

# 2012 Qualifying Events Report

November 19, 2012 Event

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# **Event Description**

## Date of event

November 19, 2012

# **Event Type**

Wind storm.

## **Service Areas Affected**

**Thurston County** 

## **Number of Customers Affected**

Approximately 43,450 customers were without power over the course of this event.

# **Summary of System Impacts**

Total Number of Outages	169
Distribution Circuits Totally Out	10
Distribution Circuits Partially Out	159

Transmission Circuits Affected	3
Substations Totally Off-line	3

# **Mobilization Summary**

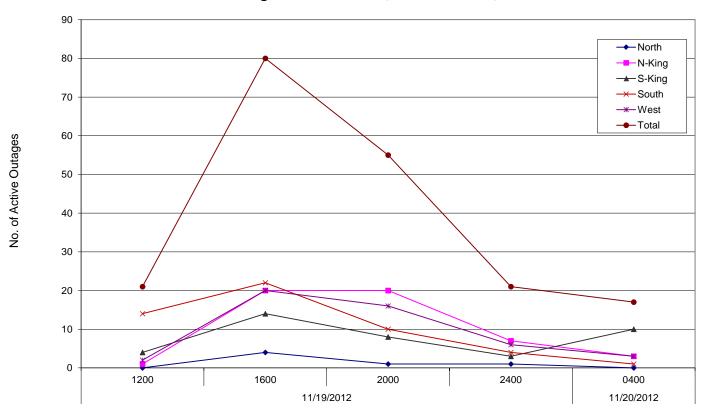
# **Operating Bases**

Base	Date Opened	Time Opened	Date Closed	Time Closed	
Thurston	11/19/2012	11:00	11/19/2012	21:30	

## **Emergency Coordination Center**

FCC	Date Opened	Time Opened	Date Closed	Time Closed
ECC	N/A			

Outage Events - Nov. 19, 2012 to Nov. 20, 2012



Date &Time

## 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 (Alpha + 2.5 \* Beta)
- 7. Any day in the next year with SAIDI > Tmed is a major event day.

## Puget Sound Energy's Major Event Threshold for 2012: 5.38 Minutes

## **Qualified Events - 2012**

### **Current Event - Calculation Detail**

Event Date	Total Customer Minutes	Average Customer Count	Daily SAIDI – Customer Minutes /Customer Count
01/18/2012	1,374,545,559	1,091,788	1,258.99
03/12/2012	11,004,046	1,092,611	10.07
11/19/2012	6,911,043	1,095,656	6.31

## Cumulative list of events that have qualified

Date(s)	T-med Score	O&M – Deferrable Accumulation
01/18/2012	1,258.99	\$8,000,000
03/12/2012	10.07	\$0
11/19/2012	6.31	\$0

# **Event Restoration – Cost Summary**

# **Restoration Cost Detail by Qualifying Event**

Date	Qualified Events Deferred Account	Canital Direct Rillings		O&M – Not Deferrable	O&M – Deferrable Accumulation	Total O&M	Total
01/18/2012	\$58,370,860(r)	\$5,893,856(r)	\$0	\$1,610,921(r)	\$8,000,000	\$67,981,780(r)	\$73,875,636(r)
03/12/2012	\$420,528(r)	\$132,916(r)	\$0	\$42,432(r)	\$0	\$462,959(r)	\$595,876(r)
11/19/2012	\$170,985	\$2,742	\$0	\$13,185	\$0	\$184,170	\$186,912

<sup>(</sup>r) Reflects updated repair costs through 11/19/12

# YTD Storm Restoration Cost Detail - Through November 19, 2012

Qualified Events 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
\$58,962,373(r)	\$6,029,514(r)	\$0	\$1,666,537(r)	\$8,000,000	\$68,628,910(r)	\$74,658,424(r)

