

December 2006 Windstorm



Presented by Bill Eaquinto

Vice President, Transmission & Distribution Operations

February 8, 2007

The Storm

December 14, 2006 Peak Wind Gusts

Damage included:

- 59 poles
- 204 cross-arms
- 94 transformers
- 21.8 miles conductor

Resources:

- 505 linemen
- 170 support personnel
- 65 tree crewmembers

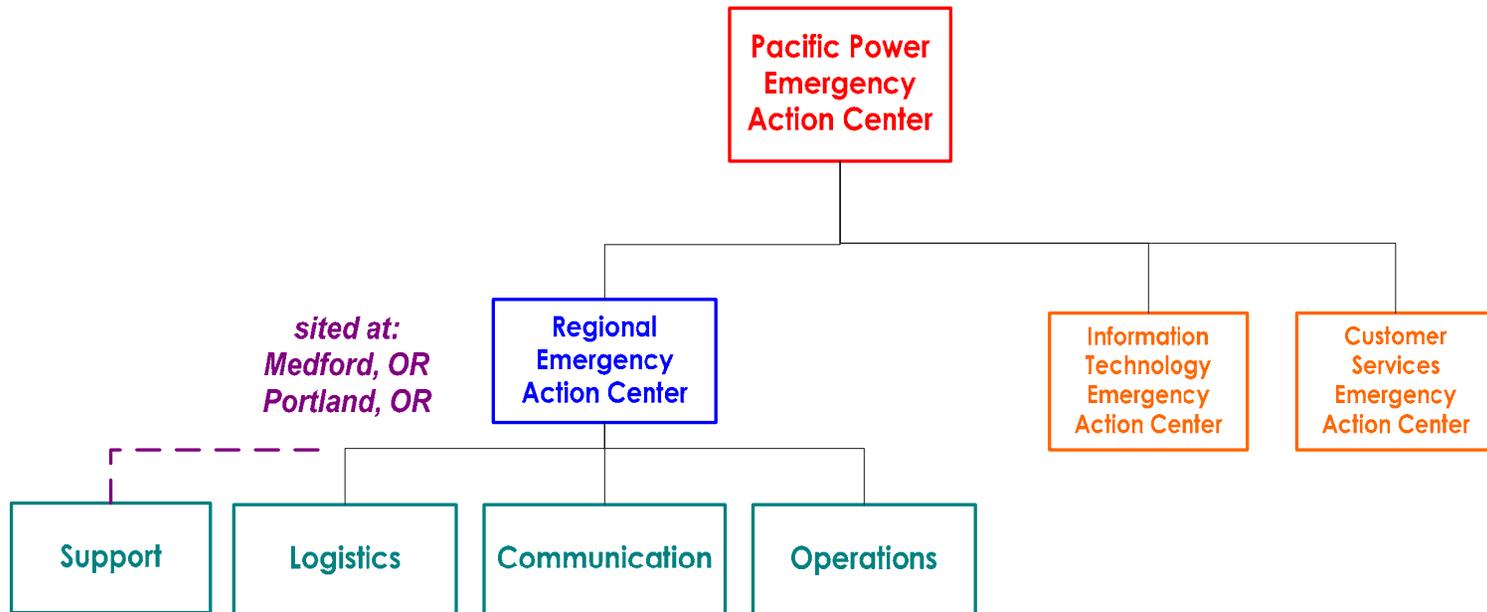
Complaints:

- 2 in Oregon (commission)
- 1 in Washington (internal)

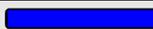


*Data provided by National Weather Service

Emergency Action Structure



Actions during December 2006 Storm

Task Name	Dec 06									
	11	12	13	14	15	16	17	18	19	20
Monitor Storm Activity/Storm Preparation	▼  ▼									
Alert Staff to Remain Available for Weather Event										
Equipment Gassed Up & Made Ready										
Materials at Hubs Evaluated & Backfill Plan Developed										
Call Centers Assessed Staffing Levels & Contingency Plans										
Coordination with Vendors for Additional Backfill Material										
Crews Moved Into Expected Impact Areas										
Emergency Action Center Activated	▼  ▼									
Portland and Salt Lake City Call Centers Operate Around the Clock (Portland normally a 24x7 operation)										
Assessment Begins										
Suspend all IT Maintenance & Upgrades										
Suspend Automated Estimated Time of Restore Function										
Rocky Mountain Power and MidAmerican Alerted to Potential Need for Assistance										
Additional Pacific Power Crews Moved from Unimpacted and Restored Areas										
Rocky Mountain Power Crews Deployed										
MidAmerican Crews Deployed										
Emergency Action Center Deactivated								▼  ▼		
Contacted Other Utilities to Offer Assistance										
Deployed 13 Crews to Support Seattle City Light										

