



2006
Qualifying Storm Events

January 31, 2006

Table of Contents

Table of Contents	2
Event Description	3
Date of event	3
Event Type	3
Service Areas Affected	3
Number of Customers Affected	3
Summary of System Impacts	3
Mobilization Summary	3
Major Event Day – Qualification.....	5
Qualified Events - 2006	5
Current Event – Calculation Detail	5
Cumulative list of events that have qualified	5
Event Restoration – Cost Summary	6
Restoration Cost Detail by Qualifying Event.....	6
YTD Storm Restoration Cost Detail – Through January 31, 2006	6
Detail Documents.....	7
Restoration Cost Detail – Current Event	8
Detailed List of Distribution Circuits with Outages	9
Terms, Codes and Definitions Used on Detail Reports	11
Newsprint Media Coverage	12

Event Description

Date of event

January 31, 2006

Event Type

Wind storm.

Service Areas Affected

This was a moderate wind storm which impacted primarily the northern and southern portions of PSE's electric service areas in Whatcom, Pierce and Thurston counties. This storm resulted in a high number of tree and limb-related outages, particularly in the rural areas of Pierce and Thurston counties.

Number of Customers Affected

Approximately 27,000 customers lost power during the event.

Summary of System Impacts

Total Number of Outages	256
Distribution Circuits Totally Out	5
Distribution Circuits Partially Out	251

Transmission Circuits Affected	5
Substations Totally Off-line	0

Mobilization Summary

Operating bases

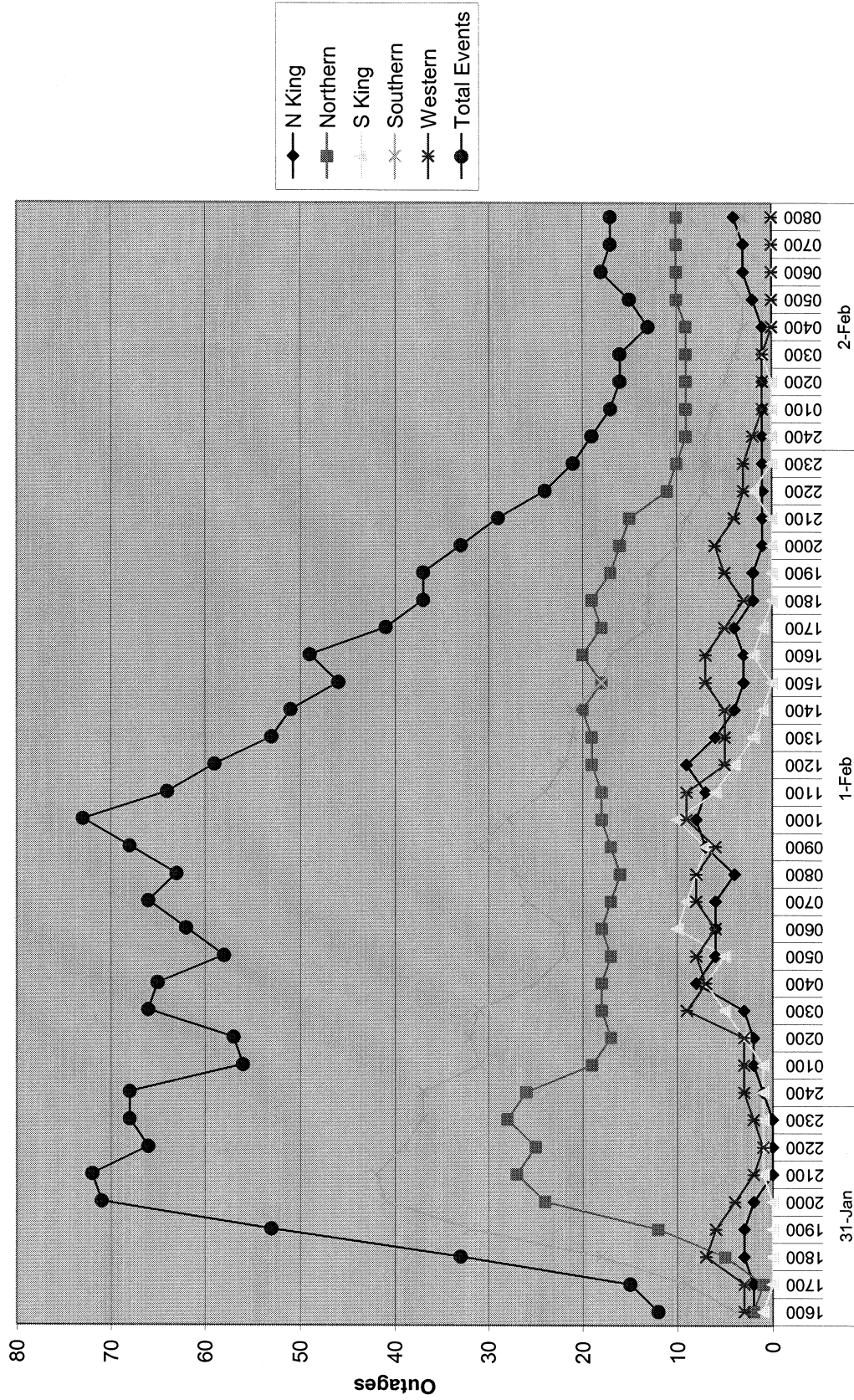
Base	Date Opened	Time Opened	Date Closed	Time Closed
Thurston	1/31/06	18:30	2/1/06	23:00
Pierce	1/31/06	20:00	2/1/06	18:45
Whatcom	1/31/06	20:00	2/1/06	04:30

