### RE 112 e-FILING REPORT COVER SHEET

## **REPORT NAME:**

PGE's Major Storm/Event Exclusion for October 13, 2016

#### COMPANY NAME:

Portland General Electric

# DOES REPORT CONTAIN CONFIDENTIAL INFORMATION?

X No

If known, please select designation:

X RE (Electric)

Report is required by:

X OAR 860-023-0161

Is this report associated with a specific docket/case?

X No

Key words:

PGE's Major Storm/Event Exclusion for October 13, 2016

If known, please select the PUC Section to which the report should be directed:

X Electric Rates and Planning



**Portland General Electric Company** 121 SW Salmon Street • Portland, Oregon 97204 PortlandGeneral.com

November 15, 2016

Oregon Public Utility Commission Attn: Filing Center 201 High Street, S.E. Salem, OR 97308-1088

Re:Major Storm/Event ExclusionPeriod:October 13, 2016

Portland General Electric (PGE) hereby submits this report in compliance with OAR 860-023-0161 which requires the electric company to file a report with the Commission within 30 business days after the conclusion of an event. This report provides a summary of the major storm event that occurred on October 13, 2016.

OAR 860-023-0161: Major Event Filing by Electric Companies

1. Description of the major event, the interruption causes, and factors that impacted restoration of service.

On October 13, 2016, PGE's entire service territory experienced a windstorm causing widespread outages. The Portland area experienced wind gusts of 36 mph, Salem experienced wind gusts of 36 mph, and Hillsboro experienced wind gusts of 36 mph.

The severe wind combined with an extremely wet October caused many tree related outages. Uprooted trees and broken limbs caused damage to PGE overhead equipment and poles which made restoration difficult.

2. The Reliability reporting area and geographic area impacted.

PGE's entire service territory was impacted by the high winds. Most outages were in PGE's Eastern service territory.

3. The total number of customers affected and the number of customers without service at periodic intervals.

At the peak of the storm, PGE had approximately 12,081 customers without power. During the storm, a total of 21,094 customers were affected.

4. The calculated SAIDI, SAIFI, and CAIDI impacts (i.e., "Event SAIDI<sup>1</sup>, SAIFI<sup>2</sup>, CAIDI<sup>3</sup> and Tmed<sup>4</sup>") associated with the Major Event on a reliability reporting area and a system-wide basis.

The following table represents the calculated impacts for SAIDI, SAIFI, CAIDI, T<sub>med</sub>, and system-wide basis totals:

	RELIA	SYSTEM-WIDE BASIS		
	EASTERN <sup>1</sup>	SOUTHERN	WESTERN	PGE SERVICE TERRITORY
SAIDI <sup>2</sup>	2.69	1.95	1.11	5.76
SAIFI	0.014	0.004	0.005	0.024
CAIDI <sup>4</sup>	182	431	198	231
Customers out at peak	5,296	2,209	4,576	12,081
T med				4.38

<sup>2</sup> SAIDI - System Average Interruption Duration Index

<sup>4</sup> CAIDI - Customer Average Interruption Duration Index

<sup>&</sup>lt;sup>1</sup> Eastern and Central regions are now combined and represented as the Eastern region.

<sup>&</sup>lt;sup>3</sup> SAIFI - System Average Interruption Frequency Index

Major Storm/Event Exclusion Occurred: October 13, 2016 Page 3 of 3

# Additional Reporting Related to the October 13, 2016 Storm Event:

Attachment A provides a summary of outages within PGE's service territory lasting 5 hours or longer.

For questions regarding this filing, please contact Kalia Savage at (503) 464-7432. Please direct all formal correspondence and requests to the following email address: pge.opuc.filings@pgn.com

