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REPORT NAME: Annual Reliability Report for Calendar Year 2016

COMPANY NAME: Pacific Power

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If known, please select designation: RE (Electric) RG (Gas) RW (Water) RO (Other)

Report is required by: OAR OAR 860-023-0151

Statute

Order

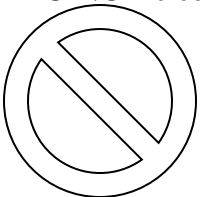
Other

Is this report associated with a specific docket/case? No Yes

If yes, enter docket number: RE 171

List applicable Key Words for this report to facilitate electronic search:
Reliability

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825 NE Multnomah, Suite 2000
Portland, Oregon 97232

April 28, 2017

VIA ELECTRONIC FILING

Public Utility Commission of Oregon
201 High Street SE, Suite 100
Salem, OR 97301-3398

Attn: Filing Center

RE: Annual Reliability Report for Calendar Year 2016

PacifiCorp d/b/a Pacific Power submits for filing its Annual Reliability Report for calendar year 2016. This filing is made in compliance with OAR 860-023-0151.

Please direct any questions on this report to Natasha Siores, Manager, Regulatory Affairs, at 503-813-6583.

Sincerely,

R. Bryce Dalley
Vice President, Regulation

Enclosure



**Pacific Power's
Annual Report:**

**Oregon Administrative Rules
860-023, 024 and 028**

Calendar Year 2016 Review
(January 1 – December 31, 2016)

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RELIABILITY

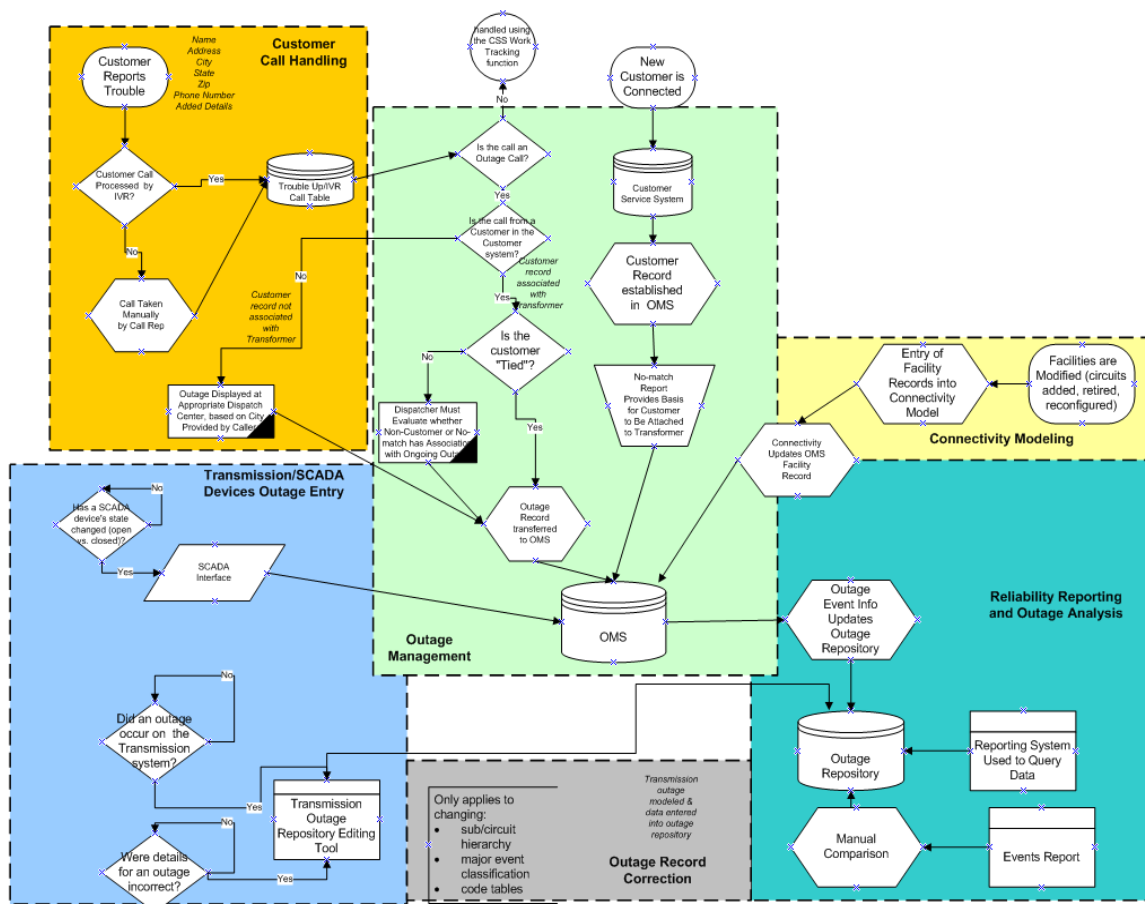
Introduction and Reliability Discussion

This year's reliability report includes a brief overview of Pacific Power's programs and initiatives to evaluate and enhance reliability. Changes to this section have been made in compliance with administration rules 860-023, 024 and 028.

Monitoring, Recording, and Reporting Reliability

How Pacific Power Monitors Reliability

Pacific Power operates automated outage management and reporting systems; a diagram of the data flow process is shown below. Customer trouble calls and SCADA events are interfaced with the Company's real-time network connectivity model, its CADOPS system (Computer Aided Distribution Operations System). By overlaying these events onto the network model, the program infers outages at the appropriate devices (such as a transformer, fuse or other interrupting device) for all customers down line of the interrupting device. The outage is then routed to appropriate field operations staff for restoration and the outage event is recorded in the Company's Prosper/US outage repository. In addition to this real-time model of the system's electrical flow, the Company relies heavily upon the SCADA system it has in place. This includes the Dispatch Log System (an SQL database application) which serves to collect all events on SCADA-operable circuits. That data is then analyzed for momentary interruptions to establish state-level and circuit-level momentary interruption indices, per agreement with the Oregon PUC Staff. The Company is in the midst of implementing an advanced metering infrastructure (AMI) system, after which modifications to the outage communication process and reliability will occur. As the Company rationalizes the effects of these changes it will apprise the Commission Staff about the changes and their measured impacts to reliability metrics.



Reliability Reporting: Interpreting Indices and Metrics

Raw reliability data comes in the form of outage start and stop times, numbers of customers interrupted and outage cause codes. Out of these are derived an array of indices and acronyms that attempt to reduce complex data to a handful of numbers. This section briefly describes the metrics used by Pacific Power for reliability measurements.

SAIDI, SAIFI, CAIDI and MAIFI_e are the most common indicators or indices used by utilities across the nation for measuring and reporting reliability. Along with other indices, they were first rigorously documented in Institute of Electrical and Electronics Engineers (IEEE) Standard 1366-1998, and since modified in IEEE 1366-2003/2012, IEEE Guide for Electric Power Distribution Reliability Indices. This standard for reporting reliability performance was adopted in OAR 860-023 and reports provided thereafter have adhered to this standard.

For performance reporting as contained within this document¹, Pacific Power uses the current standard indices, applied at the state level as well as to its defined reliability reporting regions. In years preceding 2012 the major events excluded from performance during the period were determined using the historic “10% of operating area customers” method, not the IEEE 1366 “2.5 beta” TMed method applied to these reliability reporting regions. Therefore, year-on-year comparisons need to be made carefully.

Regional reliability reporting areas were established by using statistical tools to determine the granular level at which performance complied with assumptions underlying the development of the major event thresholds adopted within the standard. For the Customer Guarantee element of the Performance Standards Program, exceptions to the guarantees may also be determined based on data at a state level.

In order to devise circuit-level performance measures, Pacific Power performed research into which metrics are appropriate for ranking reliability investments in order to better serve the needs of customers. The need to reliably serve the areas with the greatest numbers of customers must be balanced against the need to maintain focus on service levels where there are fewer customers. To do this, Pacific Power implemented in 1999 a balanced set of circuit performance indices (known as CPI⁹⁹) and methods that improve on those documented in IEEE 1366. Circuit performance is reviewed at least annually against these various metrics to determine the selection of circuits to be addressed within the Company’s Worst-Performing Feeders Program; as time has elapsed and tools have evolved the Company has focused its analysis at a lower level than circuit, i.e. sub-circuit selection may have been chosen as the optimal improvement activity. Mining of this data allows the company to optimize cost against reliability metric improvements.

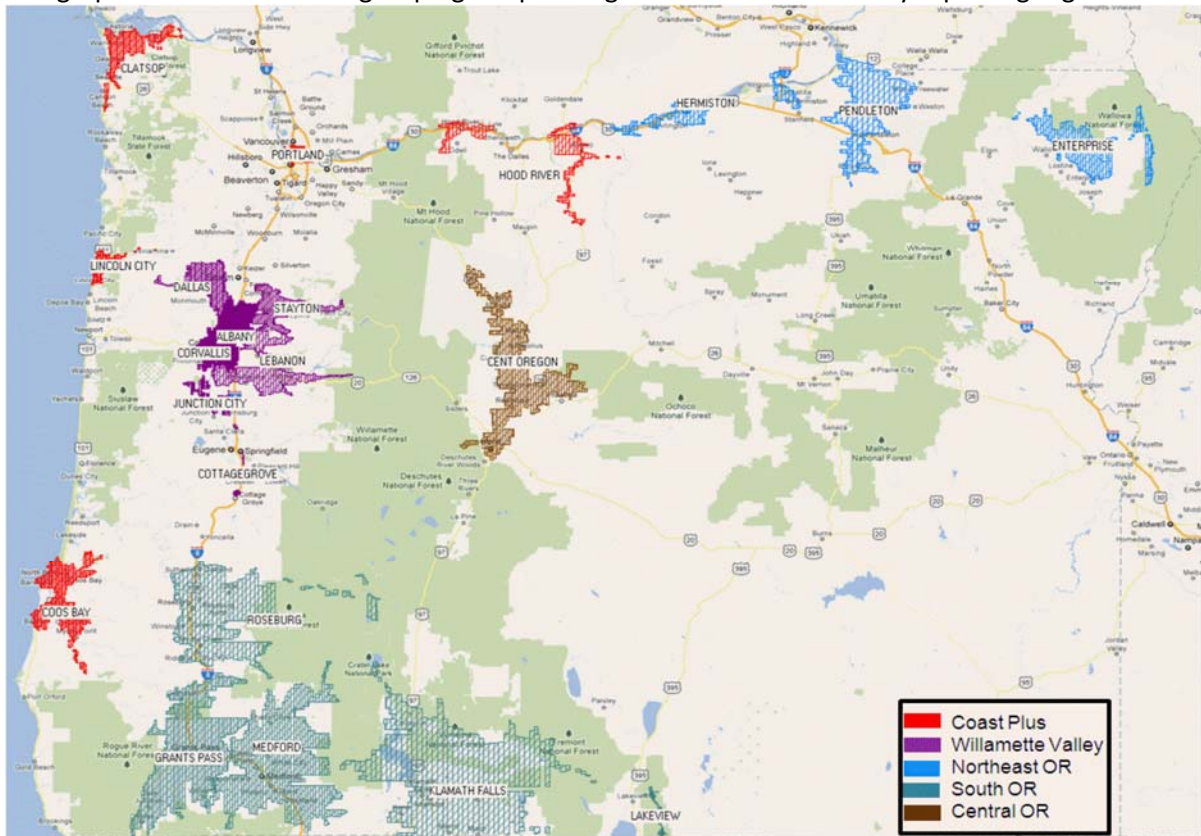
¹ State administrative rules regarding service reliability were modified during 2011, which has resulted in significant modifications to this section of the report.

Reliability Tools: Improving Indices and Metrics

Pacific Power uses the reliability data in a variety of ways that are designed to improve reliability to its customers. It has devised methods that are contained in the recently-adopted industry guide for electric power reliability, IEEE 1782-2014². Some of these analytical methods render the outage data in a tabular, graphical and geospatial manner. All of them serve as input to developing projects that improve reliability, including the Company's fuse coordination program, Fuse It or Lose It (FIOLI), its circuit hardening program, Saving SAIDI, and its capital construction program, Network Initiatives. These programs are evaluated for their forecast improvements to network reliability, as measured by the avoidance of customer interruptions, customer minutes interrupted and momentary customer interruptions. Each project is assigned a value for reduced interruptions along with the cost for that project, and based upon the best cost projects, selected to align with budget and resource capacity targets. Other tools the Company has created to deliver better reliability to customers include web-based notifications when interrupting devices (such as circuit breakers, reclosers or fuses) have experienced more operations within a given time period than is the norm. This enables field engineering and operations management team members to promptly evaluate means to modify performance in that area of the system. These ad-hoc activities augment the Company's reliability planning process (which is completed annually with periodic updates); review of historic reliability performance demonstrates the process' efficacy. Annually the Company designates five circuits that are designated as "underperforming circuits" against which the Company reports blended reliability metrics (SAIDI, SAIFI, MAIFI and breaker lockouts) to highlight performance changes for that family of circuits over the next five years; these circuits are identified subsequently.

Reliability Reporting Regions Map

The graphic below shows the grouping of operating areas into five reliability reporting regions.



² NEW P1782 (PE/T&D) Guide for Collecting, Categorizing and Utilization of Information Related to Electric Power Distribution Interruption Events was approved on March 27, 2014 and contains many of the approaches used by Pacific Power to evaluate system reliability and determine areas where improvements should be deployed.

Major Event Thresholds

Effective CY2012, the administrative rules were modified to replace the 10% of operating area customers methodology with IEEE P1366 “2.5 beta” or TMed methodology for determining major events. For Pacific Power’s service territory in Oregon, all operating areas were grouped into five reliability reporting regions and each reliability region’s threshold determined according to IEEE 1366-2003/2012. The tables below depict the composition of each region and its threshold as used during CY2016 and for application during CY2017. Since certain major events may be filed as a statewide event, the state threshold and history is also supplied.

2016 Major Event Threshold			
Reliability Region	TMed SAIDI	TMed CMI	Operating Areas within Region
Central OR	4.95	383,788	Bend/Redmond, Madras
Coast Plus	9.45	1,421,626	Clatsop/Astoria, Coos Bay/Coquille, Hood River, Lincoln City, Portland
Northeast OR	10.82	277,008	Enterprise, Hermiston, Milton-Freewater, Pendleton, Walla Walla
South OR	11.24	2,471,653	Grants Pass, Klamath Falls, Lakeview, Medford, Roseburg/Myrtle Creek
Willamette Valley	17.84	2,124,571	Albany, Corvallis, Cottage Grove/J. City, Dallas/Independence, Lebanon, Stayton
Oregon	7.21	4,262,263	

2017 Major Event Threshold			
Reliability Region	TMed SAIDI	TMed CMI	Operating Areas within Region
Central OR	5.40	429,381	Bend/Redmond, Madras
Coast Plus	11.09	1,687,255	Clatsop/Astoria, Coos Bay/Coquille, Hood River, Lincoln City, Portland
Northeast OR	12.27	302,667	Enterprise, Hermiston, Milton-Freewater, Pendleton, Walla Walla
South OR	12.35	2,740,682	Grants Pass, Klamath Falls, Lakeview, Medford, Roseburg/Myrtle Creek
Willamette Valley	20.28	2,439,916	Albany, Corvallis, Cottage Grove/J. City, Dallas/Independence, Lebanon, Stayton
Oregon	7.85	4,698,658	

The following table is a 5-year view of each region’s TMed values.

Calendar Year	2017		2016		2015		2014		2013	
	CMI	SAIDI	CMI	SAIDI	CMI	SAIDI	CMI	SAIDI	CMI	SAIDI
Central OR	429,381	5.40	383,788	4.95	349,230	4.34	349,946	4.44	347,505	4.48
Coast Plus	1,687,255	11.09	1,421,626	9.45	1,452,428	9.60	1,449,117	9.57	1,475,758	9.82
Northeast OR	302,667	12.27	277,008	10.82	232,269	9.35	236,978	9.20	249,447	9.68
South OR	2,740,682	12.35	2,471,653	11.24	2,306,700	10.13	2,635,154	11.64	2,533,923	11.26
Willamette Valley	2,439,916	20.28	2,124,571	17.84	2,134,793	17.34	1,796,334	14.71	1,585,648	13.09
Oregon	4,698,658	7.85	4,262,263	7.21	4,317,671	7.11	4,535,521	7.50	4,949,058	8.25

Major Events Excluded Report

Pacific Power filed written documentation for four Major Events in 2016 that were excluded from reliability performance results. They are summarized in the table below.

Oregon 2016 Major Events - Written Filings									
Event Date	Reliability Reporting Region – Description	CML	CI	PUC Report Required	Region TMed SAIDI	Region Event SAIDI	Oregon SAIDI	Oregon SAIFI	Oregon CAIDI
January 1	Coast Plus – Wind Storm	1,720,990	3,437	Yes	11.09	11.44	2.91	0.01	501
January 16-17	Coast Plus – Wind and Rain Storm	6,720,604	13,507	Yes	11.09	44.67	11.36	0.02	498
April 13-15	Southern – Wind Storm	6,448,973	19,448	Yes	12.35	29.32	10.90	0.03	332
October 13-15	Oregon – Storm	11,103,124	65,146	Yes	7.85	18.77	18.77	0.11	170
TOTAL Oregon Major Events Filed		25,993,691	101,538				43.95	0.17	256

The company excluded 10 events where CAIDI was less than five hours (300 CAIDI minutes), for which no filing is required according to Oregon Administrative Rules.

Oregon 2016 Major Events - Low CAIDI (<300) No Filings									
Event Date	Reliability Reporting Region –Description	CML	CIS	PUC Report Required	Region TMed SAIDI	Region Event SAIDI	Oregon SAIDI	Oregon SAIFI	Oregon CAIDI
March 1	Willamette Valley - Loss of Transmission	2,928,111	12,069	No	20.28	24.59	4.95	0.02	243
March 9-11	Coast Plus - Wind Storm	7,746,016	39,950	No	11.09	51.49	13.10	0.07	194
March 14	Central - Animal	400,121	2,473	No	5.40	5.16	0.68	0.00	162
April 12	Willamette Valley - Wind Storm/Trees	2,857,124	12,052	No	20.28	24.00	4.83	0.02	237
April 13 - 14	Coast Plus - Wind Storm	1,840,107	12,064	No	11.09	12.23	3.11	0.02	153
June 18	Northeast - Pole Fire	282,073	2,107	No	12.27	11.54	0.48	0.00	134
July 17	Central - Lightning	933,849	4,278	No	5.40	12.04	1.58	0.01	218
August 30	Central - Loss of Transmission	844,310	16,533	No	5.40	10.89	1.43	0.03	51
December 9-12	State - Winter Storm	12,656,476	44,318	No	7.85	21.40	21.40	0.07	286
December 14-16	State - Winter Storm	9,382,377	62,482	No	7.85	15.86	15.86	0.11	150
TOTAL Major Events with low CAIDI		39,870,564	208,326				67.41	0.35	191

Total Performance Summary

Oregon 2016 Major Events - Summary	CML	CIS	PUC Report Required	Oregon SAIDI	Oregon SAIFI	Oregon CAIDI
Total Oregon Major Events Filed	25,993,691	101,538	Yes	43.95	0.17	256
Total Major Events with low CAIDI (no filing required) ²	39,870,564	208,326	No	67.41	0.35	191
TOTAL MAJOR EVENTS EXCLUDED	65,864,255	309,864	-	111.36	0.52	213
Oregon Underlying Events - <u>Excludes</u> Major Event	65,943,786	632,022	-	111.49	1.07	104
Oregon Total Performance - <u>Includes</u> Major Event	131,808,041	941,886	-	222.85	1.59	140

Under-Performing Circuits

After the completion of the development of reliability improvement plans, the Company evaluates those circuits whose blended reliability scores rank low, using its Circuit Performance Indicator (CPI). This is the primary basis for the next year's Worst Performing Feeders element of its Targeted Reliability Program. CPI is an acronym for Circuit Performance Indicator, which uses 3-year weighted reliability metrics of the circuit to identify underperformance. The Company has evaluated the effectiveness of the CPI, determining whether inclusion of major events and transmission outages produce better results. The inclusion of major event and transmission outages, reporting period comparisons yielded a limited ability to identify the benefits of improvements made on each of the circuits. The application of CPI99 proved to demonstrate more consistently how performance comparisons could be made. The variables and equation for calculating CPI are:

$$\text{CPI} = \text{Index} * ((\text{SAIDI} * \text{WF} * \text{NF}) + (\text{SAIFI} * \text{WF} * \text{NF}) + (\text{MAIFI} * \text{WF} * \text{NF}) + (\text{Lockouts} * \text{WF} * \text{NF}))$$

Index: 10.645

SAIDI: Weighting Factor 0.30, Normalizing Factor 0.029

SAIFI: Weighting Factor 0.30, Normalizing Factor 2.439

MAIFI: Weighting Factor 0.20, Normalizing Factor 0.70

Lockouts: Weighting Factor 0.20, Normalizing Factor 2.00

Therefore, $10.645 * ((3\text{-year SAIDI} * 0.30 * 0.029) + (3\text{-year SAIFI} * 0.30 * 2.439) + (3\text{-year MAIFI} * 0.20 * 0.70) + (3\text{-year breaker lockouts} * 0.20 * 2.00)) = \text{CPI Score}$

The following distribution feeders were selected as under-performing based on CPI scores ending 12/31/2016 (in addition to other criteria, discussions with area engineers) and identified as Program Year 18 (2017) circuits in the Network Initiatives program:

Program Year 18 (2017) UNDER-PERFORMING CIRCUITS				
CIRCUIT ID	CIRCUIT NAME	KV	OPERATING AREA	CPI ⁹⁹
4M25	Buena Vista	20.8	Dallas/Independence	163
4C106	Coos River	20.8	Coos Bay/Coquille	212
4M120	Mill City	20.8	Stayton	261
5A211	Olney	12.5	Clatsop/Astoria	183
5R55	Siskiyou	12.5	Medford	220
TARGET SCORE				166

The status of prior years' under-performing circuits is shown in the following table. (Targets for Program Years 1-10 were met and filed previously.)

