support the process includes the establishment of the "Bothell Emergency Center." PSE's report does not describe what this center will do, or how it fits into PSE's overall storm response process. PSE should provide this information to the commission.

PSE has developed a master task list of actions incorporating recommendations from the Company's 2006 internal storm debriefs (*Recommendation 13.4.1*). It has formed a team of operating managers to lead the efforts in implementing actions and processes based on the consolidated list of recommendations. PSE's matrix, attached to its report, appears only to be a listing of such recommendations and actions but does not provide any indication of when these are being proposed for implementation. PSE should describe to the commission just what actions it is taking (including target completion dates) based on this list.

II. PSE stated it was partially accepting the following recommendations:

10.4.2 Develop end-to-end information and business process flows for outage management and emergency restoration processes.
10.4.3 Enhance existing technology and systems to close functionality gaps with the strategy of migrating them toward the final architecture.
14.4.1 Enhance PSE's transmission vegetation management policy and standards for ROW width.

PSE says that additional study is needed to determine if it will be cost-effective to implement an enterprise outage management system and geographic information system (OMS/GIS). During that investigation it will begin process mapping to identify key functionalities that should migrate from the Company's existing outage response applications to the proposed OMS/GIS (*Recommendations 10.4.2 and 10.4.3*). PSE notes that it is expanding the electronic Supervisory

Control and Data Acquisition (SCADA) capabilities at its distribution substations (currently all transmission level substations have SCADA but only a portion of the distribution substations are so equipped). PSE plans to install or upgrade SCADA in 91 percent of the distribution substations between 2007 and 2015. This additional instrumentation will allow PSE to expand its now-limited distribution automation. PSE has plans to conduct distribution automation pilots on its system over the next five years. Enhanced SCADA integration with an OMS will be considered as part of the cost/benefit analysis being conducted for Recommendation 10.4.1 (see below).

PSE states that it is partially adopting the recommendation to enhance its transmission vegetation policy and standards for ROW width (*Recommendation 14.4.1*), however the information provided in the report is non-specific. PSE says it is working with local jurisdictions across its territory and it hopes to introduce legislation and regulatory solutions for vegetation management policy issues, including:

- Creating healthier buffers when lands are converted for development.
- Hazardous trees outside existing ROWs that present risk to utility infrastructure.
- Ensuring vegetation within utility ROWs is compatible.

PSE should provide a more detailed response so the commission can evaluate the propriety of these proposed actions.

III. PSE stated they were considering the following recommendations:

10.4.1 Establish enterprise-level technology, data and integration architecture for outage management related processes.
10.4.4 Deploy new systems to close the functionality gaps and build out the outage management architecture.
10.4.5 Develop a phased implementation plan for outage management related information system and processes.

KEMA noted in its report that PSE does not utilize a dedicated Outage Management System (OMS) or a system connectivity model in its outage response (*Recommendation 10.4.1*). Rather, PSE relies on its Storm Bases and a series of manual tracking systems that are not fully responsive to the magnitude of the December 2006 storm. PSE states in its reply report that it has contracted with KEMA to further define what a new enterprise-level architecture for integrating technology and data for outage management might look like and at what cost. The benefit/cost analysis for this is expected to be completed in the first quarter of 2008. PSE says it will make its determination on whether to pursue such an integrated system based on cost, benefits and value-added functionality in emergency response and restoration. PSE says it will also make determinations on KEMA's *recommendations 10.4.4 and 10.4.5* after the definition, requirements and cost/benefit implications of the integrated system are established. PSE should report back to the commission on the results of KEMA's initial analysis. PSE should describe fully what kind of cost/benefit analysis it is conducting, what quantitative and/or qualitative result would lead them to decide to move forward, and what timeline they will set for implementation assuming the hurdle is met.

IV. PSE stated it was rejecting the following recommendations as not necessary:

7.4.1 Institute consistent accountability for executing the storm plan.

11.4.1 Refine the Emergency/Storm Event Response Services Contract to add the planning, training, communication and evaluation roles necessary to plan for and implement major restoration efforts.

PSE says that the appropriate level of accountability currently exists in its service provider contracts and operating base processes for storm response (*Recommendation 7.4.1*). It reviewed the contracts with Potelco and concluded the existing contracts are sufficient to ensure adequate performance levels during emergency operations (*Recommendation 11.4.1*). PSE acknowledges the need for ongoing reinforcement of leadership expectations and role clarification for both PSE and Potelco personnel. This reinforcement will take place during ongoing storm plan orientations, training, and event debriefings. These expectations, roles and responsibilities have been clarified in the Company Emergency Response Plan. PSE should formalize the leadership expectations and storm role clarifications with its major service provider so that these understandings are durable. The company should also develop performance metrics for its service providers that support these concepts and can be used to show the commission that such accountability is working.