Sincerely,

James Landstrom, Manager, Transmission and Distribution Asset Management

Enclosures

Major Storm/Event Exclusion Period: October 13, 2016 Attachment A

Summary of Outages 5 Hours and Longer for the Entire PGE Service Territory

#### Attachment A Summary of Outages 5 hours and Longer PGE Service Territory October 13, 2016

				Customers		Customer		Return				
Outage #	Outage Date	Outage Time	Feeder Name	Affected	Duration	Minutes	Return Date	Time	Interrupt Location	SAIDI	SAIFI	CAIDI
108872	10/13/2016	8:13 PM	WILLAMINA-BRIDGE	1	1,586	1,585	10/14/2016	10:38 PM	SP:18601 SW INDIAN CREEK RD	0.001873128	1.18178E-06	1,585
108979	10/13/2016	8:18 PM	UNIONVALE-UNIONVALE 13	21	1,563	32,802	10/14/2016	10:21 PM	FUSE_OH:C4327B-1347 / ABC / 40 A	0.038764893		1,562
108848	10/13/2016	8:09 PM	EAGLE CREEK-RIVER MILL	1	1,311	1,311	10/14/2016	6:01 PM	SP:Null_56	0.001549319	1.18178E-06	1,311
111036	10/13/2016	7:43 PM	MOLALLA-MARQUAM	16	1,310	20,960	10/14/2016	5:33 PM	SP:38500 S DICKEY PRAIRIE RD	0.024770202		1,310
111032	10/13/2016	8:15 PM	AMITY-BELLEVUE	4	1,296	5,184	10/14/2016	5:51 PM	SP:12900 SW SALT CREEK RD	0.006126371		1,296
109460	10/13/2016	9:16 PM	COLTON-GRAYS HILL	1	1,251	1,251	10/14/2016	6:07 PM	SP:20490 S GREEN MOUNTAIN RD	0.001478412	1.18178E-06	1,251
109454	10/13/2016	9:14 PM	REDLAND-REDLAND 13	3	1,215	3,645	10/14/2016	5:29 PM	XFM_OH:A 25 79141	0,004307604	3.54535E-06	1,215
109453	10/13/2016	9:14 PM	REDLAND-REDLAND 13	11	1,213	13,343	10/14/2016	5:27 PM	FUSE_OH:D2223D-9123 / A / 15 A	0.01576855	1.29996E-05	1,213
108693	10/13/2016	7:15 PM	AMITY-BELLEVUE	41	1,212	49,651	10/14/2016	3:27 PM	FUSE_OH:C6514D-44 / BC / 25 A	0.05867678	4.84532E-05	1,211
110780	10/13/2016	9:39 PM	WELCHES-WELCHES 13	299	1,177	351,923	10/14/2016	5:17 PM	<inline_jumper.1688></inline_jumper.1688>	0.415897128		1.177
109657	10/13/2016	9:53 PM	BRIGHTWOOD-BRIGHTWOOD 13	3	1,166	3,498	10/14/2016	5:19 PM	SP:53806 E HWY 26	0.004133882	3.54535E-06	1.166
108927	10/13/2016	8:24 PM	UNIONVALE-UNIONVALE 13	37	1,162	42,994	10/14/2016	3:46 PM	RECL:5277	0.050809641	4.3726E-05	1.162
109510	10/13/2016	9:33 PM	ORIENT-BARLOW	1	1,151	1,150	10/14/2016	4:43 PM	SP:34911 SE HOMAN RD	0.001359052	1.18178E-06	1,150
109598	10/13/2016	9:14 PM	DAYTON-LAFAYETTE	70	1,110	77,630	10/14/2016	3:43 PM	FUSE_OH:C4307A-61 / ABC / 40 A	0.091741927	8.27249E-05	1,109
108885	10/13/2016	8:20 PM	UNIONVALE-UNIONVALE 13	101	1,099	110,898	10/14/2016	2:39 PM	FUSE_OH:C5414D-935 / AB / UNKNOWN	0.131057532	0.00011936	1,098
108982	10/13/2016	8:31 PM	UNIONVALE-UNIONVALE 13	1	1,091	1,091	10/14/2016	2:42 PM	SP:19085 SE MALLARD LN	0.001289327	1.18178E-06	1,091
109362	10/13/2016	9:07 PM	ABERNETHY-OREGON CITY	5	1,056	5,280	10/14/2016	2:43 PM	SP:16602 S KRAEFT RD	0.006239822	5.90892E-06	1,056
108544	10/13/2016	5:34 PM	NEWBERG-CHEHALEM	115	1,044	120,060	10/14/2016	10:59 AM	FUSE_OH:C2325C-1498 / AB / 40 A	0.141885041	0.000135905	1,044
108731	10/13/2016	7:17 PM	COLTON-GRAYS HILL	34	1,022	34,748	10/14/2016	12:19 PM	FUSE_OH:D4419D-193 / B / 65 A_1	0.041064646	4.01807E-05	1,022
109359	10/13/2016	9:07 PM	COLTON-GRAYS HILL	1	1,020	1,020	10/14/2016	2:08 PM	SP:31373 S TIFFANY LN	0.00120542	1.18178E-06	1,020
110789	10/13/2016	10:42 PM	COLTON-DHOOGHE	2	1,006	2,010	10/14/2016	3:28 PM	SP:20437 S HWY 211	0.002375387	2.36357E-06	1,005
108994	10/13/2016	8:32 PM	INDIAN-WEST	3	1,001	3,003	10/14/2016	1:13 PM	SP:8425 WINDSOR ISLAND RD N	0.003548899	3.54535E-06	1,001