Communications During the Storm

Customers

- 119,942 calls handled by 190 call agents
- 42,273 calls handled through automated system
- No busy signals delivered; courtesy hold to approx 16% of customers calling that required live agents
- Safety messages delivered to incoming callers
- Implemented customer callbacks to confirm power was restored
- Warming center information communicated to customers

Governmental Agencies

- President and senior officers made phone calls updating mayors and governmental officials
- Email/phone notifications to commission staff members
 - 21 to Oregon PUC
 - 8 to Washington UTC
- Coordinated with OPUC to facilitate ports of entry into Oregon
- Alerted other states' staff about potential delays customers may experience from call centers

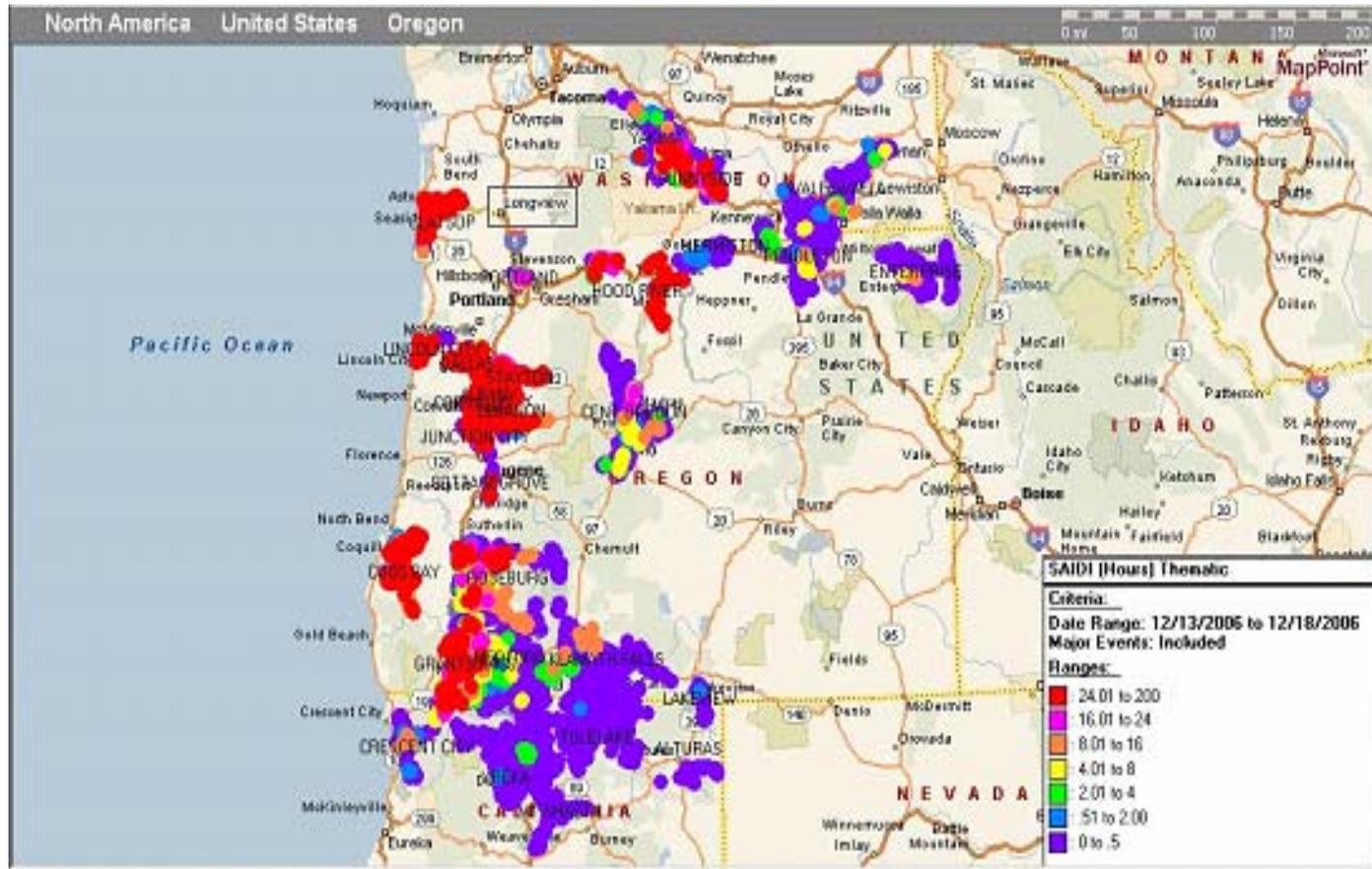
Media

- More than 250 interviews with local and national media
- Newspaper ads to thank hardest hit communities for their patience during the storm event
- Alerted customers to be wary of lines down, take precautions when burning candles and be aware of carbon dioxide hazards