UNDER-PERFORMING CIRCUITS				
CIRCUIT ID	CIRCUIT NAME	OPERATING AREA	BASELINE	Performance 12/31/16
Circuit Performance Indicator (CPI99)				
Program Year 17 (2016):				
5A20	SOUTH (Warrenton)	Warrenton	124	100
4C67	INDUSTRIAL	Coos Bay/Coquille	82	90
5L57	CRATER LAKE	Klamath Falls	200	265
4A316	LAKE (DEVILS LAKE)	Lincoln City	172	197
5U52	BEALS CREEK FEEDER	Roseburg/Myrtle Creek	188	149
TARGET SCORE = 123			153	160

UNDER-PERFORMING CIRCUITS				
CIRCUIT ID	CIRCUIT NAME	OPERATING AREA	BASELINE	Performance 12/31/16
Circuit Performance Indicator (CPI99)				
Program Year 16 (2015):				
4C108	EMPIRE	Coos Bay/Coquille	16	17
5A93	BRADWOOD	Clatsop (Astoria)	114	217
5K43	BELMONT	Hood River	118	48
5R232	MERLIN-HUGO	Grants Pass	41	40
5R65	DEER CREEK	Grants Pass	59	150
TARGET SCORE = 56			70	95
Program Year 15 (2014):				
4M268	KINGS ROAD	Corvallis	115	74
4M269	29 TH STREET	Corvallis	133	89
4U5	DOUGLAS	Roseburg/Myrtle Creek	34	52
4C50	BUNKERHILL	Coos Bay/Coquille	152	81
5R63	WOOD RIVER	Grants Pass	193	98
TARGET MET			TARGET SCORE = 100	125
Program Year 14 (2013):				
4C42	TERRES HGHTS	Coos Bay/Coquille	158	127
5K70	EASTSIDE (Hood River)	Hood River	110	33
5R133	GLENDALE	Grants Pass	171	135
5R259	CHINOOK (Grants Pass)	Grants Pass	131	110
5R53	ROUGH & READY	Grants Pass	69	95
TARGET MET			TARGET SCORE = 102	128
Program Year 13 (2012):				
5D144	D.R.W.	Bend/Redmond	124	33
5D2	DESCHUTES S	Bend/Redmond	104	52
4U39	GOEDECK	Roseburg/Myrtle Creek	24	28
5U84	LITTLE RIVER	Roseburg/Myrtle Creek	70	159
5L59	WEST	Klamath Falls	45	25
TARGET MET			TARGET SCORE = 59	73
Program Year 12 (2011):				
5L45	CRYSTAL SPR	Klamath Falls	154	55
4D68	WARM SPRINGS	Madras	157	106
5U83	IDLEYLD	Roseburg/Myrtle Creek	146	173
5R248	PLEASANT VLY- MERLIN	Grants Pass	39	116
4U10	DIAMOND	Roseburg/Myrtle Creek	40	73
TARGET SCORE = 86			107	105

Oregon Five-Year Reliability Reporting Region Metrics

Excluding Major Events	SAIDI					SAIFI					MAIFle				
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
OR REGION															
Central OR	34	56	63	60	45	0.362	0.356	1.102	0.489	0.396	3.30	2.67	2.97	2.59	2.50
CoastPlus	97	68	110	87	98	0.885	0.755	1.060	0.757	1.012	3.98	2.64	4.42	4.22	3.51
Northeast OR	75	96	108	120	87	0.519	0.780	1.184	1.036	0.659	3.98	4.10	1.37	4.41	5.34
South OR	139	120	128	133	123	1.354	0.980	1.121	0.830	1.014	4.61	3.07	3.32	4.02	3.54
Willamette Valley	159	148	172	176	157	1.236	1.357	1.316	1.656	1.764	4.85	3.77	6.88	3.16	2.79
OREGON	116	103	123	120	111	1.048	0.911	1.145	0.943	1.069	4.28	3.12	4.227	3.65	3.23

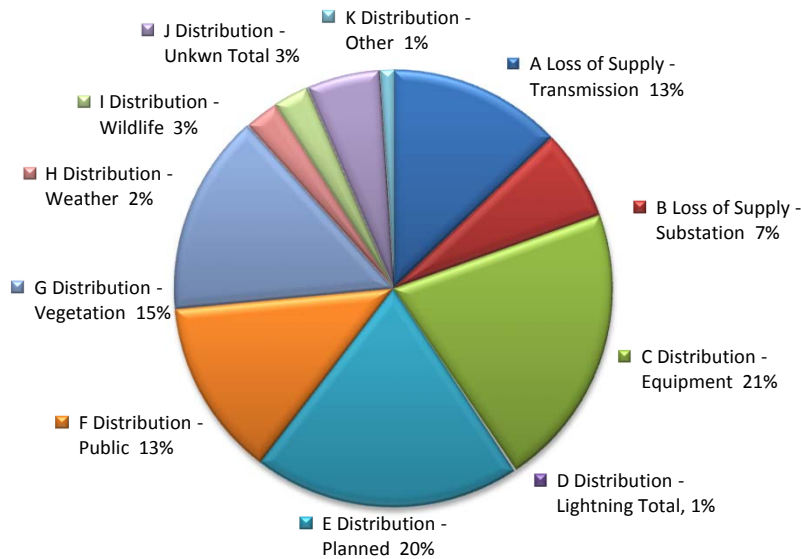
Including Major Events	SAIDI					SAIFI					MAIFle				
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
OR REGION															
Central OR	95	98	99	117	74	0.779	0.557	1.261	0.885	0.700	3.30	2.67	2.97	2.59	2.50
CoastPlus	521	137	211	175	336	1.945	1.145	1.540	1.214	1.969	3.98	2.64	4.42	4.22	3.51
Northeast OR	149	282	205	289	146	0.976	1.603	1.386	1.696	0.920	3.98	4.10	1.37	4.41	5.34
South OR	417	134	146	389	184	1.672	1.022	1.264	1.278	1.377	4.61	3.07	3.32	4.02	3.54
Willamette Valley	444	189	597	240	264	2.229	1.593	2.429	1.873	2.234	4.85	3.77	6.88	3.16	2.79
OREGON	395	147	250	265	223	1.708	1.133	1.574	1.348	1.592	4.28	3.12	4.227	3.65	3.23

Region	Op Area	CY2016	CY2015	CY2014	CY2013	CY2012
Central OR	BEND/REDMOND	61,061	63,110	61,724	60,345	59,844
Central OR	MADRAS	16,476	17,325	17,250	17,177	17,113
Central OR		77,537	80,435	78,974	77,522	76,957
CoastPlus	CLATSOP (ASTORIA)	24,146	24,462	24,367	24,215	24,128
CoastPlus	COOS BAY/COQUILLE	26,104	27,376	27,310	27,200	27,210
CoastPlus	HOOD RIVER	9,113	9,545	9,414	9,269	9,180
CoastPlus	LINCOLN CITY	11,926	12,060	12,071	12,052	12,018
CoastPlus	PORTLAND	79,156	77,877	78,281	77,501	76,977
CoastPlus		150,445	151,320	151,443	150,237	149,513
Northeast OR	ENTERPRISE	5,316	5,412	5,366	5,483	5,457
Northeast OR	HERMISTON	4,634	4,859	4,824	4,783	4,745
Northeast OR	MILTON/FREEWATER	0	102	1,010	1,003	994
Northeast OR	PENDLETON	12,762	13,299	13,180	13,151	13,122
Northeast OR	WALLA WALLA OR	1,723	1,177	1,372	1,360	1,416
Northeast OR		24,435	24,849	25,752	25,780	25,734
South OR	GRANTS PASS	50,709	52,490	52,220	51,957	51,497
South OR	KLAMATH FALLS	37,251	39,334	39,153	39,004	38,925
South OR	LAKEVIEW	2,410	2,543	2,529	2,557	2,529
South OR	MEDFORD	87,494	90,122	89,379	88,690	87,985
South OR	ROSEBURG/MYRTLECREEK	42,116	43,233	43,022	42,926	42,807
South OR		219,980	227,722	226,303	225,134	223,743
Willamette Valley	ALBANY	30,943	32,190	32,670	32,310	32,119
Willamette Valley	CORVALLIS	29,072	29,754	29,551	29,330	28,981
Willamette Valley	COTTAGE GROVE/J.CITY	10,983	11,271	11,371	11,329	11,292
Willamette Valley	DALLAS/INDEPENDENCE	14,717	15,044	14,854	14,725	14,674
Willamette Valley	LEBANON	20,090	20,914	19,818	19,644	19,531
Willamette Valley	STAYTON	13,254	13,951	13,851	13,764	13,675
Willamette Valley		119,059	123,124	122,115	121,102	120,272
Oregon		591,456	607,450	604,587	599,775	596,219

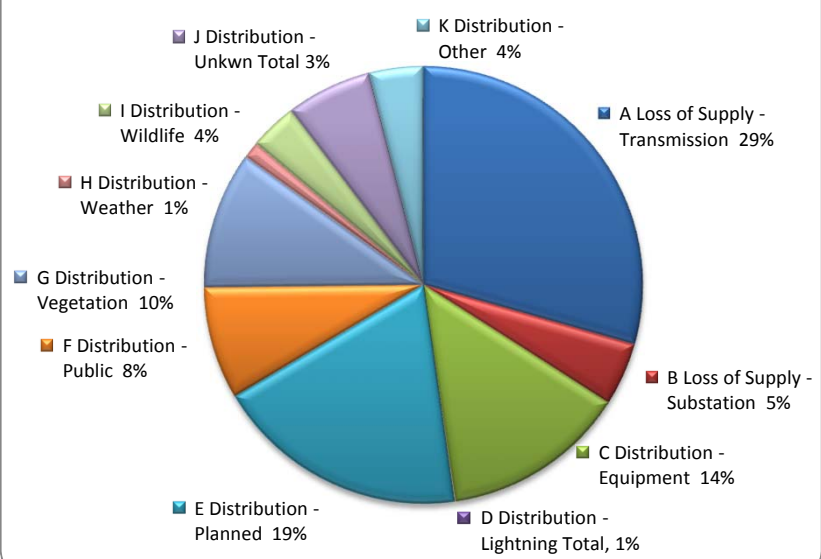
Oregon Five-Year Cause Analysis by State (excluding major events)

OAR Cause	2012		2013		2014		2015		2016	
	SAIDI	SAIFI	SAIDI	SAIFI	SAIDI	SAIFI	SAIDI	SAIFI	SAIDI	SAIFI
A Loss of Supply - Transmission	13.73	0.303	13.68	0.219	12.58	0.376	9.69	0.156	16.12	0.336
B Loss of Supply - Substation	3.84	0.024	8.32	0.070	7.66	0.047	8.87	0.039	8.37	0.053
C Distribution - Equipment	24.17	0.153	25.58	0.161	30.12	0.186	27.24	0.171	26.33	0.156
D Distribution - Lightning	1.02	0.006	4.98	0.019	1.49	0.005	1.09	0.006	0.20	0.001
E Distribution - Planned	18.46	0.170	19.41	0.185	20.56	0.175	32.78	0.233	24.72	0.214
F Distribution - Public	11.90	0.064	11.48	0.071	16.31	0.096	17.66	0.116	16.42	0.095
G Distribution - Vegetation	32.85	0.201	14.17	0.097	31.56	0.194	24.86	0.134	18.65	0.116
H Distribution - Weather	2.65	0.010	1.22	0.007	3.65	0.021	4.52	0.035	3.17	0.014
I Distribution - Wildlife	2.92	0.037	2.37	0.031	2.16	0.026	5.19	0.047	3.31	0.040
J Distribution - Unknown	7.85	0.089	8.46	0.077	5.51	0.057	5.41	0.075	6.76	0.072
K Distribution - Other	2.38	0.023	3.03	0.020	0.86	0.008	1.46	0.025	1.33	0.046
Grand Total	121.78	1.080	112.70	0.954	132.44	1.191	138.78	1.036	125.38	1.143

2016 Oregon Cause Analysis - SAIDI



2016 Oregon Cause Analysis - SAIFI



Oregon Five-Year Cause by Reliability Region (excluding major events)

Reliability Region	OAR Cause	2012		2013		2014		2015		2016	
		SAIDI	SAIFI	SAIDI	SAIFI	SAIDI	SAIFI	SAIDI	SAIFI	SAIDI	SAIFI
Central OR	A Loss of Supply - Transmission	1.80	0.038	0.74	0.000	4.91	0.557	2.25	0.046	0.56	0.027
	B Loss of Supply - Substation	0.47	0.027	9.60	0.037	5.38	0.130	-	-	-	-
	C Distribution - Equipment	17.11	0.134	19.55	0.108	29.98	0.197	31.30	0.193	26.37	0.130
	D Distribution - Lightning	0.26	0.002	0.16	0.001	0.62	0.004	0.05	0.002	0.17	0.002
	E Distribution - Planned	5.66	0.068	30.10	0.169	13.67	0.154	25.09	0.353	3.65	0.066
	F Distribution - Public	5.07	0.040	10.25	0.051	9.13	0.045	4.83	0.025	5.02	0.030
	G Distribution - Vegetation	2.02	0.021	3.17	0.043	3.18	0.034	3.79	0.032	5.38	0.044
	H Distribution - Weather	0.35	0.003	0.42	0.002	0.73	0.002	7.73	0.066	0.24	0.002
	I Distribution - Wildlife	0.38	0.004	0.33	0.004	1.11	0.012	0.68	0.006	1.51	0.026
	J Distribution - Unknown	1.68	0.032	3.18	0.019	2.62	0.018	2.49	0.035	1.73	0.066
	K Distribution - Other	0.11	0.004	0.10	0.001	0.09	0.001	1.69	0.009	1.01	0.008
	Grand Total	34.92	0.373	77.60	0.435	71.43	1.155	79.92	0.768	45.64	0.400
CoastPlus OR	A Loss of Supply - Transmission	4.21	0.226	3.72	0.189	9.84	0.341	0.00	0.000	15.79	0.353
	B Loss of Supply - Substation	1.30	0.017	6.84	0.071	4.06	0.011	-	-	3.15	0.035
	C Distribution - Equipment	13.60	0.085	20.24	0.143	29.08	0.177	22.98	0.167	22.82	0.142
	D Distribution - Lightning	0.05	0.000	0.13	0.001	0.01	0.000	0.04	0.000	0.03	0.000
	E Distribution - Planned	16.24	0.121	19.66	0.165	27.50	0.208	45.79	0.285	26.82	0.222
	F Distribution - Public	10.94	0.073	7.04	0.052	16.40	0.122	17.06	0.165	21.70	0.131
	G Distribution - Vegetation	39.40	0.250	8.92	0.080	31.28	0.225	21.10	0.130	21.38	0.168
	H Distribution - Weather	2.99	0.008	0.05	0.001	4.51	0.027	3.96	0.032	0.34	0.002
	I Distribution - Wildlife	2.41	0.044	1.45	0.022	0.84	0.011	1.14	0.010	2.68	0.041
	J Distribution - Unknown	7.42	0.054	2.21	0.040	1.88	0.015	3.04	0.041	1.98	0.022
	K Distribution - Other	3.15	0.033	7.01	0.041	0.09	0.002	0.29	0.022	0.72	0.031
	Grand Total	101.72	0.910	77.29	0.804	125.50	1.138	115.41	0.852	117.42	1.147
Northeast OR	A Loss of Supply - Transmission	8.63	0.040	19.85	0.190	24.67	0.439	9.05	0.075	1.82	0.034
	B Loss of Supply - Substation	-	-	8.30	0.055	5.00	0.033	0.51	0.007	7.40	0.019
	C Distribution - Equipment	21.32	0.108	32.87	0.241	22.42	0.165	32.46	0.181	17.24	0.101
	D Distribution - Lightning	11.29	0.056	2.05	0.010	2.01	0.010	0.36	0.003	0.43	0.006
	E Distribution - Planned	8.13	0.117	18.05	0.163	16.50	0.174	8.17	0.163	11.22	0.084
	F Distribution - Public	4.53	0.048	5.18	0.043	9.37	0.062	21.06	0.151	11.57	0.082
	G Distribution - Vegetation	12.73	0.076	4.16	0.021	10.84	0.145	23.83	0.247	18.85	0.154
	H Distribution - Weather	2.44	0.015	0.97	0.004	6.86	0.035	3.51	0.024	3.30	0.058
	I Distribution - Wildlife	1.60	0.025	3.49	0.041	2.37	0.038	8.85	0.092	12.28	0.097
	J Distribution - Unknown	5.54	0.046	6.55	0.056	6.22	0.065	9.61	0.093	5.30	0.038
	K Distribution - Other	1.26	0.008	0.51	0.003	4.60	0.044	4.39	0.019	0.01	0.000
	Grand Total	77.49	0.539	101.98	0.825	110.86	1.210	121.80	1.055	89.42	0.674

Oregon Five-Year Cause by Reliability Region (excluding major events)

Reliability Region	OAR Cause	2012		2013		2014		2015		2016	
		SAIDI	SAIFI	SAIDI	SAIFI	SAIDI	SAIFI	SAIDI	SAIFI	SAIDI	SAIFI
Southern OR	A Loss of Supply - Transmission	27.67	0.566	19.60	0.233	19.35	0.444	18.93	0.146	9.22	0.247
	B Loss of Supply - Substation	3.33	0.024	11.00	0.101	12.66	0.035	22.18	0.078	10.42	0.056
	C Distribution - Equipment	29.46	0.165	22.15	0.135	26.12	0.167	24.26	0.145	25.31	0.145
	D Distribution - Lightning	0.57	0.003	11.95	0.034	0.51	0.003	1.64	0.009	0.39	0.001
	E Distribution - Planned	24.36	0.220	16.84	0.169	15.63	0.125	27.79	0.157	30.91	0.243
	F Distribution - Public	5.73	0.035	14.32	0.103	13.63	0.059	11.62	0.065	18.59	0.117
	G Distribution - Vegetation	37.19	0.192	17.01	0.090	33.52	0.177	22.05	0.095	22.65	0.105
	H Distribution - Weather	3.44	0.014	1.50	0.009	1.90	0.010	2.36	0.012	7.17	0.025
	I Distribution - Wildlife	3.81	0.042	3.01	0.046	3.34	0.037	9.80	0.081	3.42	0.035
	J Distribution - Unknown	10.04	0.109	9.86	0.086	8.52	0.093	7.47	0.097	9.26	0.078
	K Distribution - Other	3.02	0.028	1.11	0.012	0.41	0.003	1.17	0.008	1.93	0.038
Grand Total		148.61	1.399	128.37	1.018	135.62	1.152	149.27	0.894	139.25	1.092
WImVly OR	A Loss of Supply - Transmission	8.38	0.134	22.02	0.374	5.83	0.164	9.50	0.454	42.34	0.743
	B Loss of Supply - Substation	10.94	0.037	4.37	0.033	4.87	0.063	2.64	0.048	16.84	0.113
	C Distribution - Equipment	32.59	0.235	40.86	0.248	40.54	0.231	34.28	0.207	34.47	0.220
	D Distribution - Lightning	1.37	0.013	1.71	0.026	5.59	0.016	2.15	0.011	0.03	0.000
	E Distribution - Planned	20.67	0.215	17.33	0.253	26.37	0.239	36.01	0.243	27.14	0.274
	F Distribution - Public	30.53	0.126	13.81	0.052	27.25	0.175	37.28	0.200	14.16	0.054
	G Distribution - Vegetation	40.66	0.300	24.56	0.180	51.00	0.301	48.66	0.253	16.41	0.109
	H Distribution - Weather	2.29	0.010	2.73	0.013	7.01	0.042	7.30	0.064	1.23	0.006
	I Distribution - Wildlife	3.79	0.046	3.40	0.032	2.21	0.032	3.85	0.046	3.24	0.045
	J Distribution - Unknown	8.76	0.138	17.37	0.146	6.15	0.066	5.57	0.100	11.78	0.136
	K Distribution - Other	1.90	0.016	4.08	0.021	2.35	0.022	2.72	0.072	1.49	0.113
Grand Total		161.88	1.268	152.25	1.379	179.17	1.350	189.96	1.697	169.12	1.814

Oregon 2016 Active Circuits with Substation, Voltage and Customer Counts

Reliability Region	Op Area Name	Substation Name	Circuit Id	Circuit Name	Kv	Customer Count
Central OR	BEND/REDMOND	BEND	5D10	PORTLAND AVE	12.5	2,323
Central OR	BEND/REDMOND	BEND	5D11	GLEN VISTA	12.5	1,077
Central OR	BEND/REDMOND	BEND	5D12	DIVISION ST.	12.5	214
Central OR	BEND/REDMOND	BEND	5D196	MALLARD	12.5	1,423
Central OR	BEND/REDMOND	BOND STREET	5D411	BACHELOR	12.5	1,707
Central OR	BEND/REDMOND	BOND STREET	5D413	OLD MILL.	12.5	367
Central OR	BEND/REDMOND	BOND STREET	5D418	BLAKELY	12.5	1,256
Central OR	BEND/REDMOND	CHINA HAT	5D140	LAVA (CHINA HAT)	12.5	2,200
Central OR	BEND/REDMOND	CHINA HAT	5D142	HIGH DESERT	12.5	1,624
Central OR	BEND/REDMOND	CHINA HAT	5D144	D.R.W.	12.5	2,377
Central OR	BEND/REDMOND	CLEVELAND AVE.	5D30	ARROWHEAD	12.5	853
Central OR	BEND/REDMOND	CLEVELAND AVE.	5D35	WICKIUP	12.5	933
Central OR	BEND/REDMOND	CLEVELAND AVE.	5D38	TOMAHAWK	12.5	1,376
Central OR	BEND/REDMOND	CLEVELAND AVE.	5D94	TEEPEE	12.5	3,046
Central OR	BEND/REDMOND	CLEVELAND AVE.	5D96	OBSIDIAN	12.5	861
Central OR	BEND/REDMOND	CLEVELAND AVE.	5D98	HUCKLEBERRY	12.5	1,288
Central OR	BEND/REDMOND	CROOKED RIVER RANCH	4D131	CANYON	20.8	1,701
Central OR	BEND/REDMOND	CROOKED RIVER RANCH	4D30	CROOKED R.R.	20.8	741
Central OR	BEND/REDMOND	DESCHUTES	5D184	PRONGHORN	12.5	1,063
Central OR	BEND/REDMOND	DESCHUTES	5D2	DESCHUTES S	12.5	948
Central OR	BEND/REDMOND	HUNTERS CIRCLE	5D192	Mackinaw	12.5	627
Central OR	BEND/REDMOND	MIDPOINT	CO01-1	MIDPOINT-HEMMINGWAY-500KV	500	0
Central OR	BEND/REDMOND	OVERPASS	5D104	AWBREY	12.5	877
Central OR	BEND/REDMOND	OVERPASS	5D106	NEZ PERCE	12.5	2,567
Central OR	BEND/REDMOND	OVERPASS	5D120	CHINOOK	12.5	1,315
Central OR	BEND/REDMOND	OVERPASS	5D128	PAIUTE	12.5	1,926
Central OR	BEND/REDMOND	OVERPASS	5D155	APACHE	12.5	1,861
Central OR	BEND/REDMOND	PILOT BUTTE	5D261	KLONDIKE	12.5	3,083
Central OR	BEND/REDMOND	PILOT BUTTE	5D263	DRAKE FEEDER	12.5	1,944
Central OR	BEND/REDMOND	PILOT BUTTE	CO09	BEND-PILOT BUTTE-TAP TO REDMOND-69KV	69	2
Central OR	BEND/REDMOND	PILOT BUTTE	CO-2-BPA	REDMOND(BPA)-PILOT BUTTE-230KV	230	0
Central OR	BEND/REDMOND	REDMOND	5D21	SOUTH (REDMOND)	12.5	703
Central OR	BEND/REDMOND	REDMOND	5D22	INDUSTRIAL	12.5	1,366
Central OR	BEND/REDMOND	REDMOND	5D223	TETHEROW	12.5	795
Central OR	BEND/REDMOND	REDMOND	5D226	CLINE FALLS	12.5	1,393
Central OR	BEND/REDMOND	REDMOND	5D227	WINDSOR	12.5	2,787
Central OR	BEND/REDMOND	REDMOND	5D228	CITY	12.5	1,278
Central OR	BEND/REDMOND	REDMOND	5D229	JUNIPER	12.5	391
Central OR	BEND/REDMOND	REDMOND	CO006	REDMOND-COVE-69KV	69	0
Central OR	BEND/REDMOND	REDMOND	CO03-1	REDMOND(BPA)-HOUSTON LAKE-115KV	115	0
Central OR	BEND/REDMOND	REDMOND	CO07	REMOND-REDMOND BPA-69KV	69	0
Central OR	BEND/REDMOND	SHEVLIN PARK	5D238	WOLVERINE (SHP) (WAS 5D327)	12.5	2,450
Central OR	BEND/REDMOND	SHEVLIN PARK	5D241	BADGER (SHP)	12.5	2,941
Central OR	BEND/REDMOND	SHEVLIN PARK	5D243	Black Bear	12.5	1,164
Central OR	BEND/REDMOND	SUMMER LAKE (BPA)	CO01-1A	SUMMER LAKE (BPA)-HEMMINGWAY-500KV	500	0
Central OR	BEND/REDMOND	YEW AVENUE	5D322	BIRDIE	12.5	1,455
Central OR	BEND/REDMOND	YEW AVENUE	5D323	FAIRWAY	12.5	380
Central OR	BEND/REDMOND	YEW AVENUE	5D325	EAGLE	12.5	2,352
Central OR	BEND/REDMOND	YEW AVENUE	CO18	TAP TO YEW AVE-115KV	115	1
Central OR	MADRAS	CHERRY LANE	5D295	7 PEAKS	12.5	140
Central OR	MADRAS	COVE (OR)	CO005	COVE-WARM SPRINGS-69KV	69	1
Central OR	MADRAS	COVE (OR)	CO012	COVE-WARM SPRINGS-69KV	69	1
Central OR	MADRAS	CULVER	5D5	CULVER	12.5	1,718
Central OR	MADRAS	MADRAS	5D52	MADRAS RURAL	12.5	979
Central OR	MADRAS	MADRAS	5D53	AGATE	12.5	1,240
Central OR	MADRAS	MADRAS	5D57	QUARTZ	12.5	1,337