<sup>(</sup>r) Reflects updated repair costs through 11/19/12

# **Detail Documents**

Restoration Cost Detail – Current Event

Detailed List of Distribution Circuits with Outages

Terms, Codes and Definitions Used on Detail Reports

Newsprint Media Coverage

# **Restoration Cost Detail – Current Event**

					Puget Sound	d Er	nergy						
	November 19, 2012 - Storm Damage Repair Costs												
	fying Events red Account	Ca	pital	Direct B	ecoverable from Billings (Costs Not Yet Billed)	_	&M - Not eferrable		O&M - Deferrable ccumulation	T	otal O&M		Total
Labor													
ST		\$	46			\$	-	\$	4,928	\$	4,928	\$	4,974
ОТ		\$	128			\$	-	\$	11,648	\$	11,648	\$	11,776
Total Labor	\$ -	\$	174	\$	-	\$	-	\$	16,576	\$	16,576	\$	16,750
Labor OH		\$	99			\$	(6,063)	\$	15,316	\$	9,253	\$	9,353
Materials		\$	434			\$	-	\$	6,467	\$	6,467	\$	6,901
Contractors		\$ 1	,591			\$	-	\$	144,268	\$ 1	144,268	\$	145,859
Other Direct Charges		\$	-			\$	-	\$	2,454	\$	2,454	\$	2,454
Fleet		\$	25			\$	-	\$	1,862	\$	1,862	\$	1,886
Other Assessments		\$	420			\$	19,247	\$	(15,958)	\$	3,289	\$	3,709
Deferred Expenses	\$ 170,985							\$	(170,985)	\$	(170,985)	\$	0
	\$ 170,985	\$ 2	2,742	\$	_	\$	13,185	\$	170,985	\$ ^	184,170	\$	15,927

**IEEE-1366 - Detailed List of Distribution Circuits with Outages** 

NUMBER	DATE	TIME	СКТ	MPG	CAZ	EQT	CUST.OUT	CUST. MIN
11058036	11/19/2012	12:22:00 AM	OBY-17	ECC	EF	OFC	1	232
E093072433	11/19/2012	2:56:10 AM	MVW-17	EBJ	TV	OFU	50	3,376
E063894294	11/19/2012	3:16:02 AM	WLK-13	ECA	TV	OCO	21	8,903
E951813095	11/19/2012	3:17:32 AM	SNQ-15	EBF	TV	OCO	6	1,035
E303371784	11/19/2012	3:23:47 AM	RAI-13	ECC	TV	OCO	14	1,704
E280002711	11/19/2012	3:46:21 AM	VAS-13	EBL	EF	OCO	3	328
E595689373	11/19/2012	3:59:13 AM	FRA-12	ECD	TV	OCO	14	3,587
E673390069	11/19/2012	4:00:54 AM	LON-22	ECC	TV	OTR	7	1,968
E733810060	11/19/2012	4:56:57 AM	PMA-16	ECE	EF	oco	19	2,907
E918804057	11/19/2012	5:10:43 AM	PMA-15	ECE	EF	oco	7	3,047
E185620092	11/19/2012	5:21:15 AM	EAR-17	EBJ	TV	OPO	7	3,617
E194414553	11/19/2012	6:00:38 AM	SIN-23	ECD	TV	oco	14	2,945
E593894116	11/19/2012	7:12:44 AM	SWD-12	ECE	EF	OTF	1	82
E459523426	11/19/2012	7:25:14 AM	EGT-16	EBE	TV	OTF	5	494
E616377340	11/19/2012	7:48:21 AM	AVO-15	EBD	EF	OJU	30	4,310
E365889149	11/19/2012	8:09:45 AM	SHD-17	EBI	TV	OTF	2	233
E364094636	11/19/2012	8:15:00 AM	YEL-27	ECC	TV	oco	8	1,194
E020131881	11/19/2012	8:48:19 AM	CHA-12	ECC	EF	OTF	2	63
11059732	11/19/2012	8:52:34 AM	RAI-12	ECC	TV	oco	181	71,935
E700873988	11/19/2012	9:14:00 AM	PLY-16	EAA	SO	UPT	2	330
E659212844	11/19/2012	9:20:38 AM	ORT-22	ECA	TV	OSV	1	131
E848191355	11/19/2012	9:30:00 AM	BTR-25	EBE	SO	UJU	25	1,500
E936907258	11/19/2012	9:39:10 AM	TAN-13	ECC	TV	OFU	21	1,005
E422640035	11/19/2012	9:59:14 AM	FRG-22	ECC	TV	oco	2	502
E282786987	11/19/2012	10:00:00 AM	VIS-22	EAA	SO	OPO	4	1,028
E679064920	11/19/2012	10:08:33 AM	ROC-26	ECC	TV	OFU	100	4,945
E665479929	11/19/2012	10:10:00 AM	GRA-25	EBJ	EF	oco	1	31
E741326234	11/19/2012	10:15:00 AM	LUH-14	ECC	TV	ОТН	3,573	930,171
E076940735	11/19/2012	10:18:53 AM	HKX-16	EAC	TV	OPO	218	156,331
E655368731	11/19/2012	10:20:08 AM	SWA-15	EAD	EF	OCN	1	74
E699276514	11/19/2012	10:24:40 AM	KLA-17	EBF	ТО	000	1,164	63,244
E745857792	11/19/2012	10:25:58 AM	LON-23 TLN-	ECC	TV	OTH	909	149,106
E483838734	11/19/2012	10:27:27 AM	0154	ECC	TV	OCO	4,294	122,594
E305110753	11/19/2012	10:30:00 AM	RAI-13	ECC	TV	OCO	1,801	179,750
E788160299	11/19/2012	10:36:20 AM	PAT-17	ECC	TV	OCO	270	99,810
E019914591	11/19/2012	10:40:00 AM	RAI-12	ECC	TV	OCO	727	251,494
E532292655	11/19/2012	10:57:00 AM	PMA-12	ECE	TV	OIN	2	688
E659019047	11/19/2012	11:05:09 AM	LMD-16	EBJ	TV	OFU	8	903
E541190608	11/19/2012	11:06:51 AM	LON-17	ECC	TV	OCO	75	45,611
E744635689	11/19/2012	11:07:03 AM	HOB-15	EBI	TV	OCO	22	5,545
E052772573	11/19/2012	11:11:20 AM	BLU-16	ECC	TV	oco	755	181,703
E137249406	11/19/2012	11:15:32 AM	YEL-23	ECC	EF	OTF	1	82
E094321719	11/19/2012	11:20:59 AM	ROC-26	ECC	EF	OJU	20	5,100
E133547304	11/19/2012	11:29:57 AM	SHD-18	EBI	TV	OHS	207	13,465
E099344370	11/19/2012	11:34:42 AM	GAR-13	ECA	TV	oco	15	3,536