Emergency Operations Center

EOC	Date Opened	Time Opened	Date Closed	Time Closed
	1/31/06	19:30	2/1/06	02:00

Qualifying Storm Event
January 31, 2006

Outage Events - January 31, 2006



Major Event Day – Qualification

IEEE 1366 Method

IEEE 1366 was established to present a set of terms and definitions which can be used to foster uniformity in the development of distribution service reliability indices, to identify factors which affect the indices, and to aid in consistent reporting practices among utilities. Also, it provides guidance for new personnel in the reliability area, and tools for internal as well as external comparisons. The Major Event Day definition was created as part of IEEE 1366 to allow for consistent calculation of reliability metrics between utilities, and enable more valid comparisons with other utility reliability metrics.

IEEE Major Event Day Calculation (2.5 BETA METHOD)

1. A threshold on daily SAIDI is computed once a year, following year end.
2. Assemble the 5 most recent years of historical values of SAIDI/day.
3. Discard any days in the data set that has a SAIDI/day of zero.
4. Find the natural logarithm of each value in the data set.
5. Compute the average Alpha and the standard deviation (Beta) of the natural logarithms computed in step 3.
6. Compute the threshold Tmed where $Tmed = \exp(\text{Alpha} + 2.5 * \text{Beta})$
7. Any day in the next year with SAIDI > Tmed is a major event day.

Puget Sound Energy's Major Event Threshold for 2006: 4.97 Minutes

Qualified Events - 2006

Current Event – Calculation Detail

Event Date	Total Customer Minutes	Average Customer Count	Daily SAIDI – Customer Minutes / Customer Count
1/31/2006	11,492,179	1,026,970	11.19

Cumulative list of events that have qualified

Date(s)	T-med Score	O&M – Deferrable Accumulation
1/1/2006	5.35	\$248,103
1/31/2006	11.19	\$653,176

Event Restoration – Cost Summary

Restoration Cost Detail by Qualifying Event

Date	Capital	C&D Costs Recoverable from Direct Billings (Costs Not Yet Billed)	O&M – Not Deferrable	O&M – Deferrable Accumulation	Total O&M	Total
1/1/2006*	\$0	\$0	\$23,995	\$242,708	\$266,703	\$266,703
1/31/2006	\$70,613	\$0	\$35,780	\$653,176	\$688,956	\$759,569

* Costs reported for this storm on the 2006 Qualifying Storm Events report filed on March 31, 2006 have been adjusted to reflect current accounting information.

YTD Storm Restoration Cost Detail – Through January 31, 2006

Catastrophic Deferred Account	Capital	C&D Costs Recoverable from Direct Billings (Costs Not Yet Billed)	O&M – Not Deferrable	O&M Deferrable Accumulation	Total O&M	Total
\$0	\$70,613	\$0	\$59,775	\$895,884	\$955,659	\$1,026,272