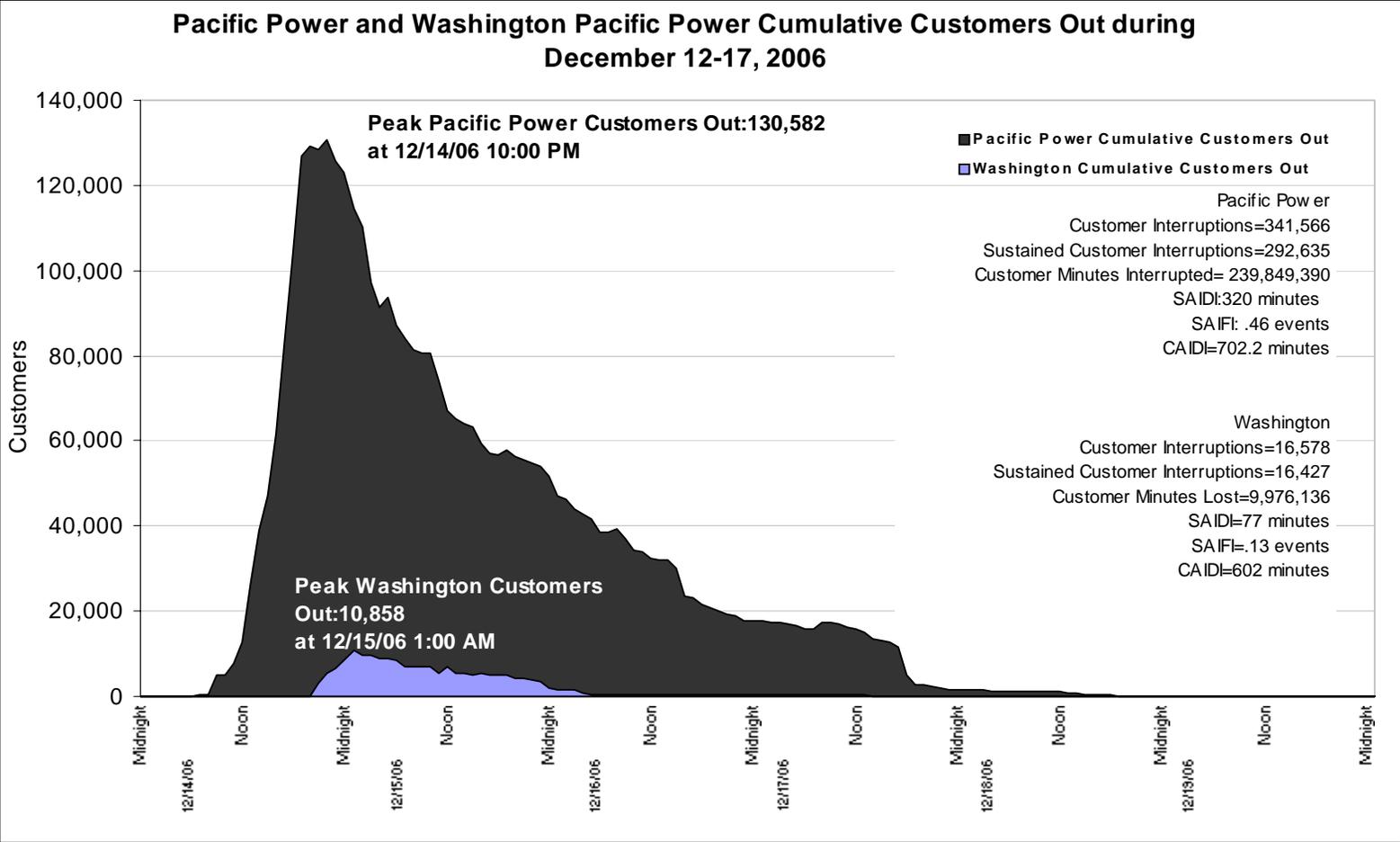
Customer Interruptions During the Storm



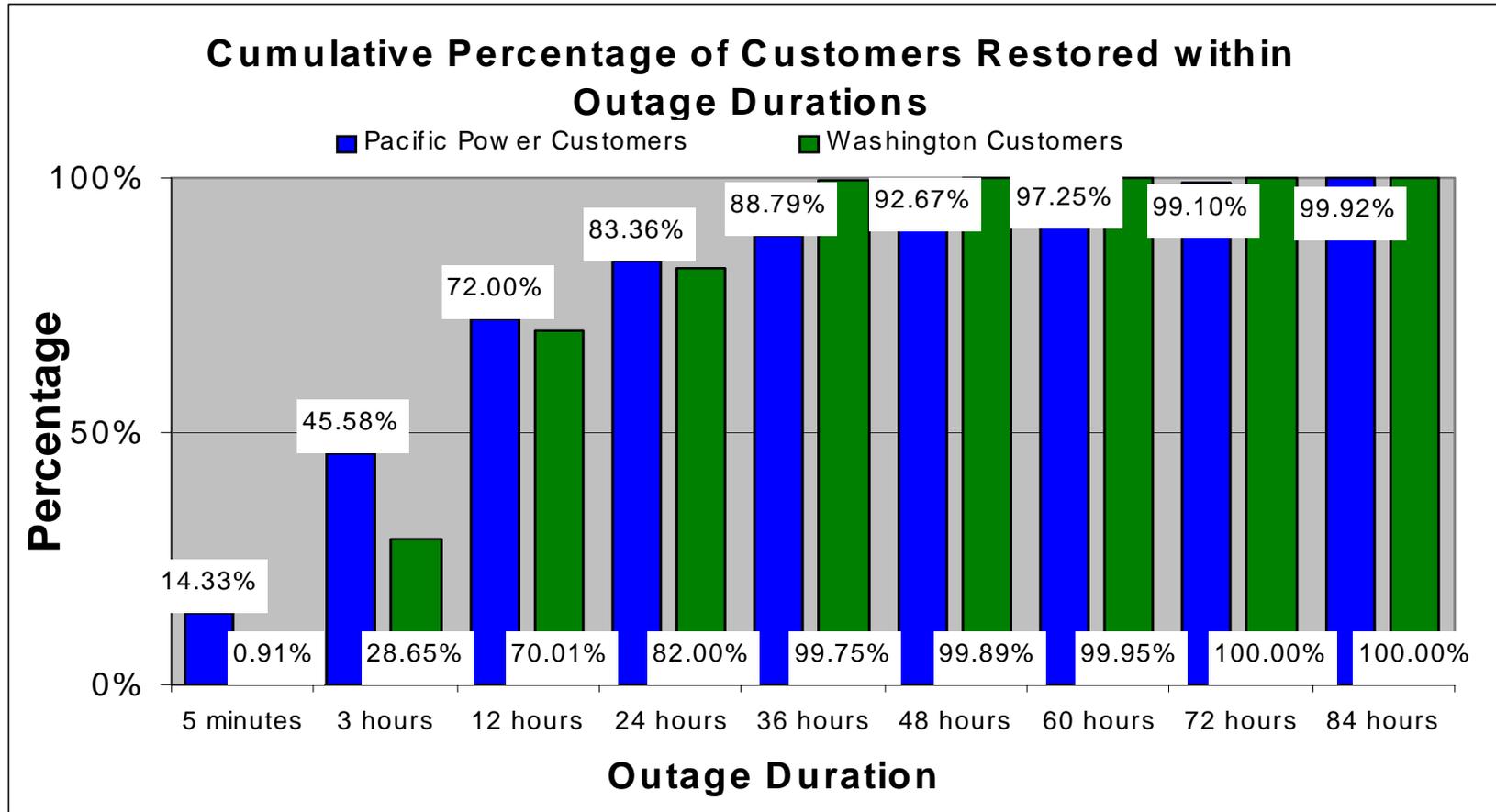
Customer Outage Duration During the Storm



Customer Outages During the Storm



Customer Restoration Percentages



Vegetation

- Transmission
- Distribution







Lessons Learned

- **Preparation**
 - Movement of Crews ahead of Event into Forecast Impact Areas was highly effective
 - Early Deployment & Activation
- **Logistics**
 - Port of Entry challenges across state lines
 - Early activation of Emergency Action Center to coordinate overall logistics needs
 - The company effectively leveraged technologies to be more effective in deploying resources
- **Communications**
 - Senior Executive Communications with Elected Officials of Hardest Impacted Areas
 - Customer Callbacks upon Restoration were Effective
 - Communities were Well-Informed of Response Activities
 - Continue to improve communications with large commercial and industrial customers
- **Resources**
 - Early Coordination & Procurement of Resources was Beneficial
 - Deployment of MidAmerican and Rocky Mountain Power crews (as well as other resources) significantly enhanced the company's responsiveness to the event
 - Contract crews normally deployed within service area went elsewhere
- **Storm Hardened-System**
 - Vegetation Management, Inspection & Maintenance Programs helped yield a less-damaged system

Questions