NUMBER	DATE	TIME	CKT	MPG	CAZ	EQT	CUST.OUT	CUST. MIN
E079596313	11/19/2012	11:35:21 AM	RAI-14	ECC	TV	oco	6	3,898
E852965157	11/19/2012	11:40:31 AM	OSC-23	EBI	TV	oco	6	1,863
E656030195	11/19/2012	11:46:23 AM	HOL-12	ECA	TV	OCO	1,229	112,597
E656664420	11/19/2012	11:48:12 AM	WIS-16	EBF	TF	OCO	791	41,765
E716660762	11/19/2012	11:48:47 AM	BLU-13	ECC	TV	OCO	27	12,588
E752582434	11/19/2012	11:50:30 AM	GOO-13	EBE	TV	OCO	3,584	8,960
E148948491	11/19/2012	12:02:00 PM	LON-25	ECC	TV	OTH	1,276	135,248
E060568900	11/19/2012	12:06:32 PM	AIR-26	ECC	TV	OCO	25	8,737
E198573761	11/19/2012	12:11:30 PM	PRI-13	ECC	TV	OCO	15	3,668
E687986253	11/19/2012	12:29:52 PM	RHO-15	ECA	TV	OCO	1,921	167,383
E303421380	11/19/2012	12:35:22 PM	GRV-12	ECA	PO	OSV	1	121
E245355553	11/19/2012	12:56:36 PM	WIS-12	EBF	TV	OCO	5	432
E739248306	11/19/2012	1:02:16 PM	FRA-12	ECD	TV	OCO	1,063	37,985
E754002733	11/19/2012	1:05:15 PM	MAN-12	ECD	TV	oco	143	63,742
E735774166	11/19/2012	1:05:24 PM	LAC-17	ECC	TV	oco	30	6,738
E946581661	11/19/2012	1:05:26 PM	CHI-12	ECD	TV	OFU	1	210
E101403415	11/19/2012	1:06:16 PM	DUV-12 TLN-	EBD	TV	oco	140	18,443
E280621146	11/19/2012	1:11:00 PM	0283	ECE	TV	OCO	5,235	1,985,085
E630959461	11/19/2012	1:11:21 PM	SAH-15	EBD	TV	OCO	78	56,679
E141908985	11/19/2012	1:13:42 PM	PIN-26	EBF	TV	OCO	80	6,984
E006333006	11/19/2012	1:16:00 PM	VAS-13	EBL	UI	VCB	1,847	151,454
E328061097	11/19/2012	1:20:37 PM	LOL-21	ECD	TV	OCO	29	17,208
E143311265	11/19/2012	1:21:02 PM	LTA-17	ECA	CP	OPO	1	554
E854765587	11/19/2012	1:21:06 PM	PMA-13	ECE	TV	OIN	99	48,995
11059740	11/19/2012	1:22:00 PM	VAS-12	EBL	EF	OPO	1,685	313,318
E906735106	11/19/2012	1:24:18 PM	STA-26	EBJ	TO	OCO	1,411	87,059
E799207742	11/19/2012	1:24:24 PM	MWD-16	EBE	TO	OCO	738	83,837
E642463445	11/19/2012	1:25:56 PM	BRW-15	EAC	EF	OTR	3	1,310
E327790302	11/19/2012	1:26:04 PM	PMA-16	ECE	TV	OFU	12	2,435
E399869757	11/19/2012	1:30:09 PM	HWD-25	EBD	TV	OCO	417	177,162
E025084652	11/19/2012	1:32:35 PM	DUV-13	EBD	TF	OCO	1,718	110,824
E328974633	11/19/2012	1:36:16 PM	KWH-25	EBE	TV	OCO	2	821
E300462773	11/19/2012	1:39:51 PM	WAY-15	EBD	TO	OCO	808	266,489
E390317359	11/19/2012	1:40:07 PM	UHL-25	EBD	TV	OCO	64	16,701
E009466050	11/19/2012	1:42:14 PM	MST-23	EBI	TF	OCO	1,653	109,429
E170633114	11/19/2012	1:42:25 PM	ING-16	EBD	TV	OCO	5	1,873
E545620001	11/19/2012	1:42:38 PM	LMC-25	EBF	TV	OCO	10	1,714
E560611542	11/19/2012	1:44:28 PM	ING-15	EBD	TV	OCO	48	24,602
E405262590	11/19/2012	1:45:48 PM	ORC-17	EBJ	TV	OFU	10	1,432
E725460797	11/19/2012	1:47:00 PM	SCH-16	EAA	EF	OTR	1	282
E160201651	11/19/2012	1:47:07 PM	MVW-15	EBJ	TV	oco	13	6,546
E382873329	11/19/2012	1:48:17 PM	LWS-16	EBI	TV	oco	35	14,235
E618772555	11/19/2012	1:50:39 PM	CLY-25	EBE	TV	oco	36	10,506
E479066008	11/19/2012	1:52:08 PM	SNQ-13	EBF	TV	oco	26	8,463
E291096632	11/19/2012	1:52:24 PM	COT-16	EBD	EF	OFC	19	10,333
E232212662	11/19/2012	1:52:24 PM	MAP-13	EBF	TV	oco	11	1,327
E719962862	11/19/2012	1:53:56 PM	HOU-25	EBE	TV	oco	7	4,403
E361694638	11/19/2012	2:00:45 PM	FRA-12	ECD	TV	oco	5	1,451