Qualifying Storm Event
January 31, 2006

Detail Documents

Restoration Cost Detail – Current Event

Detailed List of Distribution Circuits with Outages

Terms, Codes & Definitions Used on Detail Reports

Newsprint Media Coverage

Restoration Cost Detail – Current Event

Puget Sound Energy						
January 31, 2006 Storm Damage Repair Costs						
	Catastrophic Deferred Account	Capital	C&D Recoverable from Direct Billings (Costs Not Yet Billed)	O&M - Not Deferrable	O&M - Deferrable Accumulation	Total O&M
Labor						
ST		\$34			\$4,318	\$4,352
OT	\$0	\$0			\$67,832	\$67,832
Total Labor	\$0	\$34	\$0	\$0	\$72,149	\$72,183
Labor OH		\$279			\$43,245	\$43,524
Materials		\$7,016			\$19,119	\$26,135
Contractors		\$63,253			\$511,937	\$575,190
Other Direct						
Charges		\$0			\$2,504	\$2,504
Fleet		\$31			\$13,854	\$13,885
Other Assessments				\$35,780	(\$9,632)	\$26,148
	\$0	\$70,613	\$0	\$35,780	\$653,176	\$688,956
						\$759,569

Detailed List of Distribution Circuits with Outages

Notification	Date	Time	Circuit	Area	Cause	Equipment	Cust Outs	Cust Mins
E270276746	1/31/2006	7:35:00	SCH-13	EAA	BA	OFU	18	1,985
E686599215	1/31/2006	8:00:00	FRU-25	ECA	SO	UPC	22	5,280
E864917702	1/31/2006	8:00:00	PIP-25	EBI	SO	UPC	4	800
E831560522	1/31/2006	9:33:00	MIR-17	EBJ	TF	OCR	15	2,640
E294037079	1/31/2006	10:00:00	LAB-25	EAA	SO		87	11,310
E742159127	1/31/2006	10:22:00	RAI-11	ECC	TF	OCO	142	12,354
E410578463	1/31/2006	11:41:00	KEA-15	ECF	EF	OCO	22	5,016
10618336	1/31/2006	12:00:00	ORT-22	ECA	DU	USV	1	130
E653205648	1/31/2006	12:02:00	SHD-18	EBI	CP	OPO	6	408
E325550194	1/31/2006	13:01:00	BRS-24	EAC	BA	OTF	1	79
E263709831	1/31/2006	13:17:00	LEA-16	EBI	TF	OCO	12	1,692
E089404904	1/31/2006	13:37:00	POU-16	ECE	TO	OCO	8	824
E519874133	1/31/2006	14:29:00	HAZ-15	EBE	EF	USV	1	289
10618962	1/31/2006	14:49:00	YEL-27	ECC	EF	USV	1	956
E673299123	1/31/2006	14:50:00	YEL-27	ECC	EF	OCO	273	481,572
E254974206	1/31/2006	14:53:00	IRO-13	ECF	TO	OCO	32	4,086
E296088787	1/31/2006	15:21:00	MLK-16	EBE	EF	USE	20	6,740
E453027219	1/31/2006	15:40:00	MOT-17	ECC	EF	UPT	57	30,666
E282318372	1/31/2006	15:55:00	BIG-16	EAC	EF	OTF	1	80
E618583311	1/31/2006	15:57:00	CHR-25	ECE	TO	OCO	23	2,285
E870025148	1/31/2006	16:29:00	YEL-25	ECC	TF	OCO	6,713	2,354,403
E101590255	1/31/2006	16:38:00	BLU-17	ECC	TO	OCO	657	135,999
E108998948	1/31/2006	16:39:00	BIG-12	EAC	EF	OFU	10	830
E652936905	1/31/2006	16:46:00	ORT-22	ECA	TF	OCR	1,761	825,320
E565738973	1/31/2006	16:47:00	LON-22	ECC	TO	OTR	1,700	2,450,116
E953176079	1/31/2006	16:48:00	LON-26	ECC	TF	OTR	1,154	1,479,428
E822039899	1/31/2006	17:03:00	CHI-12	ECD	TO	OCO	1,006	208,242
E371314405	1/31/2006	17:18:00	GRI-13	ECC	TF	OCO	33	51,546
E683339366	1/31/2006	17:19:00	ROC-25	ECC	TO	OCO	12	14,124
E310652307	1/31/2006	17:19:00	NOB-24	EBE	EF	USV	1	162
E935664008	1/31/2006	17:19:00	DIS-12	ECF	TO	OCO	30	9,972
E076075764	1/31/2006	17:32:00	KAP-16	ECA	TO	OPO	114	177,498
E145310683	1/31/2006	17:33:00	KAP-15	ECA	TO	OCO	322	116,927
E182754603	1/31/2006	17:35:00	CRE-12	EAD	EF	OFU	25	1,100
E441138987	1/31/2006	17:37:00	HAS-15	ECF	TO	OCO	1,261	78,350
E299748541	1/31/2006	17:39:00	ROC-16	ECC	TO	OCO	157	89,804
E670847987	1/31/2006	17:41:00	NLM-15	EAC	TF	OCO	25	7,631
E506287293	1/31/2006	17:44:00	PGA-13	ECE	EF	OFU	3	549
E525759937	1/31/2006	17:44:00	FRG-26	ECC	TO	OCO	472	185,968
E255210053	1/31/2006	17:47:00	SUM-15	EAC	TF	OCO	12	10,584
E276697539	1/31/2006	17:53:00	GRI-15	ECC	TF	OCO	799	1,106,615
E092832672	1/31/2006	17:54:00	SWA-12	EAD	EF	OFC	25	2,375
E787991649	1/31/2006	18:06:00	ALG-15	EAA	TO	OCO	30	9,660
E320727765	1/31/2006	18:15:00	SCH-15	EAA	CP	OTR	639	10,949
E736417703	1/31/2006	18:17:00	RHO-15	ECA	TO	OFU	30	12,990
E474646322	1/31/2006	18:26:00	TAN-16	ECC	TF	OCO	14	7,420
E375705270	1/31/2006	18:27:00	PTR-14	EAA	TO	OCO	19	10,507
E392718839	1/31/2006	18:32:00	BLU-13	ECC	TF	OCO	64	67,520
E282076887	1/31/2006	18:33:00	SHA-13	ECA	TF	OTH	1,721	437,134
E340961470	1/31/2006	18:38:00	ELD-23	ECC	TF	OCO	54	13,284
E473020656	1/31/2006	18:41:00	GBK-13	EAD	EF	OFU	25	4,800
E860935850	1/31/2006	18:50:00	SHE-25	ECE	EF	OPO	1	49
E285230800	1/31/2006	18:54:00	FRG-25	ECC	TF	OCO	15	8,115
E128186831	1/31/2006	18:54:00	RAI-11	ECC	TF	OCO	50	49,300
E704795958	1/31/2006	18:54:00	BUC-16	ECA	TF	OCO	3	1,275
E415502953	1/31/2006	18:56:00	ORT-23	ECA	TO	OCO	18	16,992