Oregon 2016 Active Circuits with Substation, Voltage and Customer Counts

Reliability Region	Op Area Name	Substation Name	Circuit Id	Circuit Name	Kv	Customer Count
Central OR	MADRAS	MADRAS	5D61	MADRAS CITY	12.5	1,279
Central OR	MADRAS	POWELL BUTTE	5D1	POWELL BUTTE	12.5	592
Central OR	MADRAS	PRINEVILLE	5D126	RIMROCK	12.5	838
Central OR	MADRAS	PRINEVILLE	5D167	NORTHVILLE	12.5	2,548
Central OR	MADRAS	PRINEVILLE	5D25	OCHOCO	12.5	959
Central OR	MADRAS	PRINEVILLE	5D47	MC KAY (PRINEVILLE)	12.5	1,608
Central OR	MADRAS	PRINEVILLE	5D48	LAMONTA	12.5	597
Central OR	MADRAS	PRINEVILLE	5D50	PINE CONE	12.5	78
Central OR	MADRAS	PRINEVILLE	5D69	GRIMES FLAT	12.5	1,528
Central OR	MADRAS	WARM SPRINGS	4D68	WARM SPRINGS (OR)	20.8	1,032
CoastPlus	CLATSOP (ASTORIA)	ASTORIA	CL01-3	ASTORIA-TILLAMOOK-115KV	115	1
CoastPlus	CLATSOP (ASTORIA)	ASTORIA	CL01-3D	CANNON BEACH TAP-NEHALEM(TPUD)-115KV	115	0
CoastPlus	CLATSOP (ASTORIA)	ASTORIA	CL04A	CANNON BEACH-CANNON BEACH TAP-115KV	115	0
CoastPlus	CLATSOP (ASTORIA)	CANNON BEACH	5A10	HAYSTACK	12.5	1,565
CoastPlus	CLATSOP (ASTORIA)	CANNON BEACH	5A8	ECOLA	12.5	1,211
CoastPlus	CLATSOP (ASTORIA)	FERN HILL SUB	5A51	JOHN DAY	12.5	261
CoastPlus	CLATSOP (ASTORIA)	FERN HILL SUB	5A52	SCANDINAVIAN	12.5	374
CoastPlus	CLATSOP (ASTORIA)	KNAPPA SVENSEN	5A92	SVENSEN	12.5	689
CoastPlus	CLATSOP (ASTORIA)	KNAPPA SVENSEN	5A93	BRADWOOD	12.5	912
CoastPlus	CLATSOP (ASTORIA)	SEASIDE	5A80	GROVE	12.5	2,356
CoastPlus	CLATSOP (ASTORIA)	SEASIDE	5A81	CENTRAL	12.5	1,614
CoastPlus	CLATSOP (ASTORIA)	SEASIDE	5A82	NECANICUM	12.5	1,169
CoastPlus	CLATSOP (ASTORIA)	SEASIDE	5A83	GEARHART	12.5	3,148
CoastPlus	CLATSOP (ASTORIA)	WARRENTON	5A15	CITY	12.5	1,821
CoastPlus	CLATSOP (ASTORIA)	WARRENTON	5A16	MILL (WARRENTON)	12.5	548
CoastPlus	CLATSOP (ASTORIA)	WARRENTON	5A20	SOUTH (WARRENTON)	12.5	1,587
CoastPlus	CLATSOP (ASTORIA)	YOUNGS BAY	5A202	PORT DOCK	12.5	1,196
CoastPlus	CLATSOP (ASTORIA)	YOUNGS BAY	5A204	MOO COW	12.5	1,116
CoastPlus	CLATSOP (ASTORIA)	YOUNGS BAY	5A205	FIFTH STREET	12.5	963
CoastPlus	CLATSOP (ASTORIA)	YOUNGS BAY	5A206	YOUNGS BAY #6	12.5	310
CoastPlus	CLATSOP (ASTORIA)	YOUNGS BAY	5A210	YOUNGS BAY #10	12.5	938
CoastPlus	CLATSOP (ASTORIA)	YOUNGS BAY	5A211	OLNEY	12.5	994
CoastPlus	CLATSOP (ASTORIA)	YOUNGS BAY	5A213	INDUSTRIAL	12.5	1,374
CoastPlus	COOS BAY/COQUILLE	BANDON TIE (BPA)	L804	BANDON	20.8	740
CoastPlus	COOS BAY/COQUILLE	COOS RIVER	4C106	COOS RIVER	20.8	1,350
CoastPlus	COOS BAY/COQUILLE	COQUILLE	4C41	HENRY STREET	20.8	1,656
CoastPlus	COOS BAY/COQUILLE	COQUILLE	4C42	TERRES HGHTS	20.8	1,552
CoastPlus	COOS BAY/COQUILLE	COQUILLE	4C43	INDUSTRIAL	20.8	148
CoastPlus	COOS BAY/COQUILLE	EMPIRE NEW	4C108	EMPIRE	20.8	1,715
CoastPlus	COOS BAY/COQUILLE	EMPIRE NEW	4C89	SCOTT	20.8	1,380
CoastPlus	COOS BAY/COQUILLE	EMPIRE NEW	4C90	CHARLESTON	20.8	2,079
CoastPlus	COOS BAY/COQUILLE	FAIRVIEW (BPA)	CB01	FAIRVIEW-ISTHMUS-230KV	230	0
CoastPlus	COOS BAY/COQUILLE	FAIRVIEW (BPA)	CB02	FAIRVIEW-LOCKHART-115KV	115	0
CoastPlus	COOS BAY/COQUILLE	FAIRVIEW (BPA)	CB02-1	FAIRVIEW-COQUILLE-115KV	115	0
CoastPlus	COOS BAY/COQUILLE	JORDAN POINT	5C11	WEYCO#2	12.5	1
CoastPlus	COOS BAY/COQUILLE	JORDAN POINT	5C6	SAND DUNES (JORDAN POINT)	12.5	31
CoastPlus	COOS BAY/COQUILLE	LOCKHART STREET	4C48	CITY CENTER	20.8	1,521
CoastPlus	COOS BAY/COQUILLE	LOCKHART STREET	4C49	EASTSIDE	20.8	770
CoastPlus	COOS BAY/COQUILLE	LOCKHART STREET	4C5	GEORGIA-PAC	20.8	94
CoastPlus	COOS BAY/COQUILLE	LOCKHART STREET	4C50	BUNKERHILL	20.8	1,812
CoastPlus	COOS BAY/COQUILLE	LOCKHART STREET	4C97	ENGLEWOOD	20.8	1,369
CoastPlus	COOS BAY/COQUILLE	LOCKHART STREET	CB02-2	LOCKHART-COQUILLE-115KV	115	0
CoastPlus	COOS BAY/COQUILLE	LOCKHART STREET	CB06-2	COOS RIVER-LOCKHART-115KV	115	0
CoastPlus	COOS BAY/COQUILLE	MYRTLE POINT	4C36	NORTH (MYRTLE POINT)	20.8	337
CoastPlus	COOS BAY/COQUILLE	MYRTLE POINT	4C37	MAPLE STREET	20.8	2,067
CoastPlus	COOS BAY/COQUILLE	SOUTH DUNES	5C9	DOUGLAS CHIP	12.5	2

Oregon 2016 Active Circuits with Substation, Voltage and Customer Counts

Reliability Region	Op Area Name	Substation Name	Circuit Id	Circuit Name	Kv	Customer Count
CoastPlus	COOS BAY/COQUILLE	STATE STREET	4C112	WOODLAND	20.8	1,827
CoastPlus	COOS BAY/COQUILLE	STATE STREET	4C66	BAYSHORE	20.8	1,695
CoastPlus	COOS BAY/COQUILLE	STATE STREET	4C67	INDUSTRIAL	20.8	2,201
CoastPlus	COOS BAY/COQUILLE	STATE STREET	4C86	BANGOR	20.8	1,757
CoastPlus	HOOD RIVER	GORDON HOLLOW	4K1	SHERMAN 208	20.8	475
CoastPlus	HOOD RIVER	HOOD RIVER	5K37	RESIDENTIAL	12.5	2,016
CoastPlus	HOOD RIVER	HOOD RIVER	5K43	BELMONT	12.5	1,125
CoastPlus	HOOD RIVER	HOOD RIVER	5K44	NORTH (HOOD RIVER)	12.5	1,752
CoastPlus	HOOD RIVER	HOOD RIVER	5K70	EASTSIDE	7.2	996
CoastPlus	HOOD RIVER	HOOD RIVER	5K74	SOUTH (HOOD RIVER)	12.5	1,559
CoastPlus	HOOD RIVER	KENWOOD	5K50	OAKGROVE	12.5	691
CoastPlus	HOOD RIVER	MORO	8K6	MORO	2.4	103
CoastPlus	HOOD RIVER	TUCKER	HR01	TUCKER-POWERDALE-69KV	69	0
CoastPlus	HOOD RIVER	TUCKER	HR04	TUCKER-POWERDALE-69KV	69	2
CoastPlus	HOOD RIVER	WASCO	7K1	WASCO	4.1	266
CoastPlus	LINCOLN CITY	BOYER	LC02	BOYER-DEVILS LAKE #2-115KV	115	0
CoastPlus	LINCOLN CITY	DEVILS LAKE	4A310	INLAND FEEDER	20.8	1,812
CoastPlus	LINCOLN CITY	DEVILS LAKE	4A312	OCEAN	20.8	2,910
CoastPlus	LINCOLN CITY	DEVILS LAKE	4A316	LAKE (DEVILS LAKE)	20.8	4,417
CoastPlus	LINCOLN CITY	DEVILS LAKE	4A338	SIUSLAW	20.8	648
CoastPlus	LINCOLN CITY	GLENEDEN	7A364	GLENEDEN	4.1	703
CoastPlus	LINCOLN CITY	GLENEDEN	7A366	SALISHAN	4.1	355
CoastPlus	LINCOLN CITY	NELSCOTT	7A390	NELSCOTT	4.1	349
CoastPlus	LINCOLN CITY	PGE GRAND RONDE	R114	BOYER	12	19
CoastPlus	LINCOLN CITY	WECOMA BEACH	7A354	WECOMA	4.1	712
CoastPlus	PORTLAND	ALBINA	5P111	ALBINA 11C01-UG	11.7	684
CoastPlus	PORTLAND	ALBINA	5P194	11C24-UG	11.7	27
CoastPlus	PORTLAND	ALBINA	5P196	11C16-UG	11.7	445
CoastPlus	PORTLAND	ALBINA	5P200	11C20-UG	11.7	457
CoastPlus	PORTLAND	ALBINA	5P91	11C11-UG	11.7	322
CoastPlus	PORTLAND	ALBINA	5P92	11C12-UG	11.7	45
CoastPlus	PORTLAND	ALDERWOOD 115/12.5	5P22	ALDERWOOD #2	12.5	202
CoastPlus	PORTLAND	ALDERWOOD 115/12.5	5P33	ALDERWOOD #4	12.5	181
CoastPlus	PORTLAND	ALDERWOOD 115/12.5	5P604	ALDERWOOD #3	12.5	174
CoastPlus	PORTLAND	BLOSS	5P172	FURNACE	12.5	1
CoastPlus	PORTLAND	BPA ST JOHNS	P10-2	BPA ST JOHNS-ST JOHNS-115KV	115	0
CoastPlus	PORTLAND	BPA ST JOHNS	P11	ST JOHNS-KNOTT-115KV	115	0
CoastPlus	PORTLAND	COLUMBIA (OR)	5P266	#2	12.5	2,554
CoastPlus	PORTLAND	COLUMBIA (OR)	5P268	COLUMBIA #1	12.5	320
CoastPlus	PORTLAND	COLUMBIA (OR)	5P474	COLUMBIA #6	12.5	549
CoastPlus	PORTLAND	COLUMBIA (OR)	5P476	COLUMBIA #3	12.5	821
CoastPlus	PORTLAND	COLUMBIA (OR)	5P478	COLUMBIA #4	12.5	824
CoastPlus	PORTLAND	COLUMBIA (OR)	5P480	COLUMBIA #5	12.5	21
CoastPlus	PORTLAND	COLUMBIA (OR)	P25	COLUMBIA-PARK ROSE-57KV	57	0
CoastPlus	PORTLAND	CULLY	5P288	CULLY #3-UG	12.5	798
CoastPlus	PORTLAND	CULLY	5P290	CULLY #2	12.5	2,393
CoastPlus	PORTLAND	CULLY	5P292	CULLY #1	12.5	2,924
CoastPlus	PORTLAND	HOLLADAY (OR)	5P145	HOLLADAY #1-UG	11.7	12
CoastPlus	PORTLAND	HOLLADAY (OR)	5P146	HOLLADAY #2-UG	11.7	22
CoastPlus	PORTLAND	HOLLADAY (OR)	5P147	HOLLADAY #3-UG	11.7	670
CoastPlus	PORTLAND	HOLLADAY (OR)	5P156	HOLLADAY #4-UG	11.7	299
CoastPlus	PORTLAND	HOLLADAY (OR)	5P157	HOLLADAY #5-UG	11.7	330
CoastPlus	PORTLAND	HOLLADAY (OR)	5P158	HOLLADAY #6	11.7	772
CoastPlus	PORTLAND	HOLLADAY (OR)	P13	HOLLADAY-HARRISON-115KV	115	0
CoastPlus	PORTLAND	HOLLYWOOD	5P203	HOLLYWOOD #3	12.5	1,346
CoastPlus	PORTLAND	HOLLYWOOD	5P204	HOLLYWOOD #2	12.5	1,935

Oregon 2016 Active Circuits with Substation, Voltage and Customer Counts

Reliability Region	Op Area Name	Substation Name	Circuit Id	Circuit Name	Kv	Customer Count
CoastPlus	PORTLAND	HOLLYWOOD	5P205	HOLLYWOOD #1	12.5	2,099
CoastPlus	PORTLAND	HOLLYWOOD	5P208	HOLLYWOOD #5	12.5	1,723
CoastPlus	PORTLAND	HOLLYWOOD	5P209	HOLLYWOOD #4	12.5	2,348
CoastPlus	PORTLAND	KILLINGSWORTH	5P123	KILLINGSWORTH #3	12.5	332
CoastPlus	PORTLAND	KILLINGSWORTH	5P217	KILLINGSWORTH #5	12.5	420
CoastPlus	PORTLAND	KILLINGSWORTH	5P41	KILLINGSWORTH #4	12.5	2,732
CoastPlus	PORTLAND	KILLINGSWORTH	5P88	KILLINGSWORTH #1-UG	12.5	15
CoastPlus	PORTLAND	KILLINGSWORTH	5P89	KILLINGSWORTH #2	12.5	3,085
CoastPlus	PORTLAND	KNOTT	5P231	KNOTT #1	12.5	2,962
CoastPlus	PORTLAND	KNOTT	5P232	KNOTT #2	12.5	1,513
CoastPlus	PORTLAND	KNOTT	5P233	KNOTT #3	12.5	2,305
CoastPlus	PORTLAND	KNOTT	5P368	11022	11.7	171
CoastPlus	PORTLAND	KNOTT	5P372	11046	11.7	562
CoastPlus	PORTLAND	KNOTT	5P374	11020	11.7	969
CoastPlus	PORTLAND	KNOTT	P14-4	HOLLYWOOD-KNOTT-115KV	115	0
CoastPlus	PORTLAND	KNOTT	P26	KNOTT-PARKROSE-57KV	57	1
CoastPlus	PORTLAND	LINCOLN (OR)	5P418	11D17	11.7	130
CoastPlus	PORTLAND	LINCOLN (OR)	5P420	11D14	11.7	21
CoastPlus	PORTLAND	LINCOLN (OR)	5P422	11D06-UG	11.7	543
CoastPlus	PORTLAND	LINCOLN (OR)	5P424	11D03-UG	11.7	1
CoastPlus	PORTLAND	LINCOLN (OR)	5P426	11D04-UG	11.7	321
CoastPlus	PORTLAND	LINCOLN (OR)	5P430	11D05-UG	11.7	366
CoastPlus	PORTLAND	LINCOLN (OR)	5P432	11D02-UG	11.7	474
CoastPlus	PORTLAND	LINCOLN (OR)	5P434	11D12-UG	11.7	15
CoastPlus	PORTLAND	LINCOLN (OR)	5P436	11G18-UG	11.7	103
CoastPlus	PORTLAND	LINCOLN (OR)	5P438	11D08-UG	11.7	17
CoastPlus	PORTLAND	LINCOLN (OR)	5P456	11D09-UG	11.7	184
CoastPlus	PORTLAND	LINCOLN (OR)	5P458	11D07-UG	11.7	216
CoastPlus	PORTLAND	LINCOLN (OR)	5P460	11D01-UG	11.7	1
CoastPlus	PORTLAND	LINCOLN (OR)	5P462	11G13-UG	11.7	32
CoastPlus	PORTLAND	LINCOLN (OR)	5P464	11G16-UG	11.6	172
CoastPlus	PORTLAND	LINCOLN (OR)	P16	LINCOLN-URBAN-115KV	115	1
CoastPlus	PORTLAND	MALLORY	5P162	MALLORY #1	12.8	1,975
CoastPlus	PORTLAND	MALLORY	5P164	MALLORY #2	12.8	3,051
CoastPlus	PORTLAND	MERWIN	P08	MERWIN-BPA CARDWELL-115KV	115	1
CoastPlus	PORTLAND	MERWIN	P09	MERWIN-YALE-115KV	115	1
CoastPlus	PORTLAND	PARKROSE	5P244	PARKROSE#4	12.5	3,077
CoastPlus	PORTLAND	PARKROSE	5P246	PARKROSE#3	12.5	3,053
CoastPlus	PORTLAND	PARKROSE	5P250	PARKROSE#2	12.5	664
CoastPlus	PORTLAND	PARKROSE	5P252	PARKROSE#1	12.5	1,779
CoastPlus	PORTLAND	RUSSELLVILLE	5P274	RUSSELLVILLE #3	12.5	3,006
CoastPlus	PORTLAND	RUSSELLVILLE	5P276	RUSSELLVILLE #4	12.5	2,313
CoastPlus	PORTLAND	RUSSELLVILLE	5P278	RUSSELLVILLE #1	12.5	3,210
CoastPlus	PORTLAND	RUSSELLVILLE	5P280	RUSSELLVILLE #2	12.5	1,272
CoastPlus	PORTLAND	TROUTDALE	P14	TROUTDALE-KNOTT-115KV	115	0
CoastPlus	PORTLAND	TROUTDALE	P19	TROUTDALE-ALBINA-69KV	69	0
CoastPlus	PORTLAND	TROUTDALE	P22-2	TROUTDALE-JAMES RIV WEST-69KV	69	1
CoastPlus	PORTLAND	TROUTDALE	P22-3	TROUTDALE-JAMES RIV EAST-69KV	69	0
CoastPlus	PORTLAND	VERNON	5P391	VERNON #1	12.5	1,805
CoastPlus	PORTLAND	VERNON	5P392	VERNON NO. 2	12.5	2,488
CoastPlus	PORTLAND	VERNON	5P393	VERNON #3	12.5	3,107
CoastPlus	PORTLAND	VERNON	5P394	VERNON # 4	12.5	3,182
CoastPlus	PORTLAND	VERNON	5P395	VERNON # 5	12.5	2,198
Northeast OR	ENTERPRISE	ENTERPRISE (OR)	4W8	CREIGHTON LN	20.8	1,421
Northeast OR	ENTERPRISE	ENTERPRISE (OR)	5W15	CITY	12.5	927
Northeast OR	ENTERPRISE	ENTERPRISE (OR)	5W26	RURAL (ENTERPRISE)	12.5	1,043

Oregon 2016 Active Circuits with Substation, Voltage and Customer Counts

Reliability Region	Op Area Name	Substation Name	Circuit Id	Circuit Name	Kv	Customer Count
Northeast OR	ENTERPRISE	HURRICANE (OR)	WW08	HURRICANE-ENTERPRISE-69KV	69	0
Northeast OR	ENTERPRISE	JOSEPH	5W21	PRAIRIE	12.5	836
Northeast OR	ENTERPRISE	MINAM	5W18	MINAM	12.5	12
Northeast OR	ENTERPRISE	PALLETTE	4W14	PALLETTE NORTH	19.9	172
Northeast OR	ENTERPRISE	WALLOWA	5W28	CITY	12.5	852
Northeast OR	HERMISTON	ARLINGTON	5K25	ARLINGTON	12.5	513
Northeast OR	HERMISTON	DALREED	4K16	WILLOW COVE	34.5	76
Northeast OR	HERMISTON	DALREED	4K36	SIMTAG	34.5	18
Northeast OR	HERMISTON	DALREED	4K46	BOEING	34.5	176
Northeast OR	HERMISTON	HERMISTON	5W602	RURAL (HERMISTON)	12.5	1,361
Northeast OR	HERMISTON	HINKLE	5W82	MEADOWS	12.5	366
Northeast OR	HERMISTON	UMATILLA	5W658	UMATILLA	12.5	1,143
Northeast OR	HERMISTON	UMATILLA	5W660	MCNARY	12.5	900
Northeast OR	HERMISTON	UMATILLA	5W664	PORT FEEDER	12.5	54
Northeast OR	PENDLETON	ATHENA	5W703	CITY	12.5	839
Northeast OR	PENDLETON	ATHENA	5W705	HELIX	12.5	415
Northeast OR	PENDLETON	BUCKAROO	5W201	STATE HOSP.	12.5	375
Northeast OR	PENDLETON	BUCKAROO	5W202	REITH	12.5	1,526
Northeast OR	PENDLETON	BUCKAROO	5W203	MONTEE	12.5	1,646
Northeast OR	PENDLETON	HERMISTON	WW14	HERMISTON-PENDLETON-69KV	69	0
Northeast OR	PENDLETON	PENDLETON	5W401	WEST HILLS	12.5	1,688
Northeast OR	PENDLETON	PENDLETON	5W402	HARRIS HTS	12.5	2,044
Northeast OR	PENDLETON	PENDLETON	5W403	MISSION	12.5	1,042
Northeast OR	PENDLETON	PENDLETON	7W451	BUSINESS	4.1	255
Northeast OR	PENDLETON	PENDLETON	7W452	NORTHWEST	4.1	515
Northeast OR	PENDLETON	PENDLETON	7W453	SOUTHWEST (PENDELTON)	4.1	343
Northeast OR	PENDLETON	PENDLETON	7W454	EAST END	4.1	248
Northeast OR	PENDLETON	PILOT ROCK	5W406	PILOT ROCK CITY	12.5	1,370
Northeast OR	PENDLETON	ROUNDUP (BPA)	WW11	BPA ROUNDUP-PILOT ROCK-69KV	69	0
Northeast OR	PENDLETON	WESTON NEW (OR)	5W40	WESTON CANNERY	12.5	14
Northeast OR	PENDLETON	WESTON NEW (OR)	5W7	SCOTTS FEEDER	12.5	441
Northeast OR	WALLA WALLA	UMAPINE	5W105	UMAPINE FEEDER	12.5	965
Northeast OR	WALLA WALLA	UMAPINE	5W106	FERNDALE	12.5	1,329
South OR	GRANTS PASS	AGNESS AVE	5R172	SPALDING MILL	12.5	874
South OR	GRANTS PASS	AGNESS AVE	5R173	JONES CREEK	12.5	850
South OR	GRANTS PASS	AGNESS AVE	5R322	ANTEATER	12.5	957
South OR	GRANTS PASS	APPLEGATE	5R267	MURPHY	12.5	1,018
South OR	GRANTS PASS	APPLEGATE	5R278	HIGHWAY	12.5	1,595
South OR	GRANTS PASS	APPLEGATE	R02-3	APPLEGATE-CAVE JUNCTION-115KV	115	0
South OR	GRANTS PASS	APPLEGATE	R23-2	APPLEGATE-HUMBUG CREEK-69KV	69	0
South OR	GRANTS PASS	APPLEGATE	R23-21	APPLEGATE-PROVOLT-69KV	69	0
South OR	GRANTS PASS	APPLEGATE	R23-22	PROVOLT-HUMBUG CREEK-69KV	69	0
South OR	GRANTS PASS	BEACON	5R104	SAVAGE ST	12.5	1,237
South OR	GRANTS PASS	BEACON	5R105	BEACON ST	12.5	829
South OR	GRANTS PASS	CAVE JUNCTION	5R52	FREE& EASY	12.5	2,302
South OR	GRANTS PASS	CAVE JUNCTION	5R53	ROUGH & READY	12.5	1,502
South OR	GRANTS PASS	CAVE JUNCTION	R04-1	CAVE JCTN-O BRIEN-115KV	115	0
South OR	GRANTS PASS	CAVE JUNCTION	R04-2	O BRIEN-PATRICK CREEK-115KV	115	0
South OR	GRANTS PASS	CAVE JUNCTION	S15	CAVE JCTN-HAPPY CAMP-69KV	69	0
South OR	GRANTS PASS	CAVEMAN	5R295	QUAIL	12.5	1,114
South OR	GRANTS PASS	CAVEMAN	5R82	WASHINGTON	12.5	1,189
South OR	GRANTS PASS	CAVEMAN	5R98	MANZANITA	12.5	572
South OR	GRANTS PASS	CAVEMAN	5R99	CAVEMAN	12.5	1,180
South OR	GRANTS PASS	DOWELL	5R331	DOVE	12.5	1,426
South OR	GRANTS PASS	DOWELL	5R334	DUCK	12.5	2,406
South OR	GRANTS PASS	EASY VALLEY	5R123	G STREET	12.5	2,006

