

RE 112 e-FILING REPORT COVER SHEET

REPORT NAME:

PGE's Major Storm/Event Exclusion for Period January 1, 2016

COMPANY NAME:

Portland General Electric

DOES REPORT CONTAIN CONFIDENTIAL INFORMATION?

No

If known, please select designation:

RE (Electric)

Report is required by:

OAR 860-023-0161

Is this report associated with a specific docket/case?

No

Key words:

PGE's Major Storm/Event Exclusion for Period January 1, 2016

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

Electric Rates and Planning



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

February 12, 2016

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

Re: Major Storm/Event Exclusion
Period: January 1, 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 January 1, 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 January 1, 2016, the PGE service territory experienced a wind storm causing widespread outages. Peak winds varied from 44 MPH in the Portland Metro Area to 47 MPH in the Troutdale area and 31 MPH in Hillsboro.

The severe wind combined with an extremely wet December 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 7,788 customers without power. During the storm, a total of 22,287 customers were affected.

4. The calculated SAIDI, SAIFI, and CAIDI impacts (i.e., "Event SAIDI¹, SAIFI², CAIDI³ and T_{med}⁴") associated with the Major Event to on a reliability reporting area and a system-wide basis.

The following table represents the calculated impacts for SAIDI, SAIFI, CAIDI, T_{med}, and system-wide basis totals:

	RELIABILITY REPORTING AREAS			SYSTEM-WIDE BASIS
	EASTERN ¹	SOUTHERN	WESTERN	PGE SERVICE TERRITORY
<i>SAIDI</i> ²	5.11	0.24	0.73	6.09
<i>SAIFI</i> ³	0.021	0.002	0.003	0.026
<i>CAIDI</i> ⁴	241	119	230	231
<i>Customers out at peak</i>	7,426	61	301	7,788
<i>T_{med}</i>				4.38

¹ Eastern and Central regions are now combined and represented as the Eastern region.

² SAIDI - System Average Interruption Duration Index

³ SAIFI - System Average Interruption Frequency Index

⁴ CAIDI - Customer Average Interruption Duration Index

Additional Reporting Related to the January 1, 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 Terri Bowman at (503) 464-8854. Please direct all formal correspondence and requests to the following email address pge.opuc.filings@pqn.com

Sincerely,



James Landstrom,
Manager, Transmission and Distribution Asset Management

Enclosures

Major Storm/Event Exclusion Period: January 1, 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 January 1, 2016