Qualifying Storm Event
January 31, 2006

Notification	Date	Time	Circuit	Area	Cause	Equipment	Cust Outs	Cust Mins
E071849824	1/31/2006	18:57:00	PLG-13	ECC	TO	OCO	27	17,955
E599942689	1/31/2006	18:57:00	KAP-13	ECA	TF	OCO	2	3,326
E428839820	1/31/2006	18:58:00	BRW-13	EAC	TF	OCO	426	119,164
E558197370	1/31/2006	18:59:00	MCK-16	EAA	TF	OCO	25	13,025
E119481601	1/31/2006	18:59:00	BUC-26	ECA	TF	OCO	22	7,040
E381649600	1/31/2006	19:00:00	CRE-15	EAD	EF	OTF	6	1,020
E885670582	1/31/2006	19:01:00	CLV-16	EAD	EF	OCO	20	4,160
E848565068	1/31/2006	19:03:00	BRW-15	EAC	EF	OCO	50	14,850
E258744526	1/31/2006	19:05:00	ELD-25	ECC	TF	OCO	10	6,650
E294861641	1/31/2006	19:08:00	CHA-15	ECC	TO	OCO	23	14,536
E547298825	1/31/2006	19:11:00	HAP-13	EAA	TO	OCO	25	6,325
E908173567	1/31/2006	19:12:00	HEM-17	ECA	TO	OFU	1,271	232,593
E344191492	1/31/2006	19:22:00	HAS-15	ECF	TO	OCO	15	1,845
E158527180	1/31/2006	19:28:00	HAN-16	EAA	TO	OCO	6	2,532
10618903	1/31/2006	19:29:00	CLV-15	EAD	EF	OCO	25	4,500
E086614176	1/31/2006	19:30:00	BON-15	ECA	TO	OFU	45	14,445
E500028381	1/31/2006	19:30:00	RHO-13	ECA	TO	OFU	2	700
10619343	1/31/2006	19:36:00	SLA-16	EAA	TO	OCO	35	13,370
E997983706	1/31/2006	19:36:00	SLA-16	EAA	TO	OCO	95	47,405
E534535328	1/31/2006	19:38:00	BON-13	ECA	TO	OFU	55	15,290
E595616469	1/31/2006	19:40:00	PLY-16	EAA	TO	OCO	1,884	103,188
E832318254	1/31/2006	19:42:00	WOB-25	EAA	TO	OCO	1,347	132,006
E434033414	1/31/2006	19:44:00	WLK-13	ECA	TF	OCO	10	5,450
E713162806	1/31/2006	19:48:00	BON-16	ECA	TF	OCO	10	5,250
E745528969	1/31/2006	19:56:00	MCK-15	EAA	TO	OFU	35	5,215
E605253287	1/31/2006	20:04:00	SWA-13	EAD	TF	OTF	3	168
E278266878	1/31/2006	20:07:00	DGR-15	ECA	TF	OSV	5	1,955
E913624468	1/31/2006	20:33:00	SHD-18	EBI	TF	OCO	10	2,669
E004511313	1/31/2006	20:43:00	BLU-17	ECC	TF	OCO	45	23,715
E672767852	1/31/2006	20:47:00	RAI-12	ECC	TF	OCO	25	10,075
E287164940	1/31/2006	20:53:00	LAB-25	EAA	EF	OCO	2	916
10618870	1/31/2006	21:21:00	SUM-15	EAC	EF	OCO	10	2,960
E491256884	1/31/2006	22:01:00	SCH-13	EAA	TO	OCO	1,249	104,135
E175030570	1/31/2006	22:08:00	HAS-15	ECF	TO	OCO	7	2,413
E351757576	1/31/2006	22:15:00	VIS-25	EAA	TO	OFU	2	304
E260498462	1/31/2006	22:15:00	FLD-13	EAD	TF	OFU	25	1,100
E197901511	1/31/2006	22:21:00	YEL-25	ECC	TO	OCO	11	1,683
E289199247	1/31/2006	22:30:00	YEL-23	ECC	TF	OCO	16	16,048
E305096583	1/31/2006	23:33:00	COT-13	EBD	TF	OCO	20	4,960
E904736780	1/31/2006	23:56:00	MIL-22	ECE	TO	OFU	5	508