NUMBER	DATE	TIME	СКТ	MPG	CAZ	EQT	CUST.OUT	CUST. MIN
E143271825	11/19/2012	2:02:47 PM	DGR-15	ECA	TV	OPO	2	856
11058045	11/19/2012	2:06:00 PM	CRE-12	EAD	EF	OJU	1	127
E662134377	11/19/2012	2:06:07 PM	KCR-17	EBJ	TV	osv	1	352
E819400168	11/19/2012	2:07:16 PM	BEL-26	EBJ	TV	OTF	7	2,875
E916224932	11/19/2012	2:09:35 PM	GRV-15	ECA	TV	oco	891	78,559
E653305562	11/19/2012	2:11:22 PM	KNT-37	EBJ	TV	OFU	36	6,719
E248175650	11/19/2012	2:17:14 PM	EDG-16	ECA	TV	OFU	48	8,053
E959798990	11/19/2012	2:17:35 PM	EVA-27	EBJ	TV	OHR	318	30,343
E655686027	11/19/2012	2:29:24 PM	SNQ-17	EBF	TV	oco	37	35,949
E356644412	11/19/2012	2:42:25 PM	WLK-15	ECA	TV	oco	1	648
E086811359	11/19/2012	2:47:19 PM	SEQ-22	EBI	TV	OTF	2	553
E071499971	11/19/2012	2:48:35 PM	OBY-17	ECC	TV	OFC	6	1,149
E734770341	11/19/2012	2:56:30 PM	KCR-16	EBJ	TV	oco	10	5,365
E865618627	11/19/2012	3:07:51 PM	LAC-15	ECC	TV	osv	1	71
E969570823	11/19/2012	3:09:58 PM	PEA-15	EBJ	TV	OPO	4	2,220
E855669756	11/19/2012	3:12:14 PM	BON-15	ECA	TV	OFU	28	3,165
E436339913	11/19/2012	3:15:07 PM	SPA-16	ECA	TV	OTF	1	54
E951181546	11/19/2012	3:17:41 PM	HOL-12	ECA	TV	OFU	82	9,777
E473872615	11/19/2012	3:18:46 PM	BLU-16	ECC	TV	oco	4	433
E955738186	11/19/2012	3:19:50 PM	LON-25	ECC	TV	oco	170	70,918
E873023222	11/19/2012	3:23:06 PM	BIG-12	EAC	UN	OFU	20	1,676
E475439633	11/19/2012	3:29:35 PM	PIN-26	EBF	TV	oco	3	879
E133831695	11/19/2012	3:36:49 PM	DUV-12	EBD	EF	oco	51	6,462
E583499146	11/19/2012	3:36:54 PM	MWD-16	EBE	TV	oco	24	8,445
E733376437	11/19/2012	4:22:37 PM	DUV-12	EBD	TV	oco	66	21,247
E008674301	11/19/2012	4:32:42 PM	LMD-16	EBJ	TV	OTF	1	147
E454194707	11/19/2012	4:34:18 PM	VAS-23	EBL	TV	oco	12	5,396
E138078364	11/19/2012	4:39:49 PM	RAI-11	ECC	TV	OCO	8	2,081
E134887163	11/19/2012	4:43:06 PM	OSC-25	EBI	TV	oco	2	188
E780066237	11/19/2012	4:43:38 PM	SOO-25	EBI	TV	OFU	3	565
E053260525	11/19/2012	4:45:52 PM	LUH-14	ECC	TV	OCO	3	1,278
E915793682	11/19/2012	4:47:16 PM	HKX-12	EAC	TV	OFU	4	387
E372359189	11/19/2012	4:55:10 PM	MIL-23	ECE	TV	OCO	1	414
11058127	11/19/2012	4:57:48 PM	PEA-15	EBJ	EF	OPO	1	447
E977853340	11/19/2012	5:02:48 PM	VAS-12	EBL	TV	OFU	39	3,674
E548733980	11/19/2012	5:06:03 PM	LON-23	ECC	TV	OHR	1	140
E489054285	11/19/2012	5:20:38 PM	STW-12	ECA	TV	OTF	1	155
E300568774	11/19/2012	5:43:46 PM	VAS-13	EBL	TV	OFU	5	481
E827255957	11/19/2012	5:54:45 PM	CLA-13	EBI	TV	OHR	8	7,522
E788396112	11/19/2012	6:19:29 PM	SIL-13	ECE	EF	UPC	1	762
E274156180	11/19/2012	6:38:27 PM	TOL-17	EBD	TV	OCO	4	1,958
E146811075	11/19/2012	6:55:25 PM	FAL-13	EBF	TV	OCO	19	5,564
E908605177	11/19/2012	7:27:05 PM	ING-16	EBD	EF	UFJ	214	52,762
E763799676	11/19/2012	8:29:05 PM	VAS-13	EBL	TV	oco	5	2,775
E259577657	11/19/2012	8:31:23 PM	VAS-12	EBL	TV	oco	15	11,619
E825580750	11/19/2012	8:43:01 PM	MTV-16	EAC	TV	OPI	6	1,565
11059735	11/19/2012	8:57:00 PM	LON-25	ECC	TV	OCO	85	6,800
E904322906	11/19/2012	8:59:12 PM	RAI-12	ECC	TV	OCO	44	11,563