Outage ID	Feeder Name	Outage Start	Outage End	Duration	Affected Customers	Minutes	Cause Description	Major Cause	Interrupt Location	Region	SAMI	SAFI	CAIDI
43520	MT PLEASANT-SOUTH END	1/1/16 4:41 AM	1/2/16 1:57 PM	1,996	18	35,928	High Winds	Weather	FUSE_OH:D:314C-4291	EASTERN	0.002459	2,13E-05	1996
44123	HOLGATE-RYBEE	1/1/16 4:46 PM	1/2/16 9:01 PM	1,695	1	1,695	OH Connector / Clamp / Jumper	Weather	SP-6420 SE 32ND AVE	EASTERN	0.000203	1,38E-06	1895
44803	ARLEYA-FOSTER	1/1/16 6:48 PM	1/2/16 11:00 PM	1,692	16	27,077	Secondary Conductor	Equipment	XFM_OH:8 50 9645	EASTERN	0.031999	1,89E-05	1692
44057	REDLAND-REDLAND 13	1/1/16 11:19 PM	1/2/16 4:47 AM	1,481	2	2,963	Overhead Transformer	Equipment	FUSE_OH:D:225C-3662	EASTERN	0.000304	2,36E-06	1481
43883	TEKRONIK-SHANNON	1/1/16 12:15 PM	1/2/16 8:07 AM	1,188	1	1,188	Planned Outage	Planned	SP-11915 SW CENTER ST	WESTERN	0.000140	1,38E-06	1188
44274	REDLAND-REDLAND 13	1/1/16 5:59 PM	1/2/16 1:24 PM	1,165	1	1,165	OH Connector / Clamp / Jumper	Equipment	FUSE_OH:DH:234A-571	EASTERN	0.000377	1,38E-06	1165
44424	EAGLE CREEK RIVER MILL	1/1/16 6:58 PM	1/2/16 2:19 PM	1,161	18	20,899	High Winds	Weather	FUSE_OH:D:238C-2777	EASTERN	0.024698	2,43E-05	1161
44611	SYLVAN-BARNES	1/1/16 10:14 PM	1/2/16 2:44 PM	990	1	990	Limbs on Line	Vegetation	XFM_OH:8 25 80266	WESTERN	0.00117	1,38E-06	990
43465	SYLVAN-PATTON	1/1/16 4:40 AM	1/1/16 8:11 PM	931	12	11,178	Limbs on Line	Vegetation	FUSE_OH:DH:107C-7677	WESTERN	0.01321	1,42E-05	931
44581	CANBY-13644	1/1/16 9:43 PM	1/2/16 11:02 AM	799	69	55,132	High Winds	Weather	SP-218 SW PEACH COVE LN	SOUTHERN	0.065154	8,15E-05	799
44581	ESTACADA-FARADAY	1/1/16 10:25 PM	1/2/16 11:43 AM	798	1	798	High Winds	Weather	SP-23925 S SPRINGWATER RD	EASTERN	0.000943	1,38E-06	798
43663	COLTON-DHOOGHE	1/1/16 10:36 AM	1/1/16 11:54 PM	797	1	797	Tree Uprooted	Vegetation	SP-29246 S HULT RD	SOUTHERN	0.000942	1,38E-06	797
44094	RALEIGH HILLS-OLESON	1/1/16 4:31 PM	1/2/16 5:31 AM	780	363	283,079	Limbs on Line	Weather	RECL:6090	WESTERN	0.334539	0.000428988	780
44491	MT PLEASANT-MT VIEW	1/1/16 7:37 PM	1/2/16 8:34 AM	777	1	777	Limbs on Line	Vegetation	SP-15080 S MAPLELANE RD	EASTERN	0.000919	1,38E-06	777
43438	CEDAR HILLS-SHIPPING CENTER	1/1/16 5:49 AM	1/1/16 6:35 PM	765	12	9,185	High Winds	Weather	FUSE_OH:C1:109B-5349	WESTERN	0.010855	1,42E-05	765
43703	COLTON-DHOOGHE	1/1/16 11:16 AM	1/1/16 11:54 PM	757	19	14,990	Other - Environment / Weather	Unknown	FUSE_OH:D:433D-20	SOUTHERN	0.017006	2,25E-05	757
43669	LELAND-BEAVERCREEK	1/1/16 10:40 AM	1/1/16 11:15 PM	755	1	755	High Winds	Weather	SP-18906 S FERUGLSON RD	EASTERN	0.000892	1,38E-06	755
44578	REDLAND-HENRICI	1/1/16 8:52 PM	1/2/16 9:22 AM	750	21	15,750	High Winds	Weather	FUSE_OH:DH:318A-1815	EASTERN	0.018813	2,48E-05	750
43424	LELAND-BEAVERCREEK	1/1/16 5:23 AM	1/1/16 5:10 PM	707	4	2,829	High Winds	Weather	XFM_OH:C 25 59572	EASTERN	0.000344	4,73E-06	707