Terms, Codes and Definitions Used on Detail Reports

Notification	[Notification Number] A number assigned by SAP, identifying the outage record
Date	The date of the outage
Time	The time of the outage
Circuit	[Reference Circuit] The circuit identifier for the affected circuit
F/LOC	[Functional Location] The grid number where the outage occurred. If the grid number is not available, the Reference Circuit identifier occupies this field
EQT NBR	[Equipment Number] A number used to tie the equipment involved in the outage to the related information in SAP. This number does not represent the physical number of the equipment

Area	[Maintenance Planner Group] A code representing the energy, region and service center	
	EAA – Bellingham	EBJ – South King
	EAB – Lynden	EBK – Southwest King
	EAC – Skagit	EBL – Vashon
	EAD – Whidbey	ECA – Puyallup
	EBD – Redmond	ECC – Olympia
	EBE – Factoria	ECD – Port Orchard
	EBF – Snoqualmie	ECE – Poulsbo
	EBI – Enumclaw	ECF – Port Townsend

Cause	Cause of Outage	
	AO – Accident Other	EF – Equipment Failure
	BA – Bird or Animal	EO – Electrical Overload
	CP – Car Pole	TF – Tree Off Right-of-Way
	CR – Customer Request	TO – Tree On Right-of-Way
	DU – Dig-up Underground	UN – Unknown
	SO – Scheduled Outage	

Equipment	Affected by, or involved in the outage	
	OCN – Connector	OSW – Overhead Switch
	OCO – Overhead Conductor	OTF – Overhead Transformer Fuse
	OCR – Crossarm	OTR – Overhead Transformer
	OFC – Overhead Cut-out	OUP – OH to UG Primary
	OFS – Overhead Fire Signal	OUS – OH to UG Secondary Service
	OFU – Fuse Link/OH Line Fuse	SBF – High-side Bank Fuse
	OGS – Span Guy	SCB – Power Circuit Breaker
	OHR – Overhead Recloser	UOT – Underground Outdoor Term
	OIN – Insulator	UPC – Underground Primary Cable
	OJU- Jump Wire	UPT – Padmount Transformer
	OPO – Pole	USV – Underground Service
	OSV – Overhead Service	UTC – Underground Terminal Fuse
	ORE – Regulator	UTR – Submersible Transformer

Codes, Definitions – Continued

CUST OUT	[Customer Out] The number of customers without power for any given outage record
CUST MIN	[Customer Minutes] The total number of minutes customers were without power for any given record
CODE	[Storm Code] An event descriptor
	NON – Non Storm / Normal Conditions
	WTH – Weather Related (eg: wind storm, showers, etc)
	MAJ – Major event

Newsprint Media Coverage

No coverage for this event.