Oregon 2016 Active Circuits with Substation, Voltage and Customer Counts

Reliability Region	Op Area Name	Substation Name	Circuit Id	Circuit Name	Kv	Customer Count
South OR	GRANTS PASS	EASY VALLEY	5R125	ROGUE	12.5	1,697
South OR	GRANTS PASS	EASY VALLEY	5R259	CHINOOK	12.5	1,289
South OR	GRANTS PASS	FIELDER CREEK	4R33	ELK FDR.	20.8	1,562
South OR	GRANTS PASS	FIELDER CREEK	4R34	BEAR FDR	20.8	859
South OR	GRANTS PASS	GLENDALE SUBSTATION	5R133	GLENDALE	12.5	1,855
South OR	GRANTS PASS	GLENDALE SUBSTATION	5R143	INDUSTRIAL	12.5	637
South OR	GRANTS PASS	GRANTS PASS	BB08-4	GRANTS PASS-GLENDALE-230KV	230	0
South OR	GRANTS PASS	GRANTS PASS	R02-1	APPLEGATE-GRANTS PASS-115KV	115	0
South OR	GRANTS PASS	GRANTS PASS	R03	GRANTS PASS-CAVE JCTN-115KV	115	0
South OR	GRANTS PASS	GRANTS PASS	R03-1	GRANTS PASS-PARK DALE JCT-115KV	115	0
South OR	GRANTS PASS	GRANTS PASS	R06	DOWELL-GRANTS PASS-115KV	115	0
South OR	GRANTS PASS	GRANTS PASS	R06-1	AGNESS AVE-GRANTS PASS-115KV	115	0
South OR	GRANTS PASS	GRANTS PASS	R13	GRANTS PASS-TOLO-69KV	69	0
South OR	GRANTS PASS	GRANTS PASS	R13-7	ROGUE RIVER-SAVAGE RAPIDS-69KV	69	0
South OR	GRANTS PASS	JEROME PRAIRIE	5R62	WILD PRAIRIE	12.5	1,582
South OR	GRANTS PASS	JEROME PRAIRIE	5R63	WOOD RIVER	12.5	1,553
South OR	GRANTS PASS	MERLIN	5R232	MERLIN-HUGO	12.5	2,033
South OR	GRANTS PASS	MERLIN	5R234	PARADISE	12.5	1,170
South OR	GRANTS PASS	MERLIN	5R248	PLEASANT VALLEY-MERLIN FEEDER	12.5	1,757
South OR	GRANTS PASS	MERLIN	5R251	BADGER	12.5	903
South OR	GRANTS PASS	NEW O'BRIEN	5R106	O'BRIEN	12.5	447
South OR	GRANTS PASS	PARK STREET (OR)	5R114	FRUITDALE	12.5	2,075
South OR	GRANTS PASS	PARK STREET (OR)	5R115	ALLEN CREEK	12.5	975
South OR	GRANTS PASS	PARK STREET (OR)	5R121	NEW HOPE	12.5	1,821
South OR	GRANTS PASS	PARK STREET (OR)	5R164	EXPRESS	12.5	318
South OR	GRANTS PASS	PARK STREET (OR)	5R169	PORTOLA	12.5	1,501
South OR	GRANTS PASS	PROVOLT	5R67	NORTH-SOUTH	12.5	1,392
South OR	GRANTS PASS	ROGUE RIVER	4R7	EVANS VALLEY	20.8	226
South OR	GRANTS PASS	ROGUE RIVER	5R77	SAVAGE/WIMER	12.5	1,794
South OR	GRANTS PASS	ROGUE RIVER	5R78	ROCKY POINT (ROGUE RIVER)	12.5	1,041
South OR	GRANTS PASS	SELMA	5R65	DEER CREEK	12.5	1,175
South OR	KLAMATH FALLS	BEATTY	5L1	BEATTY	12.5	402
South OR	KLAMATH FALLS	BLY	5L14	TOWN (BLY)	12.5	434
South OR	KLAMATH FALLS	BONANZA (OR)	5L7	POE VALLEY	12.5	462
South OR	KLAMATH FALLS	BRYANT	5L2	GARY STREET	12.5	2,092
South OR	KLAMATH FALLS	BRYANT	5L3	WASHBURN	12.5	1,808
South OR	KLAMATH FALLS	BRYANT	5L4	SUMMERS LANE	12.5	1,938
South OR	KLAMATH FALLS	BRYANT	5L5	MOYINA HTS.	12.5	2,399
South OR	KLAMATH FALLS	CASEBEER SUB	4L16	LANGELL VLY	20.8	1,143
South OR	KLAMATH FALLS	CHILOQUIN	5L57	CRATER LAKE	12	1,038
South OR	KLAMATH FALLS	CHILOQUIN	BB04-1	KLAMATH FALLS-CHILOQUIN-230KV	230	0
South OR	KLAMATH FALLS	CHILOQUIN	BB04-2	CHILOQUIN-LA PINE-230KV	230	0
South OR	KLAMATH FALLS	CHILOQUIN	K02	CHILOQUIN-MILE HI-115KV	115	0
South OR	KLAMATH FALLS	CHILOQUIN	K02-1	CHILOQUIN-FISH HOLE-115KV	115	0
South OR	KLAMATH FALLS	CHILOQUIN	K02-2	FISH HOLE-MILE HI-115KV	115	0
South OR	KLAMATH FALLS	CHILOQUIN	K11	CHILOQUIN-CHILOQUIN MARKET-69KV	69	0
South OR	KLAMATH FALLS	CHILOQUIN	K11-3	CHILOQUIN MARKET-MODOC-69KV	69	0
South OR	KLAMATH FALLS	CHILOQUIN MARKET	5L37	WILLIAMSON	12.5	539
South OR	KLAMATH FALLS	DAIRY	5L42	SWAN LAKE	12.5	275
South OR	KLAMATH FALLS	DAIRY	5L43	DAIRY	12.5	463
South OR	KLAMATH FALLS	DORRIS	K10	DORRIS-TUNNEL TAP-69KV	69	0
South OR	KLAMATH FALLS	FISHHOLE	K05-4	BONANZA TAP-FISHHOLE-69KV	69	0
South OR	KLAMATH FALLS	FISHHOLE	K05-4A	BONANZA TAP-SPRAGUE RIVER-69KV	69	0
South OR	KLAMATH FALLS	FISHHOLE	K05-4C	BEATTY-BLY-69KV	69	0
South OR	KLAMATH FALLS	HAMAKER	5L55	KENO	12.5	1,666
South OR	KLAMATH FALLS	HAMAKER	5L56	MOUNTAIN	12.5	160

Oregon 2016 Active Circuits with Substation, Voltage and Customer Counts

Reliability Region	Op Area Name	Substation Name	Circuit Id	Circuit Name	Kv	Customer Count
South OR	KLAMATH FALLS	HENLEY	5L58	HENLEY	12.5	234
South OR	KLAMATH FALLS	HENLEY	5L59	WEST	12.5	530
South OR	KLAMATH FALLS	HORNET	5L44	HOMEDALE	12.5	2,704
South OR	KLAMATH FALLS	HORNET	5L45	CRYSTAL SPR	12.5	1,489
South OR	KLAMATH FALLS	HORNET	K04-2K	HENLEY TAP-MERRILL-69KV	69	0
South OR	KLAMATH FALLS	JOHN C. BOYLE SUB	K12-3	JC BOYLE TAP-KLAMATH FALLS-WEYEHAEUSER-69KV	69	0
South OR	KLAMATH FALLS	JOHN C. BOYLE SUB	K12-3A	HAMAKER-JC BOYLE TAP-69KV	69	0
South OR	KLAMATH FALLS	KLAMATH	BB06-1	BOYLE-KLAMATH FALLS-230KV	230	0
South OR	KLAMATH FALLS	KLAMATH	K05-1	KLAMATH FALLS-BONANZA-69KV	69	0
South OR	KLAMATH FALLS	KLAMATH	K05-1A	KLAMATH FALLS-HORNET-TEXUM TAP-69KV	69	0
South OR	KLAMATH FALLS	KLAMATH	K05-1B	DAIRY-HORNET-LAKEVIEW JCT-69KV	69	0
South OR	KLAMATH FALLS	KLAMATH	K07-1	KLAMATH FALLS-WESTSIDE-69KV	69	0
South OR	KLAMATH FALLS	KLAMATH	K07-2	KLAMATH FALLS-LAKEVIEW JCT-LAKEPORT-69KV	69	0
South OR	KLAMATH FALLS	KLAMATH	K07-2C	BRYANT-BRYANT TAP-ROSS AVE-69KV	69	0
South OR	KLAMATH FALLS	KLAMATH	K14-2A	DORRIS-KLAMATH FALLS-69KV	69	0
South OR	KLAMATH FALLS	KLAMATH COGEN 500KV SWITCH	BB02-1	KLAMATH CO-GEN - CAPT JACK	500	0
South OR	KLAMATH FALLS	KLAMATH COGEN 500KV SWITCH	BB02-2	KLAMATH COGEN-MERIDAN 500KV LINE	500	0
South OR	KLAMATH FALLS	LAKEPORT	5L49	WOCUS	12.5	189
South OR	KLAMATH FALLS	LAKEPORT	5L54	SOUTH (LAKEPORT)	12.5	2,377
South OR	KLAMATH FALLS	LAKEPORT	5L61	JELDWEN	12.5	7
South OR	KLAMATH FALLS	MALIN	BB05	KLAMATH FALLS-MALIN-230KV	230	0
South OR	KLAMATH FALLS	MALIN	K04-2E	MALIN TAP-TULELAKE TAP-69KV	69	0
South OR	KLAMATH FALLS	MALIN	K04-2F	MALIN TAP-TURKEY HILL-69KV	69	0
South OR	KLAMATH FALLS	MALIN	K04-2J	MERRILL-MERRILL JCT-69KV	69	0
South OR	KLAMATH FALLS	MALIN	K09-1	MALIN-MALIN TAP-69KV	69	0
South OR	KLAMATH FALLS	MERRILL (OR)	5L26	LAKE (MERRILL)	12.5	1,094
South OR	KLAMATH FALLS	MERRILL (OR)	5L27	NORTH (MERRILL)	12.5	550
South OR	KLAMATH FALLS	MODOC	5L36	MODOC	12.5	838
South OR	KLAMATH FALLS	ROSS AVENUE	5L46	ELDORADO	12.5	1,380
South OR	KLAMATH FALLS	ROSS AVENUE	5L48	BROAD ST.	12.5	1,167
South OR	KLAMATH FALLS	RUNNING Y	4L50	ROCKY POINT FEEDER (RUNNING Y)	20.8	1,421
South OR	KLAMATH FALLS	SHASTA WAY	7L25	SHASTA WAY	4.1	428
South OR	KLAMATH FALLS	SPRAGUE RIVER	5L8	SPRAGUE RIVER	12.5	492
South OR	KLAMATH FALLS	TEXUM	5L112	ANDERSON	12.5	1,186
South OR	KLAMATH FALLS	TEXUM	5L113	TOWER	12.5	283
South OR	KLAMATH FALLS	TEXUM	5L116	ALTAMONT	12.5	1,467
South OR	KLAMATH FALLS	TURKEY HILL	5L20	MALIN CITY	12.5	914
South OR	KLAMATH FALLS	TURKEY HILL	5L23	RURAL (TURKEY HILL)	12.5	321
South OR	KLAMATH FALLS	WEST SIDE HE PLANT	5L12	ORINDALE	12.5	763
South OR	KLAMATH FALLS	WEST SIDE HE PLANT	5L15	CALIFORNIA	12.5	1,349
South OR	KLAMATH FALLS	WEST SIDE HE PLANT	5L16	MAIN ST (WEST SIDE HE PLANT)	12.5	107
South OR	KLAMATH FALLS	WEST SIDE HE PLANT	5L17	PINE ST (WEST SIDE HE PLANT)	12.5	488
South OR	KLAMATH FALLS	WEST SIDE HE PLANT	5L18	RIVERSIDE (WEST SIDE HE PLANT)	12.5	573
South OR	KLAMATH FALLS	WEST SIDE HE PLANT	5L19	LAKESHORE	12.5	295
South OR	KLAMATH FALLS	WEST SIDE HE PLANT	8L10	CITY WTR PMP	2.4	1
South OR	LAKEVIEW	MILE-HI	5L104	INDUSTRIAL	12.5	715
South OR	LAKEVIEW	MILE-HI	5L105	BUSINESS	12.5	1,783
South OR	LAKEVIEW	MILE-HI	K03	MILE HI-ALTURAS-115KV	115	2
South OR	LAKEVIEW	MILE-HI	K15-1	MILE HI-SVEC-69KV	69	1
South OR	MEDFORD	ASHLAND (MTN.AVE, PUD)	5R241	CITY	12.5	9
South OR	MEDFORD	ASHLAND (MTN.AVE, PUD)	5R245	VALLEY VIEW	12.5	959
South OR	MEDFORD	ASHLAND (MTN.AVE, PUD)	R08-3	MOUNTAIN AVE(BPA)-OAK KNOLL-115KV	115	0
South OR	MEDFORD	ASHLAND (MTN.AVE, PUD)	R18-2	ASHLAND-TALENT-115KV	115	0
South OR	MEDFORD	BEALL LANE	5R361	BULLDOG	12.5	1,686
South OR	MEDFORD	BEALL LANE	5R364	BOBCAT	12.5	2,149
South OR	MEDFORD	BELKNAP	5R1	KOGAP	12.5	995

Oregon 2016 Active Circuits with Substation, Voltage and Customer Counts

Reliability Region	Op Area Name	Substation Name	Circuit Id	Circuit Name	Kv	Customer Count
South OR	MEDFORD	BELKNAP	5R2	RIVERSIDE (BELKNAP)	12.5	658
South OR	MEDFORD	BELKNAP	5R3	BARNETT	12.5	1,626
South OR	MEDFORD	BELKNAP	5R47	STEWART	12.5	2,074
South OR	MEDFORD	BROOKHURST	5R118	SPRINGBROOK	12.5	1,744
South OR	MEDFORD	BROOKHURST	5R135	ROBERTS (BROOKHURST)	12.5	1,619
South OR	MEDFORD	BROOKHURST	5R32	ROXY	12.5	1,689
South OR	MEDFORD	BROOKHURST	5R33	CRATER LAKE	12.5	1,635
South OR	MEDFORD	BROOKHURST	5R75	SUNRISE (BROOKHURST)	12.5	1,216
South OR	MEDFORD	CAMPBELL	5R216	VOORHIES	12.5	842
South OR	MEDFORD	CAMPBELL	5R218	PHOENIX	12.5	1,511
South OR	MEDFORD	CAMPBELL	5R227	FERN VALLEY	12.5	1,191
South OR	MEDFORD	CAMPBELL	5R312	COBRA	12.5	1,429
South OR	MEDFORD	DODGE BRIDGE	4R1	SALMON	20.8	1,588
South OR	MEDFORD	DODGE BRIDGE	4R35	MEADOWS ROAD	20.8	1,344
South OR	MEDFORD	FOOTHILLS	5R38	HOSPITAL	12.5	763
South OR	MEDFORD	FOOTHILLS	5R39	PIERCE ROAD	12.5	1,156
South OR	MEDFORD	FRALEY	5R87	TABLE ROCK	12.5	502
South OR	MEDFORD	FRALEY	5R88	DODGE BRIDGE	12.5	364
South OR	MEDFORD	GOLD HILL	5R103	GOLD HILL	12.5	1,973
South OR	MEDFORD	GOLD HILL	R13-4	GOLD HILL-TOLO-69KV	69	0
South OR	MEDFORD	GRIFFIN CREEK	5R204	HULL RD	12.5	2,584
South OR	MEDFORD	GRIFFIN CREEK	5R206	GRIFFIN CREEK	12.5	1,698
South OR	MEDFORD	HUMBUG CREEK	5R287	HUMMINGBIRD	12.5	670
South OR	MEDFORD	LONE PINE	R10-1D	VILAS ROAD-WHITE CITY115KV	115	0
South OR	MEDFORD	LONE PINE	R12-1	FRALEY-LONE PINE-69KV	69	0
South OR	MEDFORD	LONE PINE	R12-2	DODGE BRIDGE-FRALEY-69KV	69	0
South OR	MEDFORD	LONE PINE	R12-3	DODGE BRIDGE-PROSPECT CENTRAL-69KV	69	0
South OR	MEDFORD	MEDCO	5R280	BOISE CASCADE	12.5	1
South OR	MEDFORD	MEDFORD	5R21	MELROSE	12.5	1,595
South OR	MEDFORD	MEDFORD	5R23	SPRING ST.	12.5	1,592
South OR	MEDFORD	MEDFORD	5R250	BIG Y	12.5	1,849
South OR	MEDFORD	MEDFORD	5R253	APPLE	12.5	1,105
South OR	MEDFORD	MEDFORD	5R257	PEAR	12.5	565
South OR	MEDFORD	MEDFORD	5R659	MCLEAN	12.5	665
South OR	MEDFORD	MEDFORD	R23-10	HUMBUG CREEK-JACKSONVILLE-MEDFORD-69KV	69	0
South OR	MEDFORD	MEDFORD	R23-11	MEDFORD-JACKSONVILLE-69KV	69	0
South OR	MEDFORD	MERIDIAN	BB07	LONE PINE #1-MERIDIAN-230KV	230	0
South OR	MEDFORD	MERIDIAN	BB13-1	MERIDIAN-WHETSTONE-230KV	230	0
South OR	MEDFORD	NEW JACKSONVILLE SUB-DIST	5R284	STAGE RD	12.5	2,039
South OR	MEDFORD	NEW JACKSONVILLE SUB-DIST	5R285	JACKSONVILLE HWY	12.5	2,109
South OR	MEDFORD	OAK KNOLL	5R55	SISKIYOU	12.5	1,465
South OR	MEDFORD	OAK KNOLL	5R56	HIGHWAY 99	12.5	109
South OR	MEDFORD	OAK KNOLL	R08	TAP TO OAK KNOLL-115KV	115	0
South OR	MEDFORD	OAK KNOLL	R08-1	OAK KNOLL-ASHLAND-115KV	115	1
South OR	MEDFORD	PROSPECT CENTRAL	5R40	NEW CASCADE	12.5	334
South OR	MEDFORD	RED BLANKET	7R5	PROSPECT	4.1	382
South OR	MEDFORD	ROXY ANN	5R350	St. Bernard	12.5	1,154
South OR	MEDFORD	ROXY ANN	5R354	RACCOON	12.5	1,407
South OR	MEDFORD	RUCH	5R68	APPLEGATE	12.5	899
South OR	MEDFORD	RUCH	5R69	RUCH	12.5	539
South OR	MEDFORD	SAGE ROAD (OR)	5R209	TIMBER PROD	12.5	1
South OR	MEDFORD	SAGE ROAD (OR)	5R211	COLUMBUS	12.5	1,921
South OR	MEDFORD	SAGE ROAD (OR)	5R226	BOISE	12.5	903
South OR	MEDFORD	SAGE ROAD (OR)	5R27	MCANDREWS	12.5	116
South OR	MEDFORD	SAGE ROAD (OR)	5R28	ROSS	12.5	1,722
South OR	MEDFORD	SAGE ROAD (OR)	5R29	EDWARDS	12.5	725

Oregon 2016 Active Circuits with Substation, Voltage and Customer Counts

Reliability Region	Op Area Name	Substation Name	Circuit Id	Circuit Name	Kv	Customer Count
South OR	MEDFORD	SAGE ROAD (OR)	R10-2A	BEALL LANE-MEDCO-115KV	115	0
South OR	MEDFORD	SCENIC	5R174	UPTON	12.5	1,979
South OR	MEDFORD	SCENIC	5R180	HEAD RD	12.5	1,149
South OR	MEDFORD	SCENIC	5R182	TAYLOR RD	12.5	1,533
South OR	MEDFORD	SCENIC	5R184	CHENEY	12.5	1,412
South OR	MEDFORD	STEVENS ROAD	4R13	HENRY MILLER	20.8	2,106
South OR	MEDFORD	STEVENS ROAD	4R17	Stingray	20.8	2,433
South OR	MEDFORD	STEVENS ROAD	4R41	ANTELOPE	20.8	1,110
South OR	MEDFORD	TAKELMA	4R9	LOST CK. (TAKELMA)	20.8	2,573
South OR	MEDFORD	TALENT	5R237	TALENT	12.5	2,436
South OR	MEDFORD	TALENT	5R238	ANDERSON CRK	12.5	1,661
South OR	MEDFORD	TALENT	5R239	HARTLEY ROAD	12.5	1,512
South OR	MEDFORD	TALENT	5R240	NORTH HWY	12.5	1,181
South OR	MEDFORD	TOLO	5R90	TBL ROCK LBR	12.5	157
South OR	MEDFORD	TOLO	5R91	SAMS VALLEY	12.5	635
South OR	MEDFORD	TOLO	5R92	KIRTLAND RD	12.5	198
South OR	MEDFORD	VILAS ROAD	5R110	MCLAUGHLIN	12.5	926
South OR	MEDFORD	VILAS ROAD	5R146	KING CENTER	12.5	1,380
South OR	MEDFORD	VILAS ROAD	5R305	WEBFOOT	12.5	783
South OR	MEDFORD	WHETSTONE	R10-2C	SCENIC-WHETSTONE-115KV	115	0
South OR	MEDFORD	WHETSTONE	R1-2	FIELDER CREEK-WHETSTONE115KV	115	0
South OR	MEDFORD	WHITE CITY	5R11	EAGLE POINT	12.5	1,409
South OR	MEDFORD	WHITE CITY	5R12	INDUSTRIAL	12.5	30
South OR	MEDFORD	WHITE CITY	5R13	FIR-PLY	12.5	24
South OR	MEDFORD	WHITE CITY	5R14	AGATE	12.5	104
South OR	MEDFORD	WHITE CITY	5R19	3M	12.5	104
South OR	MEDFORD	WHITE CITY	5R66	4 CORNERS	12.5	1,702
South OR	MEDFORD	WHITE CITY	5R76	AVE C	12.5	76
South OR	ROSEBURG/MYRTLECREEK	ALVEY (BPA)	WI03	ALVEY-DIXONVILLE-230KV	230	0
South OR	ROSEBURG/MYRTLECREEK	CANYONVILLE	5U46	CANYONVILLE	12.5	406
South OR	ROSEBURG/MYRTLECREEK	CANYONVILLE	5U52	BEALS CREEK FEEDER	12.5	882
South OR	ROSEBURG/MYRTLECREEK	CARNES	5U44	RND PRARIE	12.5	414
South OR	ROSEBURG/MYRTLECREEK	CLEARWATER	U07	CLEARWATER-LEMOLO #1-115KV	115	0
South OR	ROSEBURG/MYRTLECREEK	CLEARWATER	U08	CLEARWATER-LEMOLO #2-115KV	115	0
South OR	ROSEBURG/MYRTLECREEK	CLEARWATER	U09	CLEARWATER-CLEARWATER #1-115KV	115	0
South OR	ROSEBURG/MYRTLECREEK	CLEARWATER #1 SUB	6U17	BRIGGS	7.2	2
South OR	ROSEBURG/MYRTLECREEK	CLEARWATER #2 SUB	6U33	CLEARWATER	7.2	100
South OR	ROSEBURG/MYRTLECREEK	CLOAKE	4U37	RUSA	20.8	1
South OR	ROSEBURG/MYRTLECREEK	CLOAKE	4U38	HARVARD	20.8	2,895
South OR	ROSEBURG/MYRTLECREEK	CLOAKE	4U39	GOEDECK	20.8	1,244
South OR	ROSEBURG/MYRTLECREEK	DIXONVILLE	BB08-1	DIXONVILLE-NICKEL MOUNTAIN-GRANTS PASS-230KV	230	0
South OR	ROSEBURG/MYRTLECREEK	DIXONVILLE	BB08-2	DIXONVILLE-HANNA TAP-230KV	230	0
South OR	ROSEBURG/MYRTLECREEK	DIXONVILLE	BB09	DIXONVILLE-RESTON-230KV	230	0
South OR	ROSEBURG/MYRTLECREEK	DIXONVILLE	BB10	DIXONVILLE-MERIDIAN-500KV	500	0
South OR	ROSEBURG/MYRTLECREEK	DIXONVILLE	BB12	DIXONVILLE 500KV-DIXONVILLE-230KV	230	0
South OR	ROSEBURG/MYRTLECREEK	DIXONVILLE	U02	DIXONVILLE-DAYS CREEK-115KV	115	0
South OR	ROSEBURG/MYRTLECREEK	DIXONVILLE	U03	DIXONVILLE-TOKETEE SW STA-115KV	115	0
South OR	ROSEBURG/MYRTLECREEK	DIXONVILLE	U03-2	GLIDE-STEAMBOAT-115KV	115	0
South OR	ROSEBURG/MYRTLECREEK	DIXONVILLE	U03-3	ILLAHEE FLAT-STEAMBOAT-115KV	115	0
South OR	ROSEBURG/MYRTLECREEK	DIXONVILLE	U03-4	ILLAHEE FLAT-TOKETEE SW STA-115KV	115	0
South OR	ROSEBURG/MYRTLECREEK	DIXONVILLE	U05	DIXONVILLE-SODA SPRINGS-115KV	115	0
South OR	ROSEBURG/MYRTLECREEK	DIXONVILLE	U10	CLOAKE-DIXONVILLE-GREEN-69KV	69	0
South OR	ROSEBURG/MYRTLECREEK	DIXONVILLE	U10-6	CLOAKE-SOUTHGATE TAP-69KV	69	0
South OR	ROSEBURG/MYRTLECREEK	DIXONVILLE	U11	DIXONVILLE-ROBERTS CREEK-115KV	115	0
South OR	ROSEBURG/MYRTLECREEK	DIXONVILLE	U12-3	DIXONVILLE-WINCHESTER #1-115KV	115	0
South OR	ROSEBURG/MYRTLECREEK	DIXONVILLE	U12-3A	DIXONVILLE-SUTHERLIN-115KV	115	0