NUMBER	DATE	TIME	CKT	MPG	CAZ	EQT	CUST.OUT	CUST. MIN
11059738	11/19/2012	10:01:00 PM	LOL-21	ECD	TV	oco	59	4,307
11058179	11/19/2012	10:17:00 PM	LYO-12	EBI	EF	USV	1	95
E025107454	11/19/2012	10:27:56 PM	LON-25	ECC	EF	OTF	1	223
E063179644	11/19/2012	10:43:00 PM	MUR-16	ECE	TV	OCO	40	2,720
E224728991	11/19/2012	10:46:40 PM	LYO-12	EBJ	EF	OJU	20	767
11058135	11/19/2012	11:07:00 PM	PIN-25	EBE	EF	USV	1	43
E718782119	11/19/2012	11:34:36 PM	RAI-14	ECC	TV	OFU	2	163
11058318	11/19/2012	11:35:00 PM	ORC-17	EBJ	TV	OCO	22	6,820
E244016331	11/19/2012	11:37:17 PM	WIN-13	ECE	TV	OCO	27	1,247
E573168131	11/19/2012	11:39:19 PM	TRA-23	ECE	EF	OTR	1	711
E093297715	11/19/2012	11:47:04 PM	ORC-17	EBJ	TV	OCO	1	281