109251	10/13/2016	8:52 PM	SILVERTON-WEST	1	989	989	10/14/2016	1:21 PM	XFM_OH:A 25 62122	0.001168785	1.18178E-06	989
108998	10/13/2016	8:37 PM	NEWBERG-CHEHALEM	18	987	17,748	10/14/2016	1:04 PM	FUSE_OH:C2322A-1460 / C / 15 A	0.02097431	2.12721E-05	986
109776	10/13/2016	10:45 PM	WALLACE-WALLACE 13	1	981	980	10/14/2016	3:06 PM	SP:23556 WALLACE RD NW	0.001158149	1.18178E-06	980
109461	10/13/2016	9:16 PM	SILVERTON-SOUTH	3	955	2,862	10/14/2016	1:11 PM	SP:22435 NORTH FORK RD SE	0.003382267	3.54535E-06	954
109324	10/13/2016	8:57 PM	SCOTTS MILLS-SCOTTS MILLS 13	30	951	28,500	10/14/2016	12:48 PM	RECL:4128	0.033680857	3.54535E-05	950
109140	10/13/2016	8:49 PM	SILVERTON-WEST	21	950	19,950	10/14/2016	12:39 PM	FUSE_OH:C7113C-845 / AC / 25 A	0.0235766	2.48175E-05	950
108923	10/13/2016	8:22 PM	WACONDA-RIVER	4	941	3,760	10/14/2016	12:03 PM	SP:2253 MATHENY RD NE	0.00444351	4.72714E-06	940
108911	10/13/2016	8:24 PM	INDIAN-WEST	79	924	72,996	10/14/2016	11:48 AM	RECL:4466	0.086265538	9.3361E-05	924
109244	10/13/2016	8:51 PM	HILLSBORO-LAUREL	5	876	4,375	10/14/2016	11:26 AM	FUSE_OH:C2313D-292 / B / 15 A_1	0.005170307	5.90892E-06	875
109515	10/13/2016	9:36 PM	BRIGHTWOOD-BRIGHTWOOD 13	5	871	4,355	10/14/2016	12:07 PM	XFM_OH:B 15 21459	0.005146671	5.90892E-06	871
108829	10/13/2016	7:55 PM	GALES CREEK-GALES CREEK 13	2	867	1,732	10/14/2016	10:21 AM	SP:50500 NW CLAPSHAW HILL RD_1	0.002046851	2.36357E-06	866
109018	10/13/2016	8:44 PM	TURNER-TURNER 13	35	866	30,275	10/14/2016	11:09 AM	FUSE_OH:C8235D-992 / ABC / Null	0.035778524	4.13625E-05	865
109860	10/13/2016	11:03 PM	SILVERTON-SOUTH	1	848	847	10/14/2016		5P:19807 WINTERS HILL RD SE	0.001000971	1.18178E-06	847
109682	10/13/2016	10:13 PM	HILLSBORO-LAUREL	1	844	843	10/14/2016		SP:29841 SW LAUREL RD	0.000996244	1.18178E-06	843
109341	10/13/2016	9:03 PM	LELAND-CARUS	54	842		10/14/2016		FUSE_OH:D4316C-124 / B / 40 A	0.053733375	6.38164E-05	842
109329	10/13/2016	9:00 PM	GLENCULLEN-SUNSET	19	831	15,789	10/14/2016		FUSE_OH:D1117B-7083 / A / 25 A	0.018659195		831
109477	10/13/2016	9:32 PM	ALDER-TAYLOR	1	815	815	10/14/2016		SP:933 SE 31ST AVE	0.000963154		815
108608 109444	10/13/2016	6:27 PM	SCOTTS MILLS-SCOTTS MILLS 13	21	805		10/14/2016		FUSE_OH:D6126B-1218 / A / 40 A	0.019978066		805
109444	10/13/2016 10/13/2016	9:20 PM 8:19 PM	SPRINGBROOK-FERNWOOD	48	801	38,448	10/14/2016		FUSE_OH:C3213C-1251 / BC / 25 A	0.045437248		801
110764	10/13/2016	9:38 PM	BANKS-CEDAR CANYON ESTACADA-FARADAY	20 63	789	15,780	10/14/2016		FUSE_OH:B2318C-380 / AC / 65 A	0.018648559		789
109651	10/13/2016	9:46 PM	ALDER-IRVING	30	782 769	49,266 23,070	10/14/2016		SP:36319 SE COUPLAND RD	0.058221793		782
109328	10/13/2016	8:59 PM	BOONES FERRY-WEMBLEY PARK	124	763		10/14/2016 10/14/2016		SP:805 NE 29TH AVE	0.027263767		769
109304	10/13/2016	8:56 PM	SILVERTON-WEST	23	733		10/14/2016	9:43 AM 9:09 AM	FUSE_OH:D2104C-4293 / ABC / 100 A RECL:8239		0.000146541	763
109517	10/13/2016	9:39 PM	SANDY-362ND	23 52	722			9:09 AM 9:41 AM	FUSE_OH:D2415D-820 / BC / 65 A	0.019923704 0.044368915		733
110482	10/13/2016	11:01 PM	CANBY-FILBERT	686	703		10/14/2016		SW OHLB:4962		6.14528E-05 0.000810704	722 613
108794	10/13/2016	7:53 PM	GALES CREEK-GALES CREEK 13	2	685			7:18 AM	XFM OH:B 25 75973 C 10 35881	0.001619045		613
108774	10/13/2016	7:32 PM	ESTACADA-FARADAY	3	679		10/14/2016		SP:27035 S SKINNER RD 1	0.002407295		679
										0.002.07255		0,5