Oregon 2016 Active Circuits with Substation, Voltage and Customer Counts

Reliability Region	Op Area Name	Substation Name	Circuit Id	Circuit Name	Kv	Customer Count
South OR	ROSEBURG/MYRTLECREEK	DIXONVILLE	U12-3B	OAKLAND-SUTHERLIN-115KV	115	0
South OR	ROSEBURG/MYRTLECREEK	DIXONVILLE	U12-4	DIXONVILLE-WINCHESTER #2-115KV	115	0
South OR	ROSEBURG/MYRTLECREEK	DIXONVILLE	U12-4A	DIXONVILLE-ROSEBURG-115KV	115	0
South OR	ROSEBURG/MYRTLECREEK	GARDEN VALLEY	4U80	EDENBOWER	20.8	802
South OR	ROSEBURG/MYRTLECREEK	GARDEN VALLEY	4U81	VALLEY	20.8	1,330
South OR	ROSEBURG/MYRTLECREEK	GLIDE SUBSTATION	5U83	IDLEYLD	12.5	986
South OR	ROSEBURG/MYRTLECREEK	GLIDE SUBSTATION	5U84	LITTLE RIVER	12.5	1,344
South OR	ROSEBURG/MYRTLECREEK	GREEN SUBSTATION	5U32	SAFARI	12.5	2,052
South OR	ROSEBURG/MYRTLECREEK	GREEN SUBSTATION	5U33	SUNNYSLOPE	12.5	1,618
South OR	ROSEBURG/MYRTLECREEK	ILLAHEE FLATS	6U13	ILLAHEE FLATS SINGLE PHASE RECLOSER	7.2	25
South OR	ROSEBURG/MYRTLECREEK	LEMOLO # 1	5U920	DIAMOND LAKE	12.5	181
South OR	ROSEBURG/MYRTLECREEK	MYRTLE CREEK	5U76	SUPER Y	12.5	1,529
South OR	ROSEBURG/MYRTLECREEK	MYRTLE CREEK	5U77	BOOMER HILL	12.5	2,291
South OR	ROSEBURG/MYRTLECREEK	OAKLAND (OR)	5U11	UMPQUA	12.5	1,304
South OR	ROSEBURG/MYRTLECREEK	OAKLAND (OR)	5U12	STAGECOACH	12.5	549
South OR	ROSEBURG/MYRTLECREEK	RIDDLE	5U1	TRI CITY	12.5	986
South OR	ROSEBURG/MYRTLECREEK	RIDDLE	5U2	COW CREEK	12.5	1,544
South OR	ROSEBURG/MYRTLECREEK	RIDDLE	5U3	HANNA	12.5	274
South OR	ROSEBURG/MYRTLECREEK	RIDDLE	U13-2	MYRTLE CREEK-RIDDLE-69KV	69	0
South OR	ROSEBURG/MYRTLECREEK	RIDDLE-VENEER	5U23	FORD MILL	12.5	1
South OR	ROSEBURG/MYRTLECREEK	RIDDLE-VENEER	5U50	RFP-LVL (EWP)	12	29
South OR	ROSEBURG/MYRTLECREEK	ROBERTS CREEK	U10-3	GREEN-ROBERTS CREEK-69KV	69	0
South OR	ROSEBURG/MYRTLECREEK	ROBERTS CREEK	U13	MYRTLE CREEK-ROBERTS CREEK-69KV	69	0
South OR	ROSEBURG/MYRTLECREEK	ROSEBURG	4U10	DIAMOND	20.8	2,454
South OR	ROSEBURG/MYRTLECREEK	ROSEBURG	4U22	DIXON	20.8	1,102
South OR	ROSEBURG/MYRTLECREEK	ROSEBURG	4U5	DOUGLAS	20.8	2,057
South OR	ROSEBURG/MYRTLECREEK	SLIDE CREEK	6U76	SLIDE CREEK CAMP	7.2	4
South OR	ROSEBURG/MYRTLECREEK	SODA SPRINGS HE PLT	U04	SODA SPRINGS-TOKETEE SW STA-115KV	115	0
South OR	ROSEBURG/MYRTLECREEK	SOUTHGATE	4U30	SHADY POINT	20.8	1,561
South OR	ROSEBURG/MYRTLECREEK	SOUTHGATE	4U31	BOOTH	20.8	1,568
South OR	ROSEBURG/MYRTLECREEK	STEAMBOAT	6U18	STEAMBOAT	7.2	22
South OR	ROSEBURG/MYRTLECREEK	SUTHERLIN	5U35	NON-PAREIL	12.5	1,301
South OR	ROSEBURG/MYRTLECREEK	SUTHERLIN	5U36	DEADY	12.5	1,298
South OR	ROSEBURG/MYRTLECREEK	SUTHERLIN	5U56	Industrial	12.5	472
South OR	ROSEBURG/MYRTLECREEK	TILLER	5U89	JACKSON CRK	12.5	310
South OR	ROSEBURG/MYRTLECREEK	TOKETEE	6U21	BACK UP FOR CLEARWATER 6U33	6.9	0
South OR	ROSEBURG/MYRTLECREEK	TOKETEE	8U12	TOKETEE CITY	2.4	19
South OR	ROSEBURG/MYRTLECREEK	WINCHESTER	4U18	WILBUR	20.8	1,631
South OR	ROSEBURG/MYRTLECREEK	WINCHESTER	5U15	NEWTON CREEK	12.5	1,712
South OR	ROSEBURG/MYRTLECREEK	WINCHESTER	5U17	FISHER	12.5	756
South OR	ROSEBURG/MYRTLECREEK	WINCHESTER	5U19	EVANS	12.5	757
South OR	ROSEBURG/MYRTLECREEK	WINCHESTER	U10-9	CLOAKE-WINCHESTER-69KV	69	0
South OR	ROSEBURG/MYRTLECREEK	WINSTON	5U48	BROCKWAY	12.5	853
South OR	ROSEBURG/MYRTLECREEK	WINSTON	5U49	DILLARD	12.5	1,444
Willamette Valley	ALBANY	HAZELWOOD	4M335	WEST HIGH	20.8	1,463
Willamette Valley	ALBANY	HAZELWOOD	4M336	RIVERVIEW (HAZELWOOD)	20.8	1,230
Willamette Valley	ALBANY	HAZELWOOD	WI07	HAZELWOOD-FRY-115KV	115	0
Willamette Valley	ALBANY	HAZELWOOD	WI10-1	HAZELWOOD-GRANT-115KV	115	0
Willamette Valley	ALBANY	HAZELWOOD	WI14-1	HAZELWOOD-QUEEN AVE-69KV	69	0
Willamette Valley	ALBANY	JEFFERSON (OR)	4M117	MARION	20.8	707
Willamette Valley	ALBANY	JEFFERSON (OR)	4M125	MINT	20.8	2,428
Willamette Valley	ALBANY	MURDER CREEK	4M243	SCRAVEL HILL	20.8	3,465
Willamette Valley	ALBANY	MURDER CREEK	4M245	RURAL NW	20.8	1,838
Willamette Valley	ALBANY	MURDER CREEK	4M249	DURA-PACIFIC	20.8	7
Willamette Valley	ALBANY	MURDER CREEK	4M250	INDUSTRIAL	20.8	1,206
Willamette Valley	ALBANY	MURDER CREEK	5M131	WAH CHANG SOUTH	12.5	1

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Reliability Region	Op Area Name	Substation Name	Circuit Id	Circuit Name	Kv	Customer Count
Willamette Valley	ALBANY	MURDER CREEK	5M132	WAH CHANG WEST	12.5	0
Willamette Valley	ALBANY	OREMET	4M295	OAK CREEK	20.8	101
Willamette Valley	ALBANY	OREMET	4M296	ROGERSDALE	20.8	2,149
Willamette Valley	ALBANY	OREMET	5M19	OREMET	12.5	3
Willamette Valley	ALBANY	PARRISH GAP	WI15-1	PARRISH GAP-STAYTON-69KV	69	0
Willamette Valley	ALBANY	PARRISH GAP	WI15-3	PARRISH GAP-JEFFERSON-69KV	69	0
Willamette Valley	ALBANY	PARRISH GAP	WI15-4	JEFFERSON-JEFFERSON TAP-69KV	69	1
Willamette Valley	ALBANY	QUEEN AVE	4M217	SANTIAM	20.8	1,953
Willamette Valley	ALBANY	QUEEN AVE	4M258	HILL STREET	20.8	2,161
Willamette Valley	ALBANY	QUEEN AVE	4M261	WAVERLY	20.8	3,363
Willamette Valley	ALBANY	QUEEN AVE	4M262	GEARY STREET	20.8	2,725
Willamette Valley	ALBANY	QUEEN AVE	WI14-2	QUEEN-SCIO-69KV	69	0
Willamette Valley	ALBANY	QUEEN AVE	WI17	JEFFERSON JCT-JEFFERSON TAP-69KV	69	0
Willamette Valley	ALBANY	VINE STREET	4M15	FERRY	20.8	2,171
Willamette Valley	ALBANY	VINE STREET	4M16	WATER STREET	20.8	3,964
Willamette Valley	ALBANY	VINE STREET	WI13-3	VINE ST-INDEPENDENCE-69KV	69	0
Willamette Valley	ALBANY	WESTERN KRAFT	5M24	WEST MAIN	12.5	1
Willamette Valley	CORVALLIS	BUCHANAN	4M130	HEWLETT PACKARD	20.8	2,625
Willamette Valley	CORVALLIS	BUCHANAN	4M133	PEORIA	20.8	2,440
Willamette Valley	CORVALLIS	BUCHANAN	4M134	N. NINTH ST.	20.8	2,569
Willamette Valley	CORVALLIS	BUCHANAN	WI06-3	BUCHANAN-DIXON-115KV	115	0
Willamette Valley	CORVALLIS	CIRCLE BLVD	4M394	H. P. #1	20.8	1
Willamette Valley	CORVALLIS	CIRCLE BLVD	4M429	H. P. #5	20.8	1
Willamette Valley	CORVALLIS	DIXON	7M26	FOURTH ST.	4.1	237
Willamette Valley	CORVALLIS	DIXON	7M29	SECOND ST.	4.1	273
Willamette Valley	CORVALLIS	GRANT	4M265	HIGH SCHOOL	20.8	2,480
Willamette Valley	CORVALLIS	GRANT	4M266	CHINTIMINI	20.8	2,545
Willamette Valley	CORVALLIS	GRANT	4M268	KINGS ROAD	20.8	2,524
Willamette Valley	CORVALLIS	GRANT	4M269	29TH STREET	20.8	3,292
Willamette Valley	CORVALLIS	HILLVIEW	4M180	WEST HILLS	20.8	1,839
Willamette Valley	CORVALLIS	HILLVIEW	4M181	PHILOMATH	20.8	634
Willamette Valley	CORVALLIS	HILLVIEW	4M182	SUNSET	20.8	1,523
Willamette Valley	CORVALLIS	HILLVIEW	4M185	PLYMOUTH	20.8	2,184
Willamette Valley	CORVALLIS	MARYS RIVER	4M151	GREENBERRY	20.8	3,551
Willamette Valley	CORVALLIS	MARYS RIVER	4M152	AVERY	20.8	190
Willamette Valley	CORVALLIS	MARYS RIVER	4M153	GALLAGHER	20.8	159
Willamette Valley	CORVALLIS	MARYS RIVER	WI10-3	MARY'S RIVER-HILLVIEW-115KV	115	0
Willamette Valley	COTTAGE GROVE/J.CITY	ALVEY (BPA)	WI12	BPA ALVEY-VILLAGE GREEN-115KV	115	1
Willamette Valley	COTTAGE GROVE/J.CITY	COBURG	4M220	DETERING	20.8	526
Willamette Valley	COTTAGE GROVE/J.CITY	DIAMOND HILL	WI02-2	DIAMOND HILL-BPA ALVEY-230KV	230	0
Willamette Valley	COTTAGE GROVE/J.CITY	DIAMOND HILL	WI19	DIAMOND HILL-BROWNSVILLE-69KV	69	0
Willamette Valley	COTTAGE GROVE/J.CITY	DIAMOND HILL	WI20	DIAMOND HILL-EWEB MCKENZIE-69KV	69	0
Willamette Valley	COTTAGE GROVE/J.CITY	GOSHEN (OR)	4M360	GOSHEN FDR	20.8	1,588
Willamette Valley	COTTAGE GROVE/J.CITY	HARRISBURG SUB	4M400	TERRITORIAL	20.8	1,809
Willamette Valley	COTTAGE GROVE/J.CITY	JUNCTION CITY	4M102	6TH STREET	20.8	1,137
Willamette Valley	COTTAGE GROVE/J.CITY	JUNCTION CITY	4M99	PRAIRIE ROAD	20.8	929
Willamette Valley	COTTAGE GROVE/J.CITY	JUNCTION CITY	WI121-1	WILKINS CORNER-VAUGHN TAP-69KV	69	0
Willamette Valley	COTTAGE GROVE/J.CITY	LANCASTER	4M209	MONROE	20.8	1,079
Willamette Valley	COTTAGE GROVE/J.CITY	MARTIN CREEK (BPA)	WI12B	BPA MARTIN CREEK-VLG GREEN-115KV	115	2
Willamette Valley	COTTAGE GROVE/J.CITY	VILLAGE GREEN	4M84	NORTH SIDE	20.8	2,339
Willamette Valley	COTTAGE GROVE/J.CITY	VILLAGE GREEN	4M86	MADISON	20.8	1,576
Willamette Valley	DALLAS/INDEPENDENCE	DALLAS	4M100	RURAL (DALLAS)	20.8	4,441
Willamette Valley	DALLAS/INDEPENDENCE	DALLAS	4M201	INDUSTRIAL	20.8	27
Willamette Valley	DALLAS/INDEPENDENCE	DALLAS	4M202	ELLEDALE	20.8	2,832
Willamette Valley	DALLAS/INDEPENDENCE	DALLAS	4M238	DALLAS	20.8	2,242
Willamette Valley	DALLAS/INDEPENDENCE	INDEPENDENCE	4M22	RICKREAL	20.8	3,264

Oregon 2016 Active Circuits with Substation, Voltage and Customer Counts

Reliability Region	Op Area Name	Substation Name	Circuit Id	Circuit Name	Kv	Customer Count
Willamette Valley	DALLAS/INDEPENDENCE	INDEPENDENCE	4M25	BUENA VISTA	20.8	1,910
Willamette Valley	DALLAS/INDEPENDENCE	MONPAC	WI05	MONPAC-BPA SALEM-115KV	115	0
Willamette Valley	DALLAS/INDEPENDENCE	MONPAC	WI05-1	DALLAS-MONPOC-115KV	115	0
Willamette Valley	DALLAS/INDEPENDENCE	MONPAC	WI13-4	MONPAC-INDEPENDENCE-69KV	69	0
Willamette Valley	LEBANON	BROWNSVILLE	4M17	CALAPOOIA	12.5	2,747
Willamette Valley	LEBANON	CROWFOOT	4M204	CROWFOOT	20.8	1,476
Willamette Valley	LEBANON	CROWFOOT	4M206	US PLYWOOD (LEBANON)	20.8	1,769
Willamette Valley	LEBANON	FRY	WI01-A	FRY-PARRISH GAP-230KV	230	0
Willamette Valley	LEBANON	FRY	WI02-1B	CALAPOOYA-FRY-230KV	230	0
Willamette Valley	LEBANON	FRY	WI08	FRY-WESTERN KRAFT-115KV	115	0
Willamette Valley	LEBANON	FRY	WI08-1	FRY-MURDER CREEK-115KV	115	0
Willamette Valley	LEBANON	FRY	WI11	FRY-FOSTER-115KV	115	0
Willamette Valley	LEBANON	FRY	WI11-2	FRY-LEBANON-115KV	115	0
Willamette Valley	LEBANON	FRY	WI11-3	CROWFOOT-LEBANON-115KV	115	0
Willamette Valley	LEBANON	FRY	WI11-4	CROWFOOT-SWEET HOME-115KV	115	0
Willamette Valley	LEBANON	FRY	WI11-5	FOSTER-SWEET HOME-115KV	115	0
Willamette Valley	LEBANON	LEBANON	4M61	TANGENT	20.8	2,414
Willamette Valley	LEBANON	LEBANON	4M62	RALSTON	20.8	1,975
Willamette Valley	LEBANON	LEBANON	4M63	TENNESSEE	20.8	1,768
Willamette Valley	LEBANON	LEBANON	4M79	CROWN Z	20.8	1,110
Willamette Valley	LEBANON	SWEET HOME	4M37	HOLLEY	20.8	1,986
Willamette Valley	LEBANON	SWEET HOME	4M38	NARROWS	20.8	952
Willamette Valley	LEBANON	SWEET HOME	4M93	AMES CREEK	20.8	1,634
Willamette Valley	LEBANON	SWEET HOME	4M94	FOSTER	20.8	2,257
Willamette Valley	STAYTON	LYONS	WI14-4	LYONS-SANTIAM SWITCH STATION-69KV	69	0
Willamette Valley	STAYTON	NEW LYONS	4M120	MILL CITY	20.8	1,867
Willamette Valley	STAYTON	NEW LYONS	4M70	MEHAMA	20.8	907
Willamette Valley	STAYTON	NEW STAYTON	4M19	AUMSVILLE	20.8	3,062
Willamette Valley	STAYTON	NEW STAYTON	4M353	WEST STAYTON	20.8	3,407
Willamette Valley	STAYTON	NEW STAYTON	4M370	CASCADE	20.8	1,561
Willamette Valley	STAYTON	NEW STAYTON	4M50	3RD STREET	20.8	906
Willamette Valley	STAYTON	PARRISH GAP	WI01-B	PARRISH GAP-PGE BETHEL-230KV	230	0
Willamette Valley	STAYTON	SCIO	5M126	THOMAS	12.5	1,538
Willamette Valley	STAYTON	SCIO	WI14-3	SCIO-LYONS-69KV	69	0

Oregon 2016 Circuit Metrics (excluding major events)

Oregon Regions	Op Area Name	Substation Name	Circuit Id	Circuit Name	Customers in Incident Sustained	Customer Minutes Lost	Circuit Customer Count	SAIDI	SAIFI
Central OR	BEND/REDMOND	BEND	5D10	PORTLAND AVE	2,520	41,472	2,323	17.85	1.085
Central OR	BEND/REDMOND	BEND	5D11	GLEN VISTA	380	13,916	1,077	12.92	0.353
Central OR	BEND/REDMOND	BEND	5D12	DIVISION ST.	215	1,540	214	7.20	1.005
Central OR	BEND/REDMOND	BEND	5D196	MALLARD	1,433	13,704	1,423	9.63	1.007
Central OR	BEND/REDMOND	BOND STREET	5D411	BACHELOR	264	24,957	1,707	14.62	0.155
Central OR	BEND/REDMOND	BOND STREET	5D413	OLD MILL.	382	49,552	367	135.02	1.041
Central OR	BEND/REDMOND	BOND STREET	5D418	BLAKELY	1,538	242,346	1,256	192.95	1.225
Central OR	BEND/REDMOND	CHINA HAT	5D140	LAVA (CHINA HAT)	455	99,680	2,200	45.31	0.207
Central OR	BEND/REDMOND	CHINA HAT	5D142	HIGH DESERT	101	12,680	1,624	7.81	0.062
Central OR	BEND/REDMOND	CHINA HAT	5D144	D.R.W.	27	3,326	2,377	1.40	0.011
Central OR	BEND/REDMOND	CLEVELAND AVE.	5D30	ARROWHEAD	17	2,025	853	2.37	0.020
Central OR	BEND/REDMOND	CLEVELAND AVE.	5D35	WICKIUP	51	6,038	933	6.47	0.055
Central OR	BEND/REDMOND	CLEVELAND AVE.	5D38	TOMAHAWK	465	108,110	1,376	78.57	0.338
Central OR	BEND/REDMOND	CLEVELAND AVE.	5D94	TEEPER	55	4,205	3,046	1.38	0.018
Central OR	BEND/REDMOND	CLEVELAND AVE.	5D96	OBSIDIAN	54	5,384	861	6.25	0.063
Central OR	BEND/REDMOND	CLEVELAND AVE.	5D98	HUCKLEBERRY	130	17,792	1,288	13.81	0.101
Central OR	BEND/REDMOND	CROOKED RIVER RANCH	4D131	CANYON	208	32,961	1,701	19.38	0.122
Central OR	BEND/REDMOND	CROOKED RIVER RANCH	4D30	CROOKED R.R.	94	52,439	741	70.77	0.127
Central OR	BEND/REDMOND	DESCHUTES	5D184	PRONGHORN	25	4,856	1,063	4.57	0.024
Central OR	BEND/REDMOND	DESCHUTES	5D2	DESCHUTES S	101	19,288	948	20.35	0.107
Central OR	BEND/REDMOND	HUNTERS CIRCLE	5D192	Mackinaw	222	33,964	627	54.17	0.354
Central OR	BEND/REDMOND	OVERPASS	5D104	AWBREY	164	17,116	877	19.52	0.187
Central OR	BEND/REDMOND	OVERPASS	5D106	NEZ PERCE	632	107,709	2,567	41.96	0.246
Central OR	BEND/REDMOND	OVERPASS	5D120	CHINOOK	9	2,086	1,315	1.59	0.007
Central OR	BEND/REDMOND	OVERPASS	5D128	PAIUTE	142	22,362	1,926	11.61	0.074
Central OR	BEND/REDMOND	OVERPASS	5D155	APACHE	31	5,527	1,861	2.97	0.017
Central OR	BEND/REDMOND	PILOT BUTTE	5D261	KLONDIKE	1,351	313,926	3,083	101.82	0.438
Central OR	BEND/REDMOND	PILOT BUTTE	5D263	DRAKE FEEDER	542	60,933	1,944	31.34	0.279
Central OR	BEND/REDMOND	REDMOND	5D21	SOUTH (REDMOND)	44	9,099	703	12.94	0.063
Central OR	BEND/REDMOND	REDMOND	5D22	INDUSTRIAL	1,780	101,302	1,366	74.16	1.303
Central OR	BEND/REDMOND	REDMOND	5D223	TETHEROW	51	15,445	795	19.43	0.064
Central OR	BEND/REDMOND	REDMOND	5D226	CLINE FALLS	7	655	1,393	0.47	0.005
Central OR	BEND/REDMOND	REDMOND	5D227	WINDSOR	288	27,096	2,787	9.72	0.103
Central OR	BEND/REDMOND	REDMOND	5D228	CITY	904	97,848	1,278	76.56	0.707
Central OR	BEND/REDMOND	REDMOND	5D229	JUNIPER	245	47,852	391	122.38	0.627
Central OR	BEND/REDMOND	SHEVLIN PARK	5D238	WOLVERINE (SHP) (WAS 5D327)	1,394	173,580	2,450	70.85	0.569
Central OR	BEND/REDMOND	SHEVLIN PARK	5D241	BADGER (SHP)	3,595	430,131	2,941	146.25	1.222
Central OR	BEND/REDMOND	SHEVLIN PARK	5D243	Black Bear	151	42,979	1,164	36.92	0.130
Central OR	BEND/REDMOND	YEW AVENUE	5D322	BIRDIE	86	19,105	1,455	13.13	0.059
Central OR	BEND/REDMOND	YEW AVENUE	5D323	FAIRWAY	79	20,503	380	53.95	0.208
Central OR	BEND/REDMOND	YEW AVENUE	5D325	EAGLE	373	63,216	2,352	26.88	0.159
Central OR	MADRAS	CHERRY LANE	5D295	7 PEAKS	2	116	140	0.83	0.014
Central OR	MADRAS	CULVER	5D5	CULVER	2,049	93,401	1,718	54.37	1.193

Oregon 2016 Circuit Metrics (excluding major events)