43539	CORNELL-WESTLAWN	1/1/16 8:46 AM	1/1/16 8:23 PM	697	1	697	Other - Environment / Weather	Unknown	SP-13722 NW PIONEER RD	WESTERN	0.000824	1,38E-06	697
43666	SIX CORNERS-CHAPMAN	1/1/16 11:00 AM	1/1/16 10:33 PM	693	24	16,636	Tree Uprooted	Vegetation	FUSE_OH:C:3201D-181	WESTERN	0.01966	2,84E-05	693
43434	CORNELL-WESTLAWN	1/1/16 5:43 AM	1/1/16 4:22 PM	639	38	24,293	Fuse / Circuit	Equipment	FUSE_OH:C1:104B-3772	WESTERN	0.02871	4,49E-05	639
43987	WALLACE-WALLACE 13	1/1/16 2:53 PM	1/2/16 12:54 AM	601	1	601	Overhead Transformer	Equipment	XFM_OH:C 15 65140	SOUTHERN	0.000711	1,38E-06	601
43955	REDLAND-HENRICI	1/1/16 2:35 PM	1/2/16 12:25 AM	590	105	61,922	High Winds	Weather	FUSE_OH:D:3316D-242	EASTERN	0.073178	0.00124087	590
43870	REDLAND-HENRICI	1/1/16 9:10 AM	1/1/16 6:43 PM	573	75	42,950	High Winds	Weather	SP-20453 S MATTOON RD	EASTERN	0.050758	8,86E-05	573
43548	CEDAR HILLS-SHIPPING CENTER	1/1/16 9:06 AM	1/1/16 6:35 PM	569	1	569	High Winds	Weather	SP-11835 SW BELVIDERE PL	WESTERN	0.000672	1,38E-06	569
44257	REDLAND-HENRICI	1/1/16 11:34 AM	1/1/16 8:48 PM	554	4	2,215	High Winds	Weather	SP-29665 S LYONS RD	EASTERN	0.002618	4,73E-06	554
43927	BROOKWOOD-BORWICK	1/1/16 2:25 PM	1/1/16 11:36 PM	551	1	551	Other - Underground Hardware Failure	Equipment	SP-1160 NE HORIZON LOOP	WESTERN	0.000651	1,38E-06	551
43909	SIX CORNERS-CHAPMAN	1/1/16 1:32 PM	1/1/16 10:34 PM	542	1	542	Limbs on Line	Vegetation	SP-25711 SW REIN RD	WESTERN	0.00064	1,38E-06	542
43882	GLENCLEEN-BRIDLEMILE	1/1/16 11:44 AM	1/1/16 8:23 PM	518	1	518	Limbs on Line	Vegetation	SP-3804 SW HAMILTON ST	EASTERN	0.000612	1,38E-06	518
43471	HOLGATE-HOLGATE 13	1/1/16 7:14 AM	1/1/16 3:52 PM	518	1	518	Limbs on Line	Vegetation	SP-3416 SE CESAR E CHAVEZ BLVD	EASTERN	0.000642	1,38E-06	518
43303	REDLAND-REDLAND 13	1/1/16 2:55 AM	1/1/16 11:19 AM	505	2532	1,279,251	Protection System	f Supply - Trans	BKR:REDLAND R112	EASTERN	1.511799	0.002992278	505
43518	MT PLEASANT-MT VIEW	1/1/16 8:18 AM	1/1/16 4:39 PM	502	1	502	High Winds	Weather	SP-14629 S QUAIL GROVE CIR	EASTERN	0.000593	1,38E-06	502
43548	LELAND-BEAVERCREEK	1/1/16 9:25 AM	1/1/16 5:13 PM	488	2	996	High Winds	Weather	XFM_OH:8 15 49742	EASTERN	0.001106	2,36E-06	488
44042	LELAND-BEAVERCREEK	1/1/16 3:43 PM	1/1/16 11:16 PM	453	1	453	Tree Uprooted	Vegetation	SP-18920 S FERUGLSON RD	EASTERN	0.000535	1,38E-06	453
43650	LELAND-CARUS	1/1/16 1:21 AM	1/1/16 5:44 PM	452	44	19,873	High Winds	Weather	SP-23050 S FELLOWS RD	EASTERN	0.023486	5,20E-05	452
43458	LELAND-CARUS	1/1/16 6:05 AM	1/1/16 1:28 PM	443	41	18,158	Tree Uprooted	Vegetation	FUSE_OH:DH:491A-479	EASTERN	0.021458	4,85E-05	443
44565	ST LOUIS-NORTH	1/1/16 9:21 PM	1/2/16 4:44 AM	442	3	1,327	Overhead Transformer	Equipment	FUSE_OH:C:CA235A-1753	SOUTHERN	0.0001569	3,55E-06	442
44276	TABOR-82ND	1/1/16 6:00 PM	1/2/16 1:18 AM	438	7	3,068	OH Connector / Clamp / Jumper	Equipment	XFM_OH:A 25 92504	EASTERN	0.000626	8,27E-06	438