# 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					
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	FI – Faulty Installation				
	CR – Customer Request	TF – Tree Off Right-of-Way				
	DU – Dig-up Underground	TO – Tree On Right-of-Way				
	TV – Trees/Vegetation	SO – Scheduled Outage				
	UN – Unknown					
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				
	OPI – Overhead Pin Insulator USV – Underground Service					

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

OPO – Pole

ORE - Regulator

OSV – Overhead Service

UTC – Underground Terminal Fuse

UTR – Submersible Transformer

## Media Coverage



## Thousands lose power as winds topple trees

Gusty winds toppled trees and knocked tree limbs onto power lines Monday, resulting in scattered power outages throughout Thurston County that affected several thousand Puget Sound Energy customers.

ROLF BOONE; STAFF WRITER

Gusty winds toppled trees and knocked tree limbs onto power lines Monday, resulting in scattered power outages throughout Thurston County that affected several thousand Puget Sound Energy customers.

About noon Monday, 7,500 PSE customers were without power. The number of outages was reduced to about 3,600 by 3 p.m., spokeswoman MacKenzie McDowell said.

Students at Rainier Middle School and Rainier High School were sent home early Monday after both schools lost power.

Power outages were triggered by a fall storm that brought heavy rain and gusty winds to Western Washington, resulting in rainfall of more than 2 inches in some areas.

Nearly two inches of rain had fallen in the Olympia area Monday, according to the National Weather Service. Rainfall was expected to ease Monday evening, although more rain and wind is in the forecast for today and the rest of the week. Daytime temperatures are expected to be in the upper 40s to lower 50s.

Flood and wind warnings also were in effect Monday.

Meanwhile, the Washington State Patrol said it responded to 20 vehicle accidents Monday in Thurston and Pierce counties, and Thurston County Public Works reminded residents to clear storm drains to prevent urban flooding. Drivers are cautioned not to drive through standing water.

"The air intake on many cars is low at the front of the car," county officials said in a news release. "Just a cup of water sucked into the combustion chamber can wreck an engine."

Thurston County Emergency Management also said residents should not call 911 to report power outages.

"We want to remind people that 911 is for life-threatening emergencies, but that a simple power outage at your house should be reported to Puget Sound Energy," Thurston County Emergency Management Division manager Kathy Estes said in a statement.



Tuesday, November 20, 2012

## Record Rain Swamps Puget Sound Region

**SEATTLE, Wash.** (Metro) -- Western Washington state is taking a beating as several storms pass over the region today leading to record rainfall and area mudslides.

Puget Sound Energy officials now report some 23 thousand people are without power due to the storms.

Sea-Tac airport was reporting record rainfall as of noon Monday, and snow is falling in some areas of the region, leading to a tough afternoon commute.

Several mudslides have also been reported in the area, including one between Seattle and Everett that has led to the cancellation of both local and Amtrak rail service.

More rain is expected well into the Thanksgiving holiday.



Monday, November 19, 2012

#### 7,500 without power in Thurston County as storm rolls through

Forty- to 50-mile-per-hour wind gusts have knocked out power to several thousand Puget Sound Energy customers in Thurston County, a spokeswoman for the utility said. **ROLF BOONE; STAFF WRITER** 

Forty- to 50-mile-per-hour wind gusts have knocked out power to several thousand Puget Sound Energy customers in Thurston County, a spokeswoman for the utility said.

As of noon Monday, about 26 outages were reported in the county, totaling 7,500 customers, MacKenzie McDowell said.

A fall storm characterized by heavy rain and gusty winds has swept through Western Washington, resulting in rainfall of more than 2 inches in several areas. Through 4 a.m. Monday, 1.61 inches of rain has fallen in the Olympia area, according to the National Weather Service.

A river and small stream flood advisory is in effect for Western Washington, as is a strong wind advisory through Monday afternoon. Rainfall is expected to ease this evening.





# UPDATE | Power out on Bainbridge Island

Officials with Puget Sound Energy report that approximately 5,000 customers on Bainbridge Island are currently without power.

Incidents such as trees falling on power lines are causing many of the outages. PSE is currently attempting to re-route power to those customers, but does not yet have an exact time frame for when power will be restored.