Oregon Regions	Op Area Name	Substation Name	Circuit Id	Circuit Name	Customers in Incident Sustained	Customer Minutes Lost	Circuit Customer Count	SAIDI	SAIFI
Central OR	MADRAS	MADRAS	5D52	MADRAS RURAL	60	5,372	979	5.49	0.061
Central OR	MADRAS	MADRAS	5D53	AGATE	70	18,534	1,240	14.95	0.056
Central OR	MADRAS	MADRAS	5D57	QUARTZ	119	31,405	1,337	23.49	0.089
Central OR	MADRAS	MADRAS	5D61	MADRAS CITY	40	7,143	1,279	5.58	0.031
Central OR	MADRAS	POWELL BUTTE	5D1	POWELL BUTTE	385	86,305	592	145.79	0.650
Central OR	MADRAS	PRINEVILLE	5D126	RIMROCK	2	195	838	0.23	0.002
Central OR	MADRAS	PRINEVILLE	5D167	NORTHVILLE	16	1,222	2,548	0.48	0.006
Central OR	MADRAS	PRINEVILLE	5D25	OCHOCO	306	53,424	959	55.71	0.319
Central OR	MADRAS	PRINEVILLE	5D47	MC KAY (PRINEVILLE)	2,294	121,153	1,608	75.34	1.427
Central OR	MADRAS	PRINEVILLE	5D48	LAMONTA	59	9,232	597	15.46	0.099
Central OR	MADRAS	PRINEVILLE	5D69	GRIMES FLAT	1,580	319,112	1,528	208.84	1.034
Central OR	MADRAS	WARM SPRINGS	4D68	WARM SPRINGS (OR)	3,083	369,243	1,032	357.79	2.987
CoastPlus	CLATSOP (ASTORIA)	CANNON BEACH	5A10	HAYSTACK	6,922	683,358	1,565	436.65	4.423
CoastPlus	CLATSOP (ASTORIA)	CANNON BEACH	5A8	ECOLA	4,948	409,633	1,211	338.26	4.086
CoastPlus	CLATSOP (ASTORIA)	FERN HILL SUB	5A51	JOHN DAY	427	13,528	261	51.83	1.636
CoastPlus	CLATSOP (ASTORIA)	FERN HILL SUB	5A52	SCANDINAVIAN	732	38,437	374	102.77	1.957
CoastPlus	CLATSOP (ASTORIA)	KNAPPA SVENSEN	5A92	SVENSEN	775	10,043	689	14.58	1.125
CoastPlus	CLATSOP (ASTORIA)	KNAPPA SVENSEN	5A93	BRADWOOD	2,411	363,095	912	398.13	2.644
CoastPlus	CLATSOP (ASTORIA)	SEASIDE	5A80	GROVE	6,524	239,865	2,356	101.81	2.769
CoastPlus	CLATSOP (ASTORIA)	SEASIDE	5A81	CENTRAL	4,867	105,026	1,614	65.07	3.015
CoastPlus	CLATSOP (ASTORIA)	SEASIDE	5A82	NECANICUM	3,138	343,536	1,169	293.87	2.684
CoastPlus	CLATSOP (ASTORIA)	SEASIDE	5A83	GEARHART	9,147	461,074	3,148	146.47	2.906
CoastPlus	CLATSOP (ASTORIA)	WARRENTON	5A15	CITY	5,902	347,551	1,821	190.86	3.241
CoastPlus	CLATSOP (ASTORIA)	WARRENTON	5A16	MILL (WARRENTON)	1,910	138,637	548	252.99	3.485
CoastPlus	CLATSOP (ASTORIA)	WARRENTON	5A20	SOUTH (WARRENTON)	3,727	141,688	1,587	89.28	2.348
CoastPlus	CLATSOP (ASTORIA)	YOUNGS BAY	5A202	PORT DOCK	1,263	14,060	1,196	11.76	1.056
CoastPlus	CLATSOP (ASTORIA)	YOUNGS BAY	5A204	MOO COW	2,366	296,058	1,116	265.29	2.120
CoastPlus	CLATSOP (ASTORIA)	YOUNGS BAY	5A205	FIFTH STREET	1,010	14,498	963	15.06	1.049
CoastPlus	CLATSOP (ASTORIA)	YOUNGS BAY	5A206	YOUNGS BAY #6	624	85,225	310	274.92	2.013
CoastPlus	CLATSOP (ASTORIA)	YOUNGS BAY	5A210	YOUNGS BAY #10	2,163	283,208	938	301.93	2.306
CoastPlus	CLATSOP (ASTORIA)	YOUNGS BAY	5A211	OLNEY	3,990	663,597	994	667.60	4.014
CoastPlus	CLATSOP (ASTORIA)	YOUNGS BAY	5A213	INDUSTRIAL	1,367	13,214	1,374	9.62	0.995
CoastPlus	COOS BAY/COQUILLE	BANDON TIE (BPA)	L804	BANDON	889	92,896	740	125.53	1.201
CoastPlus	COOS BAY/COQUILLE	COOS RIVER	4C106	COOS RIVER	3,742	606,837	1,350	449.51	2.772
CoastPlus	COOS BAY/COQUILLE	COQUILLE	4C41	HENRY STREET	4,063	455,591	1,656	275.12	2.454
CoastPlus	COOS BAY/COQUILLE	COQUILLE	4C42	TERRES HGHTS	5,795	507,372	1,552	326.92	3.734
CoastPlus	COOS BAY/COQUILLE	COQUILLE	4C43	INDUSTRIAL	505	41,093	148	277.66	3.412
CoastPlus	COOS BAY/COQUILLE	EMPIRE NEW	4C108	EMPIRE	39	3,232	1,715	1.88	0.023
CoastPlus	COOS BAY/COQUILLE	EMPIRE NEW	4C89	SCOTT	58	4,026	1,380	2.92	0.042
CoastPlus	COOS BAY/COQUILLE	EMPIRE NEW	4C90	CHARLESTON	95	16,637	2,079	8.00	0.046
CoastPlus	COOS BAY/COQUILLE	JORDAN POINT	5C6	SAND DUNES (JORDAN POINT)	5	814	31	26.25	0.161
CoastPlus	COOS BAY/COQUILLE	LOCKHART STREET	4C48	CITY CENTER	8	1,457	1,521	0.96	0.005
CoastPlus	COOS BAY/COQUILLE	LOCKHART STREET	4C49	EASTSIDE	14	1,352	770	1.76	0.018

Oregon 2016 Circuit Metrics (excluding major events)

Oregon Regions	Op Area Name	Substation Name	Circuit Id	Circuit Name	Customers in Incident Sustained	Customer Minutes Lost	Circuit Customer Count	SAIDI	SAIFI
CoastPlus	COOS BAY/COQUILLE	LOCKHART STREET	4C5	GEORGIA-PAC	114	11,459	94	121.91	1.213
CoastPlus	COOS BAY/COQUILLE	LOCKHART STREET	4C50	BUNKERHILL	4,558	305,820	1,812	168.77	2.515
CoastPlus	COOS BAY/COQUILLE	LOCKHART STREET	4C97	ENGLEWOOD	170	27,569	1,369	20.14	0.124
CoastPlus	COOS BAY/COQUILLE	MYRTLE POINT	4C36	NORTH (MYRTLE POINT)	48	13,156	337	39.04	0.142
CoastPlus	COOS BAY/COQUILLE	MYRTLE POINT	4C37	MAPLE STREET	700	84,941	2,067	41.09	0.339
CoastPlus	COOS BAY/COQUILLE	STATE STREET	4C112	WOODLAND	710	67,037	1,827	36.69	0.389
CoastPlus	COOS BAY/COQUILLE	STATE STREET	4C66	BAYSHORE	174	21,080	1,695	12.44	0.103
CoastPlus	COOS BAY/COQUILLE	STATE STREET	4C67	INDUSTRIAL	3,878	329,912	2,201	149.89	1.762
CoastPlus	COOS BAY/COQUILLE	STATE STREET	4C86	BANGOR	55	5,964	1,757	3.39	0.031
CoastPlus	HOOD RIVER	GORDON HOLLOW	4K1	SHERMAN 208	474	51,612	475	108.66	0.998
CoastPlus	HOOD RIVER	HOOD RIVER	5K37	RESIDENTIAL	2,605	213,803	2,016	106.05	1.292
CoastPlus	HOOD RIVER	HOOD RIVER	5K43	BELMONT	3,134	161,141	1,125	143.24	2.786
CoastPlus	HOOD RIVER	HOOD RIVER	5K44	NORTH (HOOD RIVER)	3,663	394,593	1,752	225.22	2.091
CoastPlus	HOOD RIVER	HOOD RIVER	5K70	EASTSIDE	1,150	97,873	996	98.27	1.155
CoastPlus	HOOD RIVER	HOOD RIVER	5K74	SOUTH (HOOD RIVER)	1,906	196,229	1,559	125.87	1.223
CoastPlus	HOOD RIVER	KENWOOD	5K50	OAKGROVE	1,430	232,670	691	336.71	2.069
CoastPlus	HOOD RIVER	MORO	8K6	MORO	104	7,313	103	71.00	1.010
CoastPlus	HOOD RIVER	WASCO	7K1	WASCO	7	478	266	1.80	0.026
CoastPlus	LINCOLN CITY	DEVILS LAKE	4A310	INLAND FEEDER	261	28,747	1,812	15.86	0.144
CoastPlus	LINCOLN CITY	DEVILS LAKE	4A312	OCEAN	788	135,723	2,910	46.64	0.271
CoastPlus	LINCOLN CITY	DEVILS LAKE	4A316	LAKE (DEVILS LAKE)	14,115	986,076	4,417	223.25	3.196
CoastPlus	LINCOLN CITY	DEVILS LAKE	4A338	SIUSLAW	1,459	148,035	648	228.45	2.252
CoastPlus	LINCOLN CITY	GLENEDEN	7A364	GLENEDEN	1,629	109,636	703	155.95	2.317
CoastPlus	LINCOLN CITY	GLENEDEN	7A366	SALISHAN	358	36,967	355	104.13	1.008
CoastPlus	LINCOLN CITY	NELSCOTT	7A390	NELSCOTT	135	13,903	349	39.84	0.387
CoastPlus	LINCOLN CITY	PGE GRAND RONDE	R114	BOYER	45	11,404	19	600.19	2.368
CoastPlus	LINCOLN CITY	WECOMA BEACH	7A354	WECOMA	459	44,805	712	62.93	0.645
CoastPlus	PORTLAND	ALDERWOOD 115/12.5	5P22	ALDERWOOD #2	32	4,104	202	20.32	0.158
CoastPlus	PORTLAND	COLUMBIA (OR)	5P266	#2	66	9,567	2,554	3.75	0.026
CoastPlus	PORTLAND	COLUMBIA (OR)	5P268	COLUMBIA #1	350	71,940	320	224.81	1.094
CoastPlus	PORTLAND	COLUMBIA (OR)	5P474	COLUMBIA #6	600	38,222	549	69.62	1.093
CoastPlus	PORTLAND	COLUMBIA (OR)	5P476	COLUMBIA #3	838	85,534	821	104.18	1.021
CoastPlus	PORTLAND	COLUMBIA (OR)	5P478	COLUMBIA #4	1,653	268,079	824	325.34	2.006
CoastPlus	PORTLAND	COLUMBIA (OR)	5P480	COLUMBIA #5	3	638	21	30.36	0.143
CoastPlus	PORTLAND	CULLY	5P288	CULLY #3-UG	115	11,104	798	13.91	0.144
CoastPlus	PORTLAND	CULLY	5P290	CULLY #2	321	21,645	2,393	9.05	0.134
CoastPlus	PORTLAND	CULLY	5P292	CULLY #1	147	12,229	2,924	4.18	0.050
CoastPlus	PORTLAND	HOLLADAY (OR)	5P145	HOLLADAY #1-UG	201	47,481	12	3,956.75	16.750
CoastPlus	PORTLAND	HOLLADAY (OR)	5P147	HOLLADAY #3-UG	10	6,141	670	9.17	0.015
CoastPlus	PORTLAND	HOLLADAY (OR)	5P156	HOLLADAY #4-UG	1	261	299	0.87	0.003
CoastPlus	PORTLAND	HOLLADAY (OR)	5P158	HOLLADAY #6	2	414	772	0.54	0.003
CoastPlus	PORTLAND	HOLLYWOOD	5P203	HOLLYWOOD #3	180	47,442	1,346	35.25	0.134
CoastPlus	PORTLAND	HOLLYWOOD	5P204	HOLLYWOOD #2	22	2,117	1,935	1.09	0.011

Oregon 2016 Circuit Metrics (excluding major events)

Oregon Regions	Op Area Name	Substation Name	Circuit Id	Circuit Name	Customers in Incident Sustained	Customer Minutes Lost	Circuit Customer Count	SAIDI	SAIFI
CoastPlus	PORTLAND	HOLLYWOOD	5P205	HOLLYWOOD #1	68	5,815	2,099	2.77	0.032
CoastPlus	PORTLAND	HOLLYWOOD	5P208	HOLLYWOOD #5	116	40,535	1,723	23.53	0.067
CoastPlus	PORTLAND	HOLLYWOOD	5P209	HOLLYWOOD #4	2,458	667,889	2,348	284.45	1.047
CoastPlus	PORTLAND	KILLINGSWORTH	5P123	KILLINGSWORTH #3	672	90,895	332	273.78	2.024
CoastPlus	PORTLAND	KILLINGSWORTH	5P217	KILLINGSWORTH #5	430	26,567	420	63.25	1.024
CoastPlus	PORTLAND	KILLINGSWORTH	5P41	KILLINGSWORTH #4	3,257	250,081	2,732	91.54	1.192
CoastPlus	PORTLAND	KILLINGSWORTH	5P88	KILLINGSWORTH #1-UG	15	1,173	15	78.18	1.000
CoastPlus	PORTLAND	KILLINGSWORTH	5P89	KILLINGSWORTH #2	154	22,058	3,085	7.15	0.050
CoastPlus	PORTLAND	KNOTT	5P231	KNOTT #1	107	13,420	2,962	4.53	0.036
CoastPlus	PORTLAND	KNOTT	5P232	KNOTT #2	1	247	1,513	0.16	0.001
CoastPlus	PORTLAND	KNOTT	5P233	KNOTT #3	121	13,388	2,305	5.81	0.052
CoastPlus	PORTLAND	KNOTT	5P368	11022	2	464	171	2.71	0.012
CoastPlus	PORTLAND	KNOTT	5P372	11046	92	8,280	562	14.73	0.164
CoastPlus	PORTLAND	KNOTT	5P374	11020	27	4,007	969	4.13	0.028
CoastPlus	PORTLAND	LINCOLN (OR)	5P432	11D02-UG	475	139,094	474	293.45	1.002
CoastPlus	PORTLAND	MALLORY	5P162	MALLORY #1	2,005	227,507	1,975	115.19	1.015
CoastPlus	PORTLAND	MALLORY	5P164	MALLORY #2	17	2,384	3,051	0.78	0.006
CoastPlus	PORTLAND	PARKROSE	5P244	PARKROSE#4	124	23,716	3,077	7.71	0.040
CoastPlus	PORTLAND	PARKROSE	5P246	PARKROSE#3	6,317	1,359,712	3,053	445.37	2.069
CoastPlus	PORTLAND	PARKROSE	5P250	PARKROSE#2	1	82	664	0.12	0.002
CoastPlus	PORTLAND	PARKROSE	5P252	PARKROSE#1	140	25,030	1,779	14.07	0.079
CoastPlus	PORTLAND	RUSSELLVILLE	5P274	RUSSELLVILLE #3	1,172	138,719	3,006	46.15	0.390
CoastPlus	PORTLAND	RUSSELLVILLE	5P276	RUSSELLVILLE #4	173	33,535	2,313	14.50	0.075
CoastPlus	PORTLAND	RUSSELLVILLE	5P278	RUSSELLVILLE #1	1,515	128,607	3,210	40.06	0.472
CoastPlus	PORTLAND	RUSSELLVILLE	5P280	RUSSELLVILLE #2	1,645	191,912	1,272	150.87	1.293
CoastPlus	PORTLAND	VERNON	5P391	VERNON #1	2,053	396,797	1,805	219.83	1.137
CoastPlus	PORTLAND	VERNON	5P392	VERNON NO. 2	364	77,913	2,488	31.32	0.146
CoastPlus	PORTLAND	VERNON	5P393	VERNON #3	213	22,219	3,107	7.15	0.069
CoastPlus	PORTLAND	VERNON	5P394	VERNON # 4	176	18,630	3,182	5.85	0.055
CoastPlus	PORTLAND	VERNON	5P395	VERNON # 5	68	6,477	2,198	2.95	0.031
Northeast OR	ENTERPRISE	ENTERPRISE (OR)	4W8	CREIGHTON LN	2,068	139,809	1,421	98.39	1.455
Northeast OR	ENTERPRISE	ENTERPRISE (OR)	5W15	CITY	21	1,849	927	1.99	0.023
Northeast OR	ENTERPRISE	ENTERPRISE (OR)	5W26	RURAL (ENTERPRISE)	1,184	96,119	1,043	92.16	1.135
Northeast OR	ENTERPRISE	JOSEPH	5W21	PRAIRIE	1,099	72,047	836	86.18	1.315
Northeast OR	ENTERPRISE	PALLETTE	4W14	PALLETTE NORTH	178	56,450	172	328.20	1.035
Northeast OR	ENTERPRISE	WALLOWA	5W28	CITY	363	62,526	852	73.39	0.426
Northeast OR	HERMISTON	ARLINGTON	5K25	ARLINGTON	11	1,078	513	2.10	0.021
Northeast OR	HERMISTON	DALREED	4K16	WILLOW COVE	3	507	76	6.67	0.039
Northeast OR	HERMISTON	DALREED	4K36	SIMTAG	3	1,264	18	70.19	0.167
Northeast OR	HERMISTON	DALREED	4K46	BOEING	24	6,550	176	37.22	0.136
Northeast OR	HERMISTON	HERMISTON	5W602	RURAL (HERMISTON)	135	29,867	1,361	21.94	0.099
Northeast OR	HERMISTON	HINKLE	5W82	MEADOWS	386	48,199	366	131.69	1.055
Northeast OR	HERMISTON	UMATILLA	5W658	UMATILLA	73	6,681	1,143	5.85	0.064

Oregon 2016 Circuit Metrics (excluding major events)

Oregon Regions	Op Area Name	Substation Name	Circuit Id	Circuit Name	Customers in Incident Sustained	Customer Minutes Lost	Circuit Customer Count	SAIDI	SAIFI
Northeast OR	HERMISTON	UMATILLA	5W660	MCNARY	35	13,652	900	15.17	0.039
Northeast OR	HERMISTON	UMATILLA	5W664	PORT FEEDER	-	-	54	-	-
Northeast OR	PENDLETON	ATHENA	5W703	CITY	105	15,292	839	18.23	0.125
Northeast OR	PENDLETON	ATHENA	5W705	HELIX	54	5,963	415	14.37	0.130
Northeast OR	PENDLETON	BUCKAROO	5W201	STATE HOSP.	1	70	375	0.19	0.003
Northeast OR	PENDLETON	BUCKAROO	5W202	REITH	2,356	323,620	1,526	212.07	1.544
Northeast OR	PENDLETON	BUCKAROO	5W203	MONTEE	549	73,434	1,646	44.61	0.334
Northeast OR	PENDLETON	PENDLETON	5W401	WEST HILLS	518	55,093	1,688	32.64	0.307
Northeast OR	PENDLETON	PENDLETON	5W402	HARRIS HTS	209	40,475	2,044	19.80	0.102
Northeast OR	PENDLETON	PENDLETON	5W403	MISSION	2,506	369,510	1,042	354.62	2.405
Northeast OR	PENDLETON	PENDLETON	7W451	BUSINESS	1	62	255	0.24	0.004
Northeast OR	PENDLETON	PENDLETON	7W452	NORTHWEST	82	5,841	515	11.34	0.159
Northeast OR	PENDLETON	PENDLETON	7W453	SOUTHWEST (PENDELTON)	5	654	343	1.91	0.015
Northeast OR	PENDLETON	PILOT ROCK	5W406	PILOT ROCK CITY	396	56,888	1,370	41.52	0.289
Northeast OR	PENDLETON	WESTON NEW (OR)	5W40	WESTON CANNERY	15	12,856	14	918.30	1.071
Northeast OR	PENDLETON	WESTON NEW (OR)	5W7	SCOTTS FEEDER	509	179,394	441	406.79	1.154
Northeast OR	WALLA WALLA	UMAPINE	5W105	UMAPINE FEEDER	1,116	208,119	965	215.67	1.156
Northeast OR	WALLA WALLA	UMAPINE	5W106	FERNDALE	2,104	232,052	1,329	174.61	1.583
South OR	GRANTS PASS	AGNESS AVE	5R172	SPALDING MILL	107	13,551	874	15.50	0.122
South OR	GRANTS PASS	AGNESS AVE	5R173	JONES CREEK	99	17,237	850	20.28	0.116
South OR	GRANTS PASS	AGNESS AVE	5R322	ANTEATER	595	80,106	957	83.71	0.622
South OR	GRANTS PASS	APPLEGATE	5R267	MURPHY	1,201	100,251	1,018	98.48	1.180
South OR	GRANTS PASS	APPLEGATE	5R278	HIGHWAY	2,721	513,194	1,595	321.75	1.706
South OR	GRANTS PASS	BEACON	5R104	SAVAGE ST	182	18,150	1,237	14.67	0.147
South OR	GRANTS PASS	BEACON	5R105	BEACON ST	84	10,055	829	12.13	0.101
South OR	GRANTS PASS	CAVE JUNCTION	5R52	FREE & EASY	3,485	1,406,655	2,302	611.06	1.514
South OR	GRANTS PASS	CAVE JUNCTION	5R53	ROUGH & READY	1,860	242,657	1,502	161.56	1.238
South OR	GRANTS PASS	CAVEMAN	5R295	QUAIL	32	4,087	1,114	3.67	0.029
South OR	GRANTS PASS	CAVEMAN	5R82	WASHINGTON	109	11,282	1,189	9.49	0.092
South OR	GRANTS PASS	CAVEMAN	5R98	MANZANITA	32	2,493	572	4.36	0.056
South OR	GRANTS PASS	CAVEMAN	5R99	CAVEMAN	169	34,554	1,180	29.28	0.143
South OR	GRANTS PASS	DOWELL	5R331	DOVE	68	11,481	1,426	8.05	0.048
South OR	GRANTS PASS	DOWELL	5R334	DUCK	92	13,328	2,406	5.54	0.038
South OR	GRANTS PASS	EASY VALLEY	5R123	G STREET	125	20,993	2,006	10.46	0.062
South OR	GRANTS PASS	EASY VALLEY	5R125	ROGUE	2,143	380,698	1,697	224.34	1.263
South OR	GRANTS PASS	EASY VALLEY	5R259	CHINOOK	2,163	294,785	1,289	228.69	1.678
South OR	GRANTS PASS	FIELDER CREEK	4R33	ELK FDR.	1,488	528,182	1,562	338.14	0.953
South OR	GRANTS PASS	FIELDER CREEK	4R34	BEAR FDR	507	215,787	859	251.21	0.590
South OR	GRANTS PASS	GLENDALE SUBSTATION	5R133	GLENDALE	2,617	305,455	1,855	164.67	1.411
South OR	GRANTS PASS	GLENDALE SUBSTATION	5R143	INDUSTRIAL	211	38,031	637	59.70	0.331
South OR	GRANTS PASS	JEROME PRAIRIE	5R62	WILD PRAIRIE	1,773	151,919	1,582	96.03	1.121
South OR	GRANTS PASS	JEROME PRAIRIE	5R63	WOOD RIVER	3,145	602,123	1,553	387.72	2.025
South OR	GRANTS PASS	MERLIN	5R232	MERLIN-HUGO	625	75,999	2,033	37.38	0.307

Oregon 2016 Circuit Metrics (excluding major events)

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South OR	GRANTS PASS	MERLIN	5R234	PARADISE	546	123,056	1,170	105.18	0.467
South OR	GRANTS PASS	MERLIN	5R248	PLEASANT VALLEY-MERLIN FEEDER	2,620	302,952	1,757	172.43	1.491
South OR	GRANTS PASS	MERLIN	5R251	BADGER	66	12,846	903	14.23	0.073
South OR	GRANTS PASS	NEW O'BRIEN	5R106	O'BRIEN	1,079	263,479	447	589.44	2.414
South OR	GRANTS PASS	PARK STREET (OR)	5R114	FRUITDALE	2,378	291,873	2,075	140.66	1.146
South OR	GRANTS PASS	PARK STREET (OR)	5R115	ALLEN CREEK	143	28,202	975	28.93	0.147
South OR	GRANTS PASS	PARK STREET (OR)	5R121	NEW HOPE	43	6,506	1,821	3.57	0.024
South OR	GRANTS PASS	PARK STREET (OR)	5R164	EXPRESS	71	15,473	318	48.66	0.223
South OR	GRANTS PASS	PARK STREET (OR)	5R169	PORTOLA	1,823	118,534	1,501	78.97	1.215
South OR	GRANTS PASS	PROVOLT	5R67	NORTH-SOUTH	1,856	106,153	1,392	76.26	1.333
South OR	GRANTS PASS	ROGUE RIVER	4R7	EVANS VALLEY	224	16,158	226	71.49	0.991
South OR	GRANTS PASS	ROGUE RIVER	5R77	SAVAGE/WIMMER	4,227	570,420	1,794	317.96	2.356
South OR	GRANTS PASS	ROGUE RIVER	5R78	ROCKY POINT (ROGUE RIVER)	1,158	93,419	1,041	89.74	1.112
South OR	GRANTS PASS	SELMA	5R65	DEER CREEK	3,979	747,925	1,175	636.53	3.386
South OR	KLAMATH FALLS	BEATTY	5L1	BEATTY	422	46,332	402	115.25	1.050
South OR	KLAMATH FALLS	BLY	5L14	TOWN (BLY)	445	57,779	434	133.13	1.025
South OR	KLAMATH FALLS	BONANZA (OR)	5L7	POE VALLEY	1,908	158,927	462	344.00	4.130
South OR	KLAMATH FALLS	BRYANT	5L2	GARY STREET	2,275	55,137	2,092	26.36	1.087
South OR	KLAMATH FALLS	BRYANT	5L3	WASHBURN	1,826	28,324	1,808	15.67	1.010
South OR	KLAMATH FALLS	BRYANT	5L4	SUMMERS LANE	1,952	64,144	1,938	33.10	1.007
South OR	KLAMATH FALLS	BRYANT	5L5	MOYINA HTS.	2,576	45,404	2,399	18.93	1.074
South OR	KLAMATH FALLS	CASEBEER SUB	4L16	LANGELL VLY	4,476	249,937	1,143	218.67	3.916
South OR	KLAMATH FALLS	CHILOQUIN	5L57	CRATER LAKE	3,546	767,880	1,038	739.77	3.416
South OR	KLAMATH FALLS	CHILOQUIN MARKET	5L37	WILLIAMSON	5	537	539	1.00	0.009
South OR	KLAMATH FALLS	DAIRY	5L42	SWAN LAKE	899	56,785	275	206.49	3.269
South OR	KLAMATH FALLS	DAIRY	5L43	DAIRY	1,523	86,369	463	186.54	3.289
South OR	KLAMATH FALLS	HAMAKER	5L55	KENO	345	61,385	1,666	36.85	0.207
South OR	KLAMATH FALLS	HAMAKER	5L56	MOUNTAIN	22	2,310	160	14.44	0.138
South OR	KLAMATH FALLS	HENLEY	5L58	HENLEY	1,188	91,806	234	392.33	5.077
South OR	KLAMATH FALLS	HENLEY	5L59	WEST	2,356	167,760	530	316.53	4.445
South OR	KLAMATH FALLS	HORNET	5L44	HOMEDALE	8,644	465,229	2,704	172.05	3.197
South OR	KLAMATH FALLS	HORNET	5L45	CRYSTAL SPR	4,512	247,174	1,489	166.00	3.030
South OR	KLAMATH FALLS	LAKEPORT	5L49	WOCUS	31	5,932	189	31.39	0.164
South OR	KLAMATH FALLS	LAKEPORT	5L54	SOUTH (LAKEPORT)	4,063	322,503	2,377	135.68	1.709
South OR	KLAMATH FALLS	LAKEPORT	5L61	JELDWEN	-	-	7	-	-
South OR	KLAMATH FALLS	MERRILL (OR)	5L26	LAKE (MERRILL)	5,213	344,698	1,094	315.08	4.765
South OR	KLAMATH FALLS	MERRILL (OR)	5L27	NORTH (MERRILL)	3,116	231,994	550	421.81	5.665
South OR	KLAMATH FALLS	MODOC	5L36	MODOC	122	17,651	838	21.06	0.146
South OR	KLAMATH FALLS	ROSS AVENUE	5L46	ELDORADO	2,104	87,152	1,380	63.15	1.525
South OR	KLAMATH FALLS	ROSS AVENUE	5L48	BROAD ST.	1,165	17,494	1,167	14.99	0.998
South OR	KLAMATH FALLS	RUNNING Y	4L50	ROCKY POINT FEEDER (RUNNING Y)	4,844	1,061,693	1,421	747.14	3.409
South OR	KLAMATH FALLS	SPRAGUE RIVER	5L8	SPRAGUE RIVER	545	63,035	492	128.12	1.108
South OR	KLAMATH FALLS	TEXUM	5L112	ANDERSON	1,206	20,223	1,186	17.05	1.017