#### Attachment A Summary of Outages 5 hours and Longer PGE Service Territory October 13, 2016

109471	10/13/2016	9:25 PM	FAIRVIEW-KENNEL CLUB	6	678	4,052	10/14/2016	8:43 AM	FUSE_OH:A1431B-2244 / A / 6 A	0.004800408	7.09071E-06	677
108793	10/13/2016	7:53 PM	BANKS-CEDAR CANYON	27	656	17,712	10/14/2016	6:49 AM	FUSE_OH:B2433A-626 / ABC / 40 A	0.020931766	3.19082E-05	656
109769	10/13/2016	9:06 PM	RALEIGH HILLS-DOGWOOD	1	646	646	10/14/2016	7:52 AM	SP:4460 SW 78TH AVE	0.000763433	1.18178E-06	646
109643	10/13/2016	9:51 PM	BORING-282ND	1	631	630	10/14/2016	8:21 AM	SP:8825 SE 287TH AVE	0.000744524	1.18178E-06	630
109519	10/13/2016	9:39 PM	DENNY-WEST	46	629	28,934	10/14/2016	8:09 AM	FUSE_OH:C1122A-1619 / A / 100 A	0.034193751	5.43621E-05	629
109779	10/13/2016	10:46 PM	LELAND-CARUS	139	622	86,458	10/14/2016	9:09 AM	RECL:2509	0.10217472	0.000164268	622
109025	10/13/2016	8:41 PM	LELAND-CARUS	2	610	1,218	10/14/2016	6:50 AM	FUSE_OH:D4311A-486 / C / 10 A	0.001439413	2.36357E-06	609
109337	10/13/2016	9:02 PM	LELAND-BEAVERCREEK	16	595	9,520	10/14/2016	6:57 AM	FUSE_OH:D3235A-4610 / B / 65 A	0.011250588	1.89086E-05	595
109653	10/13/2016	9:52 PM	MT PLEASANT-MT VIEW	5	589	2,945	10/14/2016	7:41 AM	XFM_OH:B 3 4349 A 25 45277	0.003480355	5.90892E-06	589
108840	10/13/2016	8:06 PM	WILLAMINA-BRIDGE	13	586	7,618	10/14/2016	5:52 AM	FUSE_OH:C5703A-358 / A / 10 A	0.009002834	1.53632E-05	586
108889	10/13/2016	8:20 PM	WILLAMINA-BRIDGE	1	575	575	10/14/2016	5:55 AM	SP:18000 SW INDIAN CREEK RD	0.000679526	1.18178E-06	575
109118	10/13/2016	8:45 PM	CANBY-13643	33	513	16,929	10/14/2016	5:18 AM	FUSE_OH:C4112D-10 / ABC / 40 A	0.020006429	3.899898-05	513
108989	10/13/2016	8:33 PM	YAMHILL-CARLTON	271	502	136,042	10/14/2016	4:56 AM	SC-RECL:1014	0.16077232	0.000320264	502
109007	10/13/2016	8:42 PM	YAMHILL-CARLTON	1	493	493	10/14/2016	4:56 AM	SP:13425 WESTSIDE RD	0.00058262	1.18178E-06	493
109943	10/13/2016	11:43 PM	REDLAND-REDLAND 13	1	492	491	10/14/2016	7:55 AM	SP:17449 S HOLCOMB RD	0.000580256	1.18178E-06	491
108480	10/13/2016	2:51 PM	DAYTON-EAST	1	489	489	10/13/2016	11:00 PM	SP:4840 NE BREYMAN ORCHARDS RD	0.000577893	1.18178E-06	489
108891	10/13/2016	8:16 PM	NORTH PLAINS-MASON HILL	115	485	55,775	10/14/2016	4:21 AM	RECL:6243	0.065914028	0.000135905	485