Downtown Winslow businesses began reporting outages along Winslow Way shortly after 1 p.m. Monday.

Eagle Harbor Book Co. posted on its Facebook page that it currently has power provided by a generator, but that the rest of downtown Winslow is in the dark.

Karin Lehotsky, owner of Lollipop's Children's Boutique, has continued to work despite the power outage. She has been putting up holiday decorations by candlelight, Lehotsky said.

Other reports of other power outages range up Madison Avenue, and as far down as Fort Ward.

The wet and windy weather is expected to stick around through Wednesday, according to the National Weather Service in Seattle, as one storm system after another moves through the area.

COURTESY OF KARIN LEHOTSKY.
This fallen tree blocked Buckskin Lane on the south end of Bainbridge Island Monday afternoon

The Kitsap County Emergency Operations Center went to Phase 2 at 1:15 p.m. Monday to prepare for problems caused by heavy rains and breezy conditions, county officials said.

County officials said they have received reports of flooding, roadways congested with overflowing culverts, high tides and collisions.

# PuyallupPatch.

Monday, November 19, 2012

Over 900 PSE Customers in East Pierce County Currently Without Power *PSE reports that about 900 residents in the Puyallup and Bonney Lake-Sumner areas are currently without power.* 

High winds and rain brought power outages to East Pierce County on Thursday, according to a Puget Sound Energy spokeswoman.

As of 3 p.m. on Monday approximately 900 PSE customers are without power, mostly in the Puyallup area.

Across the PSE service area, 23,000 customers are experiencing power loss due to high winds and fallen tree limbs.

PSE crews are working with the National Weather Service to restore power when the forecast clears. Crews are ready but waiting until after 4 p.m. when the winds are forecasted to die down.

If you're experiencing an outage or suspect a natural gas leak, call Puget Sound Energy 1-888-225-5773. Click here for real-time updates, or check Twitter.com/PSETalk.

PSE can't tell us at this time exactly where the outages are occurring so please keep your neighbors informed by leaving your power status in the comment section below.

**Is the power out in your neighborhood?** Tell us in the comments.



## Record-setting rains, gusty winds make travel a headache

By SCOTT SISTEK, KOMO STAFF

Updated 9:13 p.m., Monday, November 19, 2012

A record-setting rain poured down and winds howled across much of Western Washington Monday, toppling trees, knocking out power and turning some streets into impromptu swimming pools.

Over two inches of rain fell in the Seattle metro area with greater amounts out toward the coast and in the hills. Several streets were flooded and there were dozens of accidents, crippling the morning commute.

Over on the northern Oregon and southern Washington coast, winds blasted to hurricane-force strength, even reaching triple digits on some of the exposed hilltops.

In Pacific County, a trooper and another driver miraculously escaped injury when a tree fell on the trooper's car Monday morning.

The trooper had stopped for a mudslide on U.S. 101 at milepost 30, said Trooper Russ Winger, a spokesman for the Washington State Patrol. As the trooper sat in the car, another car pulled up alongside him. Suddenly, a tree fell over on top of the trooper's car, setting it on fire.

The trooper managed to crawl out the passenger door as the fire started, then broke out the window of the other car and freed the woman inside, Winger said.

The trooper then went back to his patrol car and removed the weapons to prevent ammunition from exploding.

The Washington State Department of Transportation reports there were more trees down on Highway 101 about 30 miles north along the Pacific and Grays Harbor County line. Trees were also reported down across state Route 107 near Preachers Slough Road.

The strong winds gusting over 60 mph were also knocking out power along the coast. Grays Harbor PUD says power was out to about 2,500 customers as of late Monday morning.

Wind gusts were even stronger along the southern Washington and Oregon coasts. A semi overturned on the Astoria-Megler Bridge as wind gauges nearby reported a gust to 101 mph. Across the border in Naselle, Wash., a wind gauge high up in the Willapa Hills hit a gust of 114 mph. Astoria had a gust to 92 mph, with gusts to 75-80 mph common along Newport and Tillamook.

Closer to home, in Lacey, gusty winds toppled a large tree into a car in the 6700 block of Martin Way East, witnesses said. Around Seattle and the central Puget Sound area, rain was the biggest headache. State and city Department of Transportation and utility crews were busy clearing clogged storm drains where standing water was backing up into lanes of traffic. The southbound lanes of Highway 99 approaching the Battery Street Tunnel were entirely covered with water during Monday morning's commute, slowing traffic to a crawl, and Mercer Street below the highway was also flooded. In the afternoon, Mercer Street was again the scene of problems as the traffic light went out at the busy intersection with Dexter, leading to a few accidents.