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South OR	KLAMATH FALLS	TEXUM	5L113	TOWER	709	10,440	283	36.89	2.505
South OR	KLAMATH FALLS	TEXUM	5L116	ALTAMONT	2,944	151,195	1,467	103.06	2.007
South OR	KLAMATH FALLS	TURKEY HILL	5L20	MALIN CITY	5,379	475,037	914	519.73	5.885
South OR	KLAMATH FALLS	TURKEY HILL	5L23	RURAL (TURKEY HILL)	1,633	85,176	321	265.34	5.087
South OR	KLAMATH FALLS	WEST SIDE HE PLANT	5L12	ORINDALE	10	669	763	0.88	0.013
South OR	KLAMATH FALLS	WEST SIDE HE PLANT	5L15	CALIFORNIA	10	1,914	1,349	1.42	0.007
South OR	KLAMATH FALLS	WEST SIDE HE PLANT	5L16	MAIN ST (WEST SIDE HE PLANT)	3	401	107	3.75	0.028
South OR	KLAMATH FALLS	WEST SIDE HE PLANT	5L17	PINE ST (WEST SIDE HE PLANT)	1	59	488	0.12	0.002
South OR	KLAMATH FALLS	WEST SIDE HE PLANT	5L18	RIVERSIDE (WEST SIDE HE PLANT)	8	350	573	0.61	0.014
South OR	KLAMATH FALLS	WEST SIDE HE PLANT	5L19	LAKESHORE	13	1,559	295	5.28	0.044
South OR	LAKEVIEW	MILE-HI	5L104	INDUSTRIAL	818	142,250	715	198.95	1.144
South OR	LAKEVIEW	MILE-HI	5L105	BUSINESS	5,145	788,763	1,783	442.38	2.886
South OR	MEDFORD	ASHLAND (MTN.AVE, PUD)	5R241	CITY	1	101	9	11.17	0.111
South OR	MEDFORD	ASHLAND (MTN.AVE, PUD)	5R245	VALLEY VIEW	973	8,463	959	8.83	1.015
South OR	MEDFORD	BEALL LANE	5R361	BULLDOG	2,079	248,258	1,686	147.25	1.233
South OR	MEDFORD	BEALL LANE	5R364	BOBCAT	53	14,217	2,149	6.62	0.025
South OR	MEDFORD	BELKNAP	5R1	KOGAP	140	24,049	995	24.17	0.141
South OR	MEDFORD	BELKNAP	5R2	RIVERSIDE (BELKNAP)	29	609	658	0.93	0.044
South OR	MEDFORD	BELKNAP	5R3	BARNETT	181	49,936	1,626	30.71	0.111
South OR	MEDFORD	BELKNAP	5R47	STEWART	360	63,006	2,074	30.38	0.174
South OR	MEDFORD	BROOKHURST	5R118	SPRINGBROOK	1	41	1,744	0.02	0.001
South OR	MEDFORD	BROOKHURST	5R135	ROBERTS (BROOKHURST)	150	46,904	1,619	28.97	0.093
South OR	MEDFORD	BROOKHURST	5R32	ROXY	188	39,607	1,689	23.45	0.111
South OR	MEDFORD	BROOKHURST	5R33	CRATER LAKE	286	62,750	1,635	38.38	0.175
South OR	MEDFORD	BROOKHURST	5R75	SUNRISE (BROOKHURST)	114	17,669	1,216	14.53	0.094
South OR	MEDFORD	CAMPBELL	5R216	VOORHIES	15	861	842	1.02	0.018
South OR	MEDFORD	CAMPBELL	5R218	PHOENIX	193	38,388	1,511	25.41	0.128
South OR	MEDFORD	CAMPBELL	5R227	FERN VALLEY	2,439	67,328	1,191	56.53	2.048
South OR	MEDFORD	CAMPBELL	5R312	COBRA	3,520	366,163	1,429	256.24	2.463
South OR	MEDFORD	DODGE BRIDGE	4R1	SALMON	5,435	885,208	1,588	557.44	3.423
South OR	MEDFORD	DODGE BRIDGE	4R35	MEADOWS ROAD	111	15,147	1,344	11.27	0.083
South OR	MEDFORD	FOOTHILLS	5R38	HOSPITAL	263	48,506	763	63.57	0.345
South OR	MEDFORD	FOOTHILLS	5R39	PIERCE ROAD	168	35,323	1,156	30.56	0.145
South OR	MEDFORD	FRALEY	5R87	TABLE ROCK	14	1,548	502	3.08	0.028
South OR	MEDFORD	FRALEY	5R88	DODGE BRIDGE	165	21,430	364	58.87	0.453
South OR	MEDFORD	GOLD HILL	5R103	GOLD HILL	3,182	263,077	1,973	133.34	1.613
South OR	MEDFORD	GRIFFIN CREEK	5R204	HULL RD	2,872	197,775	2,584	76.54	1.111
South OR	MEDFORD	GRIFFIN CREEK	5R206	GRIFFIN CREEK	316	51,505	1,698	30.33	0.186
South OR	MEDFORD	HUMBUG CREEK	5R287	HUMMINGBIRD	946	100,799	670	150.45	1.412
South OR	MEDFORD	MEDCO	5R280	BOISE CASCADE	1	212	1	212.15	1.000
South OR	MEDFORD	MEDFORD	5R21	MELROSE	8,801	447,831	1,595	280.77	5.518
South OR	MEDFORD	MEDFORD	5R23	SPRING ST.	1,622	65,425	1,592	41.10	1.019
South OR	MEDFORD	MEDFORD	5R250	BIG Y	894	113,945	1,849	61.62	0.484

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South OR	MEDFORD	MEDFORD	5R253	APPLE	23	1,640	1,105	1.48	0.021
South OR	MEDFORD	MEDFORD	5R257	PEAR	19	2,990	565	5.29	0.034
South OR	MEDFORD	MEDFORD	5R659	MCLEAN	2	96	665	0.14	0.003
South OR	MEDFORD	NEW JACKSONVILLE SUB-DIST	5R284	STAGE RD	522	131,103	2,039	64.30	0.256
South OR	MEDFORD	NEW JACKSONVILLE SUB-DIST	5R285	JACKSONVILLE HWY	1,934	505,420	2,109	239.65	0.917
South OR	MEDFORD	OAK KNOLL	5R55	SISKIYOU	4,855	817,007	1,465	557.68	3.314
South OR	MEDFORD	OAK KNOLL	5R56	HIGHWAY 99	163	35,688	109	327.41	1.495
South OR	MEDFORD	PROSPECT CENTRAL	5R40	NEW CASCADE	544	100,399	334	300.60	1.629
South OR	MEDFORD	RED BLANKET	7R5	PROSPECT	3	309	382	0.81	0.008
South OR	MEDFORD	ROXY ANN	5R350	St. Bernard	212	48,300	1,154	41.85	0.184
South OR	MEDFORD	ROXY ANN	5R354	RACCOON	336	90,427	1,407	64.27	0.239
South OR	MEDFORD	RUCH	5R68	APPLEGATE	2,343	235,542	899	262.00	2.606
South OR	MEDFORD	RUCH	5R69	RUCH	1,083	73,116	539	135.65	2.009
South OR	MEDFORD	SAGE ROAD (OR)	5R211	COLUMBUS	1,979	357,033	1,921	185.86	1.030
South OR	MEDFORD	SAGE ROAD (OR)	5R226	BOISE	935	13,054	903	14.46	1.035
South OR	MEDFORD	SAGE ROAD (OR)	5R27	MCANDREWS	173	27,298	116	235.33	1.491
South OR	MEDFORD	SAGE ROAD (OR)	5R28	ROSS	3,844	594,935	1,722	345.49	2.232
South OR	MEDFORD	SAGE ROAD (OR)	5R29	EDWARDS	822	171,448	725	236.48	1.134
South OR	MEDFORD	SCENIC	5R174	UPTON	23	3,243	1,979	1.64	0.012
South OR	MEDFORD	SCENIC	5R180	HEAD RD	103	26,569	1,149	23.12	0.090
South OR	MEDFORD	SCENIC	5R182	TAYLOR RD	242	55,376	1,533	36.12	0.158
South OR	MEDFORD	SCENIC	5R184	CHENEY	178	48,188	1,412	34.13	0.126
South OR	MEDFORD	STEVENS ROAD	4R13	HENRY MILLER	2,290	218,664	2,106	103.83	1.087
South OR	MEDFORD	STEVENS ROAD	4R17	Stingray	103	12,234	2,433	5.03	0.042
South OR	MEDFORD	STEVENS ROAD	4R41	ANTELOPE	793	177,918	1,110	160.29	0.714
South OR	MEDFORD	TAKELMA	4R9	LOST CK. (TAKELMA)	3,214	406,533	2,573	158.00	1.249
South OR	MEDFORD	TALENT	5R237	TALENT	615	97,054	2,436	39.84	0.252
South OR	MEDFORD	TALENT	5R238	ANDERSON CRK	1,278	88,871	1,661	53.50	0.769
South OR	MEDFORD	TALENT	5R239	HARTLEY ROAD	1,121	269,971	1,512	178.55	0.741
South OR	MEDFORD	TALENT	5R240	NORTH HWY	63	12,980	1,181	10.99	0.053
South OR	MEDFORD	TOLO	5R90	TBL ROCK LBR	29	3,967	157	25.27	0.185
South OR	MEDFORD	TOLO	5R91	SAMS VALLEY	1,563	315,912	635	497.50	2.461
South OR	MEDFORD	TOLO	5R92	KIRTLAND RD	204	47,648	198	240.65	1.030
South OR	MEDFORD	VILAS ROAD	5R110	MCLAUGHLIN	249	19,467	926	21.02	0.269
South OR	MEDFORD	VILAS ROAD	5R146	KING CENTER	29	5,150	1,380	3.73	0.021
South OR	MEDFORD	VILAS ROAD	5R305	WEBFOOT	11	1,397	783	1.78	0.014
South OR	MEDFORD	WHITE CITY	5R11	EAGLE POINT	2,562	230,916	1,409	163.89	1.818
South OR	MEDFORD	WHITE CITY	5R66	4 CORNERS	122	40,760	1,702	23.95	0.072
South OR	ROSEBURG/MYRTLECREEK	CANYONVILLE	5U46	CANYONVILLE	8	791	406	1.95	0.020
South OR	ROSEBURG/MYRTLECREEK	CANYONVILLE	5U52	BEALS CREEK FEEDER	638	157,799	882	178.91	0.723
South OR	ROSEBURG/MYRTLECREEK	CARNES	5U44	RND PRARIE	490	39,073	414	94.38	1.184
South OR	ROSEBURG/MYRTLECREEK	CLEARWATER #1 SUB	6U17	BRIGGS	5	889	2	444.55	2.500
South OR	ROSEBURG/MYRTLECREEK	CLEARWATER #2 SUB	6U33	CLEARWATER	98	1,008	100	10.08	0.980

Oregon 2016 Circuit Metrics (excluding major events)

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South OR	ROSEBURG/MYRTLECREEK	CLOAKE	4U38	HARVARD	684	81,499	2,895	28.15	0.236
South OR	ROSEBURG/MYRTLECREEK	CLOAKE	4U39	GOEDECK	105	14,643	1,244	11.77	0.084
South OR	ROSEBURG/MYRTLECREEK	GARDEN VALLEY	4U81	VALLEY	316	34,356	1,330	25.83	0.238
South OR	ROSEBURG/MYRTLECREEK	GLIDE SUBSTATION	5U83	IDLEYLD	3,233	545,055	986	552.79	3.279
South OR	ROSEBURG/MYRTLECREEK	GLIDE SUBSTATION	5U84	LITTLE RIVER	2,225	273,072	1,344	203.18	1.656
South OR	ROSEBURG/MYRTLECREEK	GREEN SUBSTATION	5U32	SAFARI	463	53,324	2,052	25.99	0.226
South OR	ROSEBURG/MYRTLECREEK	GREEN SUBSTATION	5U33	SUNNYSLOPE	7	482	1,618	0.30	0.004
South OR	ROSEBURG/MYRTLECREEK	ILLAHEE FLATS	6U13	ILLAHEE FLATS SINGLE PHASE RECLOSER	50	1,180	25	47.18	2.000
South OR	ROSEBURG/MYRTLECREEK	LEMOLO # 1	5U920	DIAMOND LAKE	916	156,432	181	864.27	5.061
South OR	ROSEBURG/MYRTLECREEK	MYRTLE CREEK	5U76	SUPER Y	3,520	511,625	1,529	334.61	2.302
South OR	ROSEBURG/MYRTLECREEK	MYRTLE CREEK	5U77	BOOMER HILL	342	55,043	2,291	24.03	0.149
South OR	ROSEBURG/MYRTLECREEK	OAKLAND (OR)	5U11	UMPQUA	110	37,911	1,304	29.07	0.084
South OR	ROSEBURG/MYRTLECREEK	OAKLAND (OR)	5U12	STAGECOACH	11	1,090	549	1.99	0.020
South OR	ROSEBURG/MYRTLECREEK	RIDDLE	5U1	TRI CITY	1,947	177,992	986	180.52	1.975
South OR	ROSEBURG/MYRTLECREEK	RIDDLE	5U2	COW CREEK	502	71,505	1,544	46.31	0.325
South OR	ROSEBURG/MYRTLECREEK	RIDDLE-VENEER	5U50	RFP-LVL (EWP)	3	755	29	26.05	0.103
South OR	ROSEBURG/MYRTLECREEK	ROSEBURG	4U10	DIAMOND	2,733	610,920	2,454	248.95	1.114
South OR	ROSEBURG/MYRTLECREEK	ROSEBURG	4U22	DIXON	1,808	412,353	1,102	374.19	1.641
South OR	ROSEBURG/MYRTLECREEK	ROSEBURG	4U5	DOUGLAS	439	54,065	2,057	26.28	0.213
South OR	ROSEBURG/MYRTLECREEK	SLIDE CREEK	6U76	SLIDE CREEK CAMP	4	41	4	10.28	1.000
South OR	ROSEBURG/MYRTLECREEK	SOUTHGATE	4U30	SHADY POINT	1,928	171,734	1,561	110.02	1.235
South OR	ROSEBURG/MYRTLECREEK	SOUTHGATE	4U31	BOOTH	88	11,434	1,568	7.29	0.056
South OR	ROSEBURG/MYRTLECREEK	STEAMBOAT	6U18	STEAMBOAT	44	380	22	17.28	2.000
South OR	ROSEBURG/MYRTLECREEK	SUTHERLIN	5U35	NON-PAREIL	52	12,584	1,301	9.67	0.040
South OR	ROSEBURG/MYRTLECREEK	SUTHERLIN	5U36	DEADY	310	17,114	1,298	13.19	0.239
South OR	ROSEBURG/MYRTLECREEK	SUTHERLIN	5U56	Industrial	44	4,097	472	8.68	0.093
South OR	ROSEBURG/MYRTLECREEK	TILLER	5U89	JACKSON CRK	672	85,843	310	276.91	2.168
South OR	ROSEBURG/MYRTLECREEK	TOKETEE	8U12	TOKETEE CITY	38	22,486	19	1,183.49	2.000
South OR	ROSEBURG/MYRTLECREEK	WINCHESTER	4U18	WILBUR	1,789	163,743	1,631	100.39	1.097
South OR	ROSEBURG/MYRTLECREEK	WINCHESTER	5U15	NEWTON CREEK	2,249	204,510	1,712	119.46	1.314
South OR	ROSEBURG/MYRTLECREEK	WINCHESTER	5U17	FISHER	131	11,773	756	15.57	0.173
South OR	ROSEBURG/MYRTLECREEK	WINCHESTER	5U19	EVANS	56	9,808	757	12.96	0.074
South OR	ROSEBURG/MYRTLECREEK	WINSTON	5U48	BROCKWAY	31	2,275	853	2.67	0.036
South OR	ROSEBURG/MYRTLECREEK	WINSTON	5U49	DILLARD	1,013	87,771	1,444	60.78	0.702
Willamette Valley	ALBANY	HAZELWOOD	4M335	WEST HIGH	1,496	372,790	1,463	254.81	1.023
Willamette Valley	ALBANY	HAZELWOOD	4M336	RIVERVIEW (HAZELWOOD)	1,548	538,251	1,230	437.60	1.259
Willamette Valley	ALBANY	JEFFERSON (OR)	4M117	MARION	2,400	214,136	707	302.88	3.395
Willamette Valley	ALBANY	JEFFERSON (OR)	4M125	MINT	3,321	247,202	2,428	101.81	1.368
Willamette Valley	ALBANY	MURDER CREEK	4M243	SCRAVEL HILL	9,031	891,903	3,465	257.40	2.606
Willamette Valley	ALBANY	MURDER CREEK	4M245	RURAL NW	2,989	142,862	1,838	77.73	1.626
Willamette Valley	ALBANY	MURDER CREEK	4M249	DURA-PACIFIC	7	65	7	9.23	1.000
Willamette Valley	ALBANY	MURDER CREEK	4M250	INDUSTRIAL	2,476	77,889	1,206	64.58	2.053
Willamette Valley	ALBANY	MURDER CREEK	5M131	WAH CHANG SOUTH	2	199	1	198.83	2.000

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Willamette Valley	ALBANY	OREMET	4M295	OAK CREEK	102	21,760	101	215.45	1.010
Willamette Valley	ALBANY	OREMET	4M296	ROGERSDALE	2,668	320,825	2,149	149.29	1.242
Willamette Valley	ALBANY	QUEEN AVE	4M217	SANTIAM	1,929	150,258	1,953	76.94	0.988
Willamette Valley	ALBANY	QUEEN AVE	4M258	HILL STREET	310	77,329	2,161	35.78	0.143
Willamette Valley	ALBANY	QUEEN AVE	4M261	WAVERLY	945	166,022	3,363	49.37	0.281
Willamette Valley	ALBANY	QUEEN AVE	4M262	GEARY STREET	470	68,067	2,725	24.98	0.172
Willamette Valley	ALBANY	VINE STREET	4M15	FERRY	34	5,015	2,171	2.31	0.016
Willamette Valley	ALBANY	VINE STREET	4M16	WATER STREET	1,406	212,119	3,964	53.51	0.355
Willamette Valley	CORVALLIS	BUCHANAN	4M130	HEWLETT PACKARD	268	17,388	2,625	6.62	0.102
Willamette Valley	CORVALLIS	BUCHANAN	4M133	PEORIA	8,816	756,182	2,440	309.91	3.613
Willamette Valley	CORVALLIS	BUCHANAN	4M134	N. NINTH ST.	609	143,738	2,569	55.95	0.237
Willamette Valley	CORVALLIS	CIRCLE BLVD	4M394	H. P. #1	1	109	1	109.13	1.000
Willamette Valley	CORVALLIS	CIRCLE BLVD	4M429	H. P. #5	1	194	1	193.97	1.000
Willamette Valley	CORVALLIS	DIXON	7M26	FOURTH ST.	-	-	237	-	-
Willamette Valley	CORVALLIS	DIXON	7M29	SECOND ST.	-	-	273	-	-
Willamette Valley	CORVALLIS	GRANT	4M265	HIGH SCHOOL	811	164,930	2,480	66.50	0.327
Willamette Valley	CORVALLIS	GRANT	4M266	CHINTIMINI	1,084	168,646	2,545	66.27	0.426
Willamette Valley	CORVALLIS	GRANT	4M268	KINGS ROAD	832	147,471	2,524	58.43	0.330
Willamette Valley	CORVALLIS	GRANT	4M269	29TH STREET	2,485	489,218	3,292	148.61	0.755
Willamette Valley	CORVALLIS	HILLVIEW	4M180	WEST HILLS	140	11,700	1,839	6.36	0.076
Willamette Valley	CORVALLIS	HILLVIEW	4M181	PHILOMATH	13	1,291	634	2.04	0.021
Willamette Valley	CORVALLIS	HILLVIEW	4M182	SUNSET	445	67,657	1,523	44.42	0.292
Willamette Valley	CORVALLIS	HILLVIEW	4M185	PLYMOUTH	532	102,558	2,184	46.96	0.244
Willamette Valley	CORVALLIS	MARYS RIVER	4M151	GREENBERRY	1,131	124,421	3,551	35.04	0.319
Willamette Valley	CORVALLIS	MARYS RIVER	4M152	AVERY	6	568	190	2.99	0.032
Willamette Valley	COTTAGE GROVE/J.CITY	COBURG	4M220	DETERING	602	78,886	526	149.97	1.144
Willamette Valley	COTTAGE GROVE/J.CITY	GOSHEN (OR)	4M360	GOSHEN FDR	1,816	201,551	1,588	126.92	1.144
Willamette Valley	COTTAGE GROVE/J.CITY	HARRISBURG SUB	4M400	TERRITORIAL	2,731	320,839	1,809	177.36	1.510
Willamette Valley	COTTAGE GROVE/J.CITY	JUNCTION CITY	4M102	6TH STREET	179	26,181	1,137	23.03	0.157
Willamette Valley	COTTAGE GROVE/J.CITY	JUNCTION CITY	4M99	PRAIRIE ROAD	31	1,680	929	1.81	0.033
Willamette Valley	COTTAGE GROVE/J.CITY	LANCASTER	4M209	MONROE	1,361	245,715	1,079	227.73	1.261
Willamette Valley	COTTAGE GROVE/J.CITY	VILLAGE GREEN	4M84	NORTH SIDE	8,122	445,961	2,339	190.66	3.472
Willamette Valley	COTTAGE GROVE/J.CITY	VILLAGE GREEN	4M86	MADISON	1,921	194,015	1,576	123.11	1.219
Willamette Valley	DALLAS/INDEPENDENCE	DALLAS	4M100	RURAL (DALLAS)	5,553	241,247	4,441	54.32	1.250
Willamette Valley	DALLAS/INDEPENDENCE	DALLAS	4M201	INDUSTRIAL	27	200	27	7.42	1.000
Willamette Valley	DALLAS/INDEPENDENCE	DALLAS	4M202	ELLENDALE	801	230,162	2,832	81.27	0.283
Willamette Valley	DALLAS/INDEPENDENCE	DALLAS	4M238	DALLAS	5,706	850,834	2,242	379.50	2.545
Willamette Valley	DALLAS/INDEPENDENCE	INDEPENDENCE	4M22	RICKREAL	8,989	664,684	3,264	203.64	2.754
Willamette Valley	DALLAS/INDEPENDENCE	INDEPENDENCE	4M25	BUENA VISTA	4,762	550,227	1,910	288.08	2.493
Willamette Valley	LEBANON	BROWNSVILLE	4M17	CALAPOOIA	5,727	707,745	2,747	257.64	2.085
Willamette Valley	LEBANON	CROWFOOT	4M204	CROWFOOT	8,062	534,905	1,476	362.40	5.462
Willamette Valley	LEBANON	CROWFOOT	4M206	US PLYWOOD (LEBANON)	7,798	539,860	1,769	305.18	4.408
Willamette Valley	LEBANON	LEBANON	4M61	TANGENT	7,712	259,902	2,414	107.66	3.195