43366	HOLGATE-HOLGATE 13	1/1/16 2:19 AM	1/1/16 9:34 AM	435	325	141,386	High Winds	f Supply - Trans	FUSE_OH:D:1112B-219	EASTERN	0.167088	0.00038408	435
51409	OAK GROVE-LAKE HARRIET	1/1/16 2:51 AM	1/1/16 9:38 AM	407	93	37,851	Limbs on Line	f Supply - Trans	SC-BKR:OAK GROVE SWYD R176	EASTERN	0.044732	0.000109996	407
51412	OAK GROVE-WHITE WATER	1/1/16 2:51 AM	1/1/16 9:38 AM	407	22	8,954	Limbs on Line	Weather	SC-BKR:OAK GROVE SWYD R180	EASTERN	0.000842	2,80E-05	407
43853	REDLAND-REDLAND 13	1/1/16 9:00 AM	1/1/16 3:27 PM	395	235	90,945	High Winds	Equipment	SP-21331 S JUBB RD	EASTERN	0.000467	1,38E-06	395
43656	REDLAND-HENRICI	1/1/16 10:29 AM	1/1/16 4:53 PM	384	25	9,592	Limbs on Line	Vegetation	XFM_OH:8 25 34400	EASTERN	0.011336	2,95E-05	384
43658	HOLGATE-HOLGATE 13	1/1/16 6:50 AM	1/1/16 1:13 PM	383	21	8,049	Tree Uprooted	Vegetation	FUSE_OH:DH:1202A-1305	EASTERN	0.0009512	2,48E-05	383
43468	MIDWAY-DOUGLAS	1/1/16 2:53 AM	1/1/16 9:05 AM	372	1759	653,527	Limbs on Line	f Supply - Trans	BKR:REDLAND R108	EASTERN	0.772480	0.002078759	372
43902	REDLAND-HENRICI	1/1/16 2:47 PM	1/1/16 8:48 PM	362	4	1,448	High Winds	Weather	FUSE_OH:DH:3317D-273	EASTERN	0.000711	4,73E-06	362
44974	REDLAND-HENRICI	1/1/16 4:04 AM	1/1/16 9:52 AM	348	4	1,992	Limbs on Line	Vegetation	XFM_OH:8 10 20148	WESTERN	0.0001645	4,73E-06	348
43388	WEST UNION-CORNELIUS PASS	1/1/16 11:33 AM	1/1/16 5:07 PM	334	5	1,670	High Winds	Weather	XFM_OH:A 25 32263	WESTERN	0.0001974	5,31E-06	334
44374	HARBORTON-BURLINGTON	1/1/16 6:18 PM	1/1/16 11:50 PM	332	99	32,848	High Winds	Unknown	FUSE_OH:C1:204D-2083	WESTERN	0.038819	0.000116997	332
44379	ROSEWAY-ESPLANADE	1/1/16 6:21 PM	1/1/16 11:50 PM	330	35	11,536	Other - Environment / Weather	Unknown	FUSE_OH:C1:204C-1245_1	WESTERN	0.013633	4,14E-05	330
44766	SYLVAN-BARNES	1/1/16 11:23 AM	1/1/16 4:46 PM	324	1	324	High Winds	Weather	SP-1827 NW MILLER RD	WESTERN	0.000386	1,38E-06	324
44546	GLENCOE-GLISAN	1/1/16 8:27 PM	1/2/16 1:48 AM	321	4	1,283	High Winds	Weather	SP-1818 SE 46TH AVE	EASTERN	0.0001516	4,73E-06	321
43452	ESTACADA-FARADAY	1/1/16 6:13 AM	1/1/16 11:24 AM	311	606	188,446	Limbs on Line	Vegetation	SC-RECL:2679	EASTERN	0.222202	0.000716161	311
44179	LELAND-BEAVERCREEK	1/1/16 5:02 PM	1/1/16 10:10 PM	308	1	308	High Winds	Weather	SP-14943 S TLELAND RD	EASTERN	0.000364	1,38E-06	308

Attachment A Summary
of Outages 5 hours and Longer PGE
Service Territory January 1, 2016

Outage ID	Feeder Name	Outage Start	Outage End	Duration	Customers Affected	Customer Minutes	Cause Description	Major Cause	Interrupt Location	Region	SADI	SAFI	CAIDI
43849	MT PLEASANT-SOUTH END	1/1/16 11:41 AM	1/1/16 4:45 PM	304	1	304	High Winds	Weather	SP-18878 S ROSE RD	EASTERN	0.00036	1.18E-06	304
43552	WILLAMINA-BUEL	1/1/16 9:22 AM	1/1/16 2:23 PM	301	1	301	Primary Conductor	Equipment	FUSE_OH-C6605D-450_1	SOUTHERN	0.000356	1.18E-06	301