108455	10/13/2016	1:33 PM	SCOGGINS-LAURELWOOD	10	479	4,790	10/13/2016	9:32 PM	FUSE_OH:C2402A-13 / C / 15 A	0.005660748	1.18178E-05	479
109520	10/13/2016	9:37 PM	WELCHES-WELCHES 13	1507	452	586,124	10/14/2016	5:09 AM	SC-BKR:WELCHES R308	0.692672227	0.001780949	389
108555	10/13/2016	5:36 PM	GARDEN HOME-METZGER	335	444	148,405	10/14/2016	1:00 AM	FUSE_OH:D1118C-4017 / ABC / 65 A	0.175382721	0.000395898	443
108266	10/13/2016	4:19 AM	GALES CREEK-GALES CREEK 13	4	426	1,700	10/13/2016	11:25 AM	XFM_OH:C 10 60169	0.002009034	4.72714E-06	425
108493	10/13/2016	3:30 PM	LIBERTY-SKYLINE	98	405	10,388	10/13/2016	10:15 PM	FUSE_OH:C8309C-4321 / A / 40 A	0.012276377	0.000115815	106
108617	10/13/2016	6:47 PM	ESTACADA-FARADAY	83	388	32,204	10/14/2016	1:16 AM	FUSE_OH:D4410B-504 / B / 40 A	0.038058186	9.80881E-05	388
109003	10/13/2016	8:42 PM	SIX CORNERS-13359	111	378	41,958	10/14/2016	3:00 AM	FUSE_OH:C3107A-1914 / ABC / 65 A	0.049585312	0.000131178	378
108356	10/13/2016	10:04 AM	BEAVERTON-WEST SLOPE	1	377	377	10/13/2016	4:21 PM	XFM_OH:C 50 3179	0.000445533	1.18178E-06	377
109022	10/13/2016	8:44 PM	WACONDA-WACONDA 13	1	368	368	10/14/2016	2:53 AM	SP:5590 RAMP ST NE	0.000434897	1.18178E-06	368
109612	10/13/2016	9:45 PM	WELCHES-ZIG ZAG	248	360	89,280	10/14/2016		RECL:1310	0.105509715	0.000293083	360
108244	10/13/2016	4:02 AM	BANKS-CEDAR CANYON	32	349	11,168	10/13/2016	9:51 AM	FUSE_OH:B2427A-168 / C / 40 A	0.013198169	3.78171E-05	349
108592	10/13/2016	6:10 PM	WALLACE-WALLACE 13	2	349	696	10/13/2016	11:59 PM	SP:3010 BRUSH COLLEGE RD NW	0.000822522	2.36357E-06	348
108275	10/13/2016	5:31 AM	KELLY BUTTE-BINNSMEAD	11	348	3,817	10/13/2016	11:18 AM	XFM_OH:B 25 34534	0.004510871	1.29996E-05	347
109131	10/13/2016	8:48 PM	CORNELL-WESTLAWN	190	322	60,990	10/14/2016	2:10 AM	FUSE_OH:C1104B-4206 / ABC / 100 A	0.072077033	0.000224539	321
109667	10/13/2016	10:06 PM	TURNER-TURNER 13	1	315	314			SP:7479 NELSON LN SE	0.00037108	1.18178E-06	314
109354	10/13/2016	9:05 PM	TIGARD-13362	53	304	16,112			FUSE_OH:C2103A-2080 / AC / 100 A	0.019040911	6.26346E-05	304
109124	10/13/2016	8:46 PM	SCHOLLS FERRY-RAINBOW	4	302	1,204	10/14/2016	1:48 AM	FUSE_OH:C2230A-17 / A / 10 A	0.001422868	4.72714E-06	301

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