Overall, troopers in King County reported 66 car crashes through 4 p.m. with the evening commute yet to commence, while Thurston and Pierce counties had a combined 20 crashes.

Reports of other flooded streets were widespread across the Puget Sound area. Bothell was hit particularly hard with streets flooded around the 21400 block of 35th Avnue Southeast.

Wind combined with the rains and soggy grounds to topple trees into power lines. Puget Sound Energy reported 23,000 people in the dark Monday afternoon -- mainly on Vashon and Bainbridge islands, while Seattle City Light reported 4,000 people without power in the North Queen Anne, Discovery Park and Fremont areas.

Mudslides in North Seattle affected passenger train service between Seattle and points north. Sound Transit had to cancel Northline Sounder service between Seattle and Everett while Amtrak said service was disrupted between Seattle and Vancouver, B.C. It will remain that way until at least Wednesday due to a required 48-hour wait after a mudslide.

Over 10 mudslides fell along the route with some trees that fell measuring 40 feet tall and 2 feet in diameter, said Gus Melonas with Burlington Northern-Santa Fe.

In Everett, heavy rains caused 10 of 12 combined sewer outfalls to overflow into the Snohomish River and Port Gardner Bay, the city said. One of the sewer lift stations in the separated system also overflowed for approximately 55 minutes. Quantities are unknown at this time.

Qualifying Storm Event November 19, 2012

Everett has notified local agencies including state departments of Health and Ecology, Snohomish Health District and Port of Everett.

In Kitsap County, street flooding has been an issue in both Bremerton and Port Orchard.

In downtown Port Orchard, water was up about halfway on cars' tires as the rain poured down there. Flooding was also causing issues along Seabeck Highway and Arnold Avenue, off Beach Drive in South Kitsap.

Water also covered four blocks of Kirkland's Totem Lake Blvd from 120th Ave Northeast to 124th Ave Northeast late Monday morning, Other spots around that city also had urban flooding, including Billy Creek, the Plaza at Yarrow Bay and a slide reported at 405 Lake Street. In Bellevue, part of the new northbound Interstate 405 bypass ramp to Eastbound state Route 520 was closed due to rainwater causing erosion under the ramp.

Strong winds also caused a truck to overturn on the Chehalis Bridge. The National Weather Service is warning of increased risks of landslides and mudslides as the heavy rain falls. Heavier rains were falling in the mountains, prompting flood warnings for the Skokomish, Chehalis and Newakum Rivers. Moderate flooding was expected on the Newakum and Chehalis with minor flooding on the Skokomish.

Centralia declared a local state of emergency and opened up an emergency shelter as local rivers and streams were expected to climb over flood stage.

The heavy rainfall also prompted King County to open its Flood Warning Center on Monday evening.

#### Seattle weather calendar says Monday rain is no surprise

For those who follow the Seattle weather calendar, rain today should not have been a surprise. Nov. 19 is statistically the most likely day to have rain in Seattle, as it has rained a whopping 88 times in the past 119 years. Make that 89 out of 120. No other day is even close (second-wettest is 81 times on Dec. 29). What's even more amazing about the gravitation of rain to this date is that the other dates surrounding the 19th have "only" had rain about 65 times -- about 20 percent less.But to give an idea of how wet Monday was, in all those 88 times it's rained before on this date, it's never rained this much. Through 10 a.m., Seattle had already set its daily rainfall record with 1.48" of rain, breaking the old record of 1.23" set in 1962, and the rain was still coming down.

Heavy rains were expected to taper off Monday evening but several more storms are lined up to keep the rain going through Thanksgiving weekend.

#### **Peak Gusts In Windstorm:**

- Naselle Ridge: 114 mph (2,000 feet)Crystal Mountain Ski: 107 mph
- Megler Tower (1.200 feet; near Astoria): 101 mph
- Yaqina Head (Ore.): 98 mph
- Astoria: 92 mphLincoln City: 85 mph
- Newport: 80 mph
- Cape Disappointment: 76 mphPacific City (Ore.): 75 mph
- Warrenton: 69 mph
  Hoquiam: 61 mph
  Tillamook: 59 mph
  Everett: 49 mph
  Olympia: 41 mph
- Seattle (Boeing Field: 40 mph)
- Alki Beach: 40 mphTacoma: 39 mphSeattle: 36 mph