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Willamette Valley	LEBANON	LEBANON	4M62	RALSTON	5,985	165,099	1,975	83.59	3.030
Willamette Valley	LEBANON	LEBANON	4M63	TENNESSEE	8,285	363,158	1,768	205.41	4.686
Willamette Valley	LEBANON	LEBANON	4M79	CROWN Z	3,997	167,238	1,110	150.67	3.601
Willamette Valley	LEBANON	SWEET HOME	4M37	HOLLEY	10,173	1,331,915	1,986	670.65	5.122
Willamette Valley	LEBANON	SWEET HOME	4M38	NARROWS	3,022	184,393	952	193.69	3.174
Willamette Valley	LEBANON	SWEET HOME	4M93	AMES CREEK	5,034	269,527	1,634	164.95	3.081
Willamette Valley	LEBANON	SWEET HOME	4M94	FOSTER	7,679	463,623	2,257	205.42	3.402
Willamette Valley	STAYTON	NEW LYONS	4M120	MILL CITY	963	99,271	1,867	53.17	0.516
Willamette Valley	STAYTON	NEW LYONS	4M70	MEHAMA	909	325,145	907	358.48	1.002
Willamette Valley	STAYTON	NEW STAYTON	4M19	AUMSVILLE	13,233	983,321	3,062	321.14	4.322
Willamette Valley	STAYTON	NEW STAYTON	4M353	WEST STAYTON	14,271	981,536	3,407	288.09	4.189
Willamette Valley	STAYTON	NEW STAYTON	4M370	CASCADE	5,571	594,555	1,561	380.88	3.569
Willamette Valley	STAYTON	NEW STAYTON	4M50	3RD STREET	2,726	185,627	906	204.89	3.009
Willamette Valley	STAYTON	SCIO	5M126	THOMAS	7,934	761,770	1,538	495.30	5.159

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Central OR	BEND/REDMOND	BEND	5D10	PORTLAND AVE	4,866	107,463	2,323	46.26	2.095
Central OR	BEND/REDMOND	BEND	5D11	GLEN VISTA	1,472	44,529	1,077	41.35	1.367
Central OR	BEND/REDMOND	BEND	5D12	DIVISION ST.	429	7,539	214	35.23	2.005
Central OR	BEND/REDMOND	BEND	5D196	MALLARD	2,859	53,680	1,423	37.72	2.009
Central OR	BEND/REDMOND	BOND STREET	5D411	BACHELOR	264	24,957	1,707	14.62	0.155
Central OR	BEND/REDMOND	BOND STREET	5D413	OLD MILL.	382	49,552	367	135.02	1.041
Central OR	BEND/REDMOND	BOND STREET	5D418	BLAKELY	1,560	245,026	1,256	195.08	1.242
Central OR	BEND/REDMOND	CHINA HAT	5D140	LAVA (CHINA HAT)	455	99,680	2,200	45.31	0.207
Central OR	BEND/REDMOND	CHINA HAT	5D142	HIGH DESERT	101	12,680	1,624	7.81	0.062
Central OR	BEND/REDMOND	CHINA HAT	5D144	D.R.W.	111	26,909	2,377	11.32	0.047
Central OR	BEND/REDMOND	CLEVELAND AVE.	5D30	ARROWHEAD	198	18,108	853	21.23	0.232
Central OR	BEND/REDMOND	CLEVELAND AVE.	5D35	WICKIUP	51	6,038	933	6.47	0.055
Central OR	BEND/REDMOND	CLEVELAND AVE.	5D38	TOMAHAWK	465	108,110	1,376	78.57	0.338
Central OR	BEND/REDMOND	CLEVELAND AVE.	5D94	TEEPEE	55	4,205	3,046	1.38	0.018
Central OR	BEND/REDMOND	CLEVELAND AVE.	5D96	OBSIDIAN	54	5,384	861	6.25	0.063
Central OR	BEND/REDMOND	CLEVELAND AVE.	5D98	HUCKLEBERRY	130	17,792	1,288	13.81	0.101
Central OR	BEND/REDMOND	CROOKED RIVER RANCH	4D131	CANYON	208	32,961	1,701	19.38	0.122
Central OR	BEND/REDMOND	CROOKED RIVER RANCH	4D30	CROOKED R.R.	94	52,439	741	70.77	0.127
Central OR	BEND/REDMOND	DESCHUTES	5D184	PRONGHORN	1,099	41,408	1,063	38.95	1.034
Central OR	BEND/REDMOND	DESCHUTES	5D2	DESCHUTES S	1,059	52,926	948	55.83	1.117
Central OR	BEND/REDMOND	HUNTERS CIRCLE	5D192	Mackinaw	857	76,530	627	122.06	1.367
Central OR	BEND/REDMOND	OVERPASS	5D104	AWBREY	1,141	82,608	877	94.19	1.301
Central OR	BEND/REDMOND	OVERPASS	5D106	NEZ PERCE	3,210	280,521	2,567	109.28	1.250
Central OR	BEND/REDMOND	OVERPASS	5D120	CHINOOK	1,347	91,777	1,315	69.79	1.024
Central OR	BEND/REDMOND	OVERPASS	5D128	PAIUTE	2,157	157,435	1,926	81.74	1.120
Central OR	BEND/REDMOND	OVERPASS	5D155	APACHE	1,916	131,885	1,861	70.87	1.030
Central OR	BEND/REDMOND	PILOT BUTTE	5D261	KLONDIKE	1,351	313,926	3,083	101.82	0.438
Central OR	BEND/REDMOND	PILOT BUTTE	5D263	DRAKE FEEDER	542	60,933	1,944	31.34	0.279
Central OR	BEND/REDMOND	REDMOND	5D21	SOUTH (REDMOND)	746	158,508	703	225.47	1.061
Central OR	BEND/REDMOND	REDMOND	5D22	INDUSTRIAL	3,154	407,400	1,366	298.24	2.309
Central OR	BEND/REDMOND	REDMOND	5D223	TETHEROW	847	183,268	795	230.53	1.065
Central OR	BEND/REDMOND	REDMOND	5D226	CLINE FALLS	1,411	310,705	1,393	223.05	1.013
Central OR	BEND/REDMOND	REDMOND	5D227	WINDSOR	288	27,096	2,787	9.72	0.103
Central OR	BEND/REDMOND	REDMOND	5D228	CITY	905	97,878	1,278	76.59	0.708
Central OR	BEND/REDMOND	REDMOND	5D229	JUNIPER	245	47,852	391	122.38	0.627
Central OR	BEND/REDMOND	SHEVLIN PARK	5D238	WOLVERINE (SHP) (WAS 5D327)	3,866	573,589	2,450	234.12	1.578
Central OR	BEND/REDMOND	SHEVLIN PARK	5D241	BADGER (SHP)	3,595	430,131	2,941	146.25	1.222
Central OR	BEND/REDMOND	SHEVLIN PARK	5D243	Black Bear	151	42,979	1,164	36.92	0.130
Central OR	BEND/REDMOND	YEW AVENUE	5D322	BIRDIE	86	19,105	1,455	13.13	0.059
Central OR	BEND/REDMOND	YEW AVENUE	5D323	FAIRWAY	79	20,503	380	53.95	0.208
Central OR	BEND/REDMOND	YEW AVENUE	5D325	EAGLE	373	63,216	2,352	26.88	0.159
Central OR	MADRAS	CHERRY LANE	5D295	7 PEAKS	2	116	140	0.83	0.014
Central OR	MADRAS	CULVER	5D5	CULVER	2,049	93,401	1,718	54.37	1.193

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Central OR	MADRAS	MADRAS	5D52	MADRAS RURAL	60	5,372	979	5.49	0.061
Central OR	MADRAS	MADRAS	5D53	AGATE	70	18,534	1,240	14.95	0.056
Central OR	MADRAS	MADRAS	5D57	QUARTZ	119	31,405	1,337	23.49	0.089
Central OR	MADRAS	MADRAS	5D61	MADRAS CITY	41	7,310	1,279	5.72	0.032
Central OR	MADRAS	POWELL BUTTE	5D1	POWELL BUTTE	385	86,305	592	145.79	0.650
Central OR	MADRAS	PRINEVILLE	5D126	RIMROCK	2	195	838	0.23	0.002
Central OR	MADRAS	PRINEVILLE	5D167	NORTHVILLE	16	1,222	2,548	0.48	0.006
Central OR	MADRAS	PRINEVILLE	5D25	OCHOCO	309	53,992	959	56.30	0.322
Central OR	MADRAS	PRINEVILLE	5D47	MC KAY (PRINEVILLE)	2,294	121,153	1,608	75.34	1.427
Central OR	MADRAS	PRINEVILLE	5D48	LAMONTA	59	9,232	597	15.46	0.099
Central OR	MADRAS	PRINEVILLE	5D69	GRIMES FLAT	1,580	319,112	1,528	208.84	1.034
Central OR	MADRAS	WARM SPRINGS	4D68	WARM SPRINGS (OR)	3,085	370,205	1,032	358.73	2.989
CoastPlus	CLATSOP (ASTORIA)	CANNON BEACH	5A10	HAYSTACK	10,412	2,230,392	1,565	1,425.17	6.653
CoastPlus	CLATSOP (ASTORIA)	CANNON BEACH	5A8	ECOLA	7,979	1,749,503	1,211	1,444.68	6.589
CoastPlus	CLATSOP (ASTORIA)	FERN HILL SUB	5A51	JOHN DAY	793	52,631	261	201.65	3.038
CoastPlus	CLATSOP (ASTORIA)	FERN HILL SUB	5A52	SCANDINAVIAN	1,164	159,230	374	425.75	3.112
CoastPlus	CLATSOP (ASTORIA)	KNAPPA SVENSEN	5A92	SVENSEN	829	31,306	689	45.44	1.203
CoastPlus	CLATSOP (ASTORIA)	KNAPPA SVENSEN	5A93	BRADWOOD	3,298	737,100	912	808.22	3.616
CoastPlus	CLATSOP (ASTORIA)	SEASIDE	5A80	GROVE	15,582	999,792	2,356	424.36	6.614
CoastPlus	CLATSOP (ASTORIA)	SEASIDE	5A81	CENTRAL	8,136	289,779	1,614	179.54	5.041
CoastPlus	CLATSOP (ASTORIA)	SEASIDE	5A82	NECANICUM	7,870	895,532	1,169	766.07	6.732
CoastPlus	CLATSOP (ASTORIA)	SEASIDE	5A83	GEARHART	20,284	1,768,677	3,148	561.84	6.443
CoastPlus	CLATSOP (ASTORIA)	WARRENTON	5A15	CITY	9,979	2,899,725	1,821	1,592.38	5.480
CoastPlus	CLATSOP (ASTORIA)	WARRENTON	5A16	MILL (WARRENTON)	3,649	423,456	548	772.73	6.659
CoastPlus	CLATSOP (ASTORIA)	WARRENTON	5A20	SOUTH (WARRENTON)	9,113	894,573	1,587	563.69	5.742
CoastPlus	CLATSOP (ASTORIA)	YOUNGS BAY	5A202	PORT DOCK	1,281	16,141	1,196	13.50	1.071
CoastPlus	CLATSOP (ASTORIA)	YOUNGS BAY	5A204	MOO COW	5,439	1,004,124	1,116	899.75	4.874
CoastPlus	CLATSOP (ASTORIA)	YOUNGS BAY	5A205	FIFTH STREET	2,043	58,197	963	60.43	2.121
CoastPlus	CLATSOP (ASTORIA)	YOUNGS BAY	5A206	YOUNGS BAY #6	624	85,225	310	274.92	2.013
CoastPlus	CLATSOP (ASTORIA)	YOUNGS BAY	5A210	YOUNGS BAY #10	2,170	289,831	938	308.99	2.313
CoastPlus	CLATSOP (ASTORIA)	YOUNGS BAY	5A211	OLNEY	4,162	771,740	994	776.40	4.187
CoastPlus	CLATSOP (ASTORIA)	YOUNGS BAY	5A213	INDUSTRIAL	1,637	148,678	1,374	108.21	1.191
CoastPlus	COOS BAY/COQUILLE	BANDON TIE (BPA)	L804	BANDON	3,215	423,319	740	572.05	4.345
CoastPlus	COOS BAY/COQUILLE	COOS RIVER	4C106	COOS RIVER	5,364	1,751,241	1,350	1,297.22	3.973
CoastPlus	COOS BAY/COQUILLE	COQUILLE	4C41	HENRY STREET	7,408	1,596,022	1,656	963.78	4.473
CoastPlus	COOS BAY/COQUILLE	COQUILLE	4C42	TERRES HGHTS	9,390	1,677,707	1,552	1,081.00	6.050
CoastPlus	COOS BAY/COQUILLE	COQUILLE	4C43	INDUSTRIAL	803	119,870	148	809.93	5.426
CoastPlus	COOS BAY/COQUILLE	EMPIRE NEW	4C108	EMPIRE	3,469	323,222	1,715	188.47	2.023
CoastPlus	COOS BAY/COQUILLE	EMPIRE NEW	4C89	SCOTT	2,827	261,093	1,380	189.20	2.049
CoastPlus	COOS BAY/COQUILLE	EMPIRE NEW	4C90	CHARLESTON	4,339	422,328	2,079	203.14	2.087
CoastPlus	COOS BAY/COQUILLE	JORDAN POINT	5C6	SAND DUNES (JORDAN POINT)	5	814	31	26.25	0.161
CoastPlus	COOS BAY/COQUILLE	LOCKHART STREET	4C48	CITY CENTER	8	1,457	1,521	0.96	0.005
CoastPlus	COOS BAY/COQUILLE	LOCKHART STREET	4C49	EASTSIDE	22	3,761	770	4.88	0.029

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CoastPlus	COOS BAY/COQUILLE	LOCKHART STREET	4C5	GEORGIA-PAC	210	29,536	94	314.21	2.234
CoastPlus	COOS BAY/COQUILLE	LOCKHART STREET	4C50	BUNKERHILL	7,497	1,708,038	1,812	942.63	4.137
CoastPlus	COOS BAY/COQUILLE	LOCKHART STREET	4C97	ENGLEWOOD	170	27,569	1,369	20.14	0.124
CoastPlus	COOS BAY/COQUILLE	MYRTLE POINT	4C36	NORTH (MYRTLE POINT)	1,191	524,182	337	1,555.44	3.534
CoastPlus	COOS BAY/COQUILLE	MYRTLE POINT	4C37	MAPLE STREET	4,947	2,676,108	2,067	1,294.68	2.393
CoastPlus	COOS BAY/COQUILLE	STATE STREET	4C112	WOODLAND	710	67,037	1,827	36.69	0.389
CoastPlus	COOS BAY/COQUILLE	STATE STREET	4C66	BAYSHORE	225	38,306	1,695	22.60	0.133
CoastPlus	COOS BAY/COQUILLE	STATE STREET	4C67	INDUSTRIAL	3,885	330,766	2,201	150.28	1.765
CoastPlus	COOS BAY/COQUILLE	STATE STREET	4C86	BANGOR	132	57,276	1,757	32.60	0.075
CoastPlus	HOOD RIVER	GORDON HOLLOW	4K1	SHERMAN 208	525	56,419	475	118.78	1.105
CoastPlus	HOOD RIVER	HOOD RIVER	5K37	RESIDENTIAL	2,605	213,803	2,016	106.05	1.292
CoastPlus	HOOD RIVER	HOOD RIVER	5K43	BELMONT	3,134	161,141	1,125	143.24	2.786
CoastPlus	HOOD RIVER	HOOD RIVER	5K44	NORTH (HOOD RIVER)	3,663	394,593	1,752	225.22	2.091
CoastPlus	HOOD RIVER	HOOD RIVER	5K70	EASTSIDE	1,156	98,422	996	98.82	1.161
CoastPlus	HOOD RIVER	HOOD RIVER	5K74	SOUTH (HOOD RIVER)	1,906	196,229	1,559	125.87	1.223
CoastPlus	HOOD RIVER	KENWOOD	5K50	OAKGROVE	1,430	232,670	691	336.71	2.069
CoastPlus	HOOD RIVER	MORO	8K6	MORO	104	7,313	103	71.00	1.010
CoastPlus	HOOD RIVER	WASCO	7K1	WASCO	7	478	266	1.80	0.026
CoastPlus	LINCOLN CITY	DEVILS LAKE	4A310	INLAND FEEDER	547	37,949	1,812	20.94	0.302
CoastPlus	LINCOLN CITY	DEVILS LAKE	4A312	OCEAN	961	166,565	2,910	57.24	0.330
CoastPlus	LINCOLN CITY	DEVILS LAKE	4A316	LAKE (DEVILS LAKE)	21,954	1,506,176	4,417	341.00	4.970
CoastPlus	LINCOLN CITY	DEVILS LAKE	4A338	SIUSLAW	1,599	167,938	648	259.16	2.468
CoastPlus	LINCOLN CITY	GLENEDEN	7A364	GLENEDEN	1,639	111,900	703	159.18	2.331
CoastPlus	LINCOLN CITY	GLENEDEN	7A366	SALISHAN	358	36,967	355	104.13	1.008
CoastPlus	LINCOLN CITY	NELSCOTT	7A390	NELSCOTT	135	13,903	349	39.84	0.387
CoastPlus	LINCOLN CITY	PGE GRAND RONDE	R114	BOYER	45	11,404	19	600.19	2.368
CoastPlus	LINCOLN CITY	WECOMA BEACH	7A354	WECOMA	460	44,952	712	63.13	0.646
CoastPlus	PORTLAND	ALDERWOOD 115/12.5	5P22	ALDERWOOD #2	232	24,670	202	122.13	1.149
CoastPlus	PORTLAND	ALDERWOOD 115/12.5	5P33	ALDERWOOD #4	4	678	181	3.75	0.022
CoastPlus	PORTLAND	ALDERWOOD 115/12.5	5P604	ALDERWOOD #3	5	2,104	174	12.09	0.029
CoastPlus	PORTLAND	COLUMBIA (OR)	5P266	#2	67	9,652	2,554	3.78	0.026
CoastPlus	PORTLAND	COLUMBIA (OR)	5P268	COLUMBIA #1	350	71,940	320	224.81	1.094
CoastPlus	PORTLAND	COLUMBIA (OR)	5P474	COLUMBIA #6	600	38,222	549	69.62	1.093
CoastPlus	PORTLAND	COLUMBIA (OR)	5P476	COLUMBIA #3	872	127,603	821	155.42	1.062
CoastPlus	PORTLAND	COLUMBIA (OR)	5P478	COLUMBIA #4	3,303	550,291	824	667.83	4.008
CoastPlus	PORTLAND	COLUMBIA (OR)	5P480	COLUMBIA #5	3	638	21	30.36	0.143
CoastPlus	PORTLAND	CULLY	5P288	CULLY #3-UG	913	162,205	798	203.26	1.144
CoastPlus	PORTLAND	CULLY	5P290	CULLY #2	564	289,327	2,393	120.91	0.236
CoastPlus	PORTLAND	CULLY	5P292	CULLY #1	298	239,960	2,924	82.07	0.102
CoastPlus	PORTLAND	HOLLADAY (OR)	5P145	HOLLADAY #1-UG	201	47,481	12	3,956.75	16.750
CoastPlus	PORTLAND	HOLLADAY (OR)	5P147	HOLLADAY #3-UG	10	6,141	670	9.17	0.015
CoastPlus	PORTLAND	HOLLADAY (OR)	5P156	HOLLADAY #4-UG	1	261	299	0.87	0.003
CoastPlus	PORTLAND	HOLLADAY (OR)	5P158	HOLLADAY #6	2	414	772	0.54	0.003

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CoastPlus	PORTLAND	HOLLYWOOD	5P203	HOLLYWOOD #3	180	47,442	1,346	35.25	0.134
CoastPlus	PORTLAND	HOLLYWOOD	5P204	HOLLYWOOD #2	22	2,117	1,935	1.09	0.011
CoastPlus	PORTLAND	HOLLYWOOD	5P205	HOLLYWOOD #1	161	150,888	2,099	71.89	0.077
CoastPlus	PORTLAND	HOLLYWOOD	5P208	HOLLYWOOD #5	559	227,206	1,723	131.87	0.324
CoastPlus	PORTLAND	HOLLYWOOD	5P209	HOLLYWOOD #4	2,519	760,496	2,348	323.89	1.073
CoastPlus	PORTLAND	KILLINGSWORTH	5P123	KILLINGSWORTH #3	674	91,794	332	276.49	2.030
CoastPlus	PORTLAND	KILLINGSWORTH	5P217	KILLINGSWORTH #5	430	26,567	420	63.25	1.024
CoastPlus	PORTLAND	KILLINGSWORTH	5P41	KILLINGSWORTH #4	6,297	911,486	2,732	333.63	2.305
CoastPlus	PORTLAND	KILLINGSWORTH	5P88	KILLINGSWORTH #1-UG	15	1,173	15	78.18	1.000
CoastPlus	PORTLAND	KILLINGSWORTH	5P89	KILLINGSWORTH #2	169	31,624	3,085	10.25	0.055
CoastPlus	PORTLAND	KNOTT	5P231	KNOTT #1	3,383	115,553	2,962	39.01	1.142
CoastPlus	PORTLAND	KNOTT	5P232	KNOTT #2	3	650	1,513	0.43	0.002
CoastPlus	PORTLAND	KNOTT	5P233	KNOTT #3	121	13,388	2,305	5.81	0.052
CoastPlus	PORTLAND	KNOTT	5P368	11022	2	464	171	2.71	0.012
CoastPlus	PORTLAND	KNOTT	5P372	11046	92	8,280	562	14.73	0.164
CoastPlus	PORTLAND	KNOTT	5P374	11020	27	4,007	969	4.13	0.028
CoastPlus	PORTLAND	LINCOLN (OR)	5P432	11D02-UG	475	139,094	474	293.45	1.002
CoastPlus	PORTLAND	MALLORY	5P162	MALLORY #1	2,006	228,583	1,975	115.74	1.016
CoastPlus	PORTLAND	MALLORY	5P164	MALLORY #2	17	2,384	3,051	0.78	0.006
CoastPlus	PORTLAND	PARKROSE	5P244	PARKROSE#4	6,576	2,000,269	3,077	650.07	2.137
CoastPlus	PORTLAND	PARKROSE	5P246	PARKROSE#3	15,671	3,575,589	3,053	1,171.17	5.133
CoastPlus	PORTLAND	PARKROSE	5P250	PARKROSE#2	2	1,609	664	2.42	0.003
CoastPlus	PORTLAND	PARKROSE	5P252	PARKROSE#1	166	45,402	1,779	25.52	0.093
CoastPlus	PORTLAND	RUSSELLVILLE	5P274	RUSSELLVILLE #3	2,118	526,442	3,006	175.13	0.705
CoastPlus	PORTLAND	RUSSELLVILLE	5P276	RUSSELLVILLE #4	2,748	882,838	2,313	381.69	1.188
CoastPlus	PORTLAND	RUSSELLVILLE	5P278	RUSSELLVILLE #1	4,701	1,743,355	3,210	543.10	1.464
CoastPlus	PORTLAND	RUSSELLVILLE	5P280	RUSSELLVILLE #2	1,731	297,244	1,272	233.68	1.361
CoastPlus	PORTLAND	VERNON	5P391	VERNON #1	5,701	1,056,528	1,805	585.33	3.158
CoastPlus	PORTLAND	VERNON	5P392	VERNON NO. 2	2,860	540,487	2,488	217.24	1.150
CoastPlus	PORTLAND	VERNON	5P393	VERNON #3	3,387	1,702,792	3,107	548.05	1.090
CoastPlus	PORTLAND	VERNON	5P394	VERNON # 4	9,043	2,181,445	3,182	685.56	2.842
CoastPlus	PORTLAND	VERNON	5P395	VERNON # 5	2,275	687,075	2,198	312.59	1.035
Northeast OR	ENTERPRISE	ENTERPRISE (OR)	4W8	CREIGHTON LN	3,463	293,851	1,421	206.79	2.437
Northeast OR	ENTERPRISE	ENTERPRISE (OR)	5W15	CITY	21	1,849	927	1.99	0.023
Northeast OR	ENTERPRISE	ENTERPRISE (OR)	5W26	RURAL (ENTERPRISE)	1,212	98,259	1,043	94.21	1.162
Northeast OR	ENTERPRISE	JOSEPH	5W21	PRAIRIE	1,224	87,285	836	104.41	1.464
Northeast OR	ENTERPRISE	PALLETTE	4W14	PALLETTE NORTH	178	56,450	172	328.20	1.035
Northeast OR	ENTERPRISE	WALLOWA	5W28	CITY	391	66,385	852	77.92	0.459
Northeast OR	HERMISTON	ARLINGTON	5K25	ARLINGTON	11	1,078	513	2.10	0.021
Northeast OR	HERMISTON	DALREED	4K16	WILLOW COVE	3	507	76	6.67	0.039
Northeast OR	HERMISTON	DALREED	4K36	SIMTAG	3	1,264	18	70.19	0.167
Northeast OR	HERMISTON	DALREED	4K46	BOEING	24	6,550	176	37.22	0.136
Northeast OR	HERMISTON	HERMISTON	5W602	RURAL (HERMISTON)	135	29,867	1,361	21.94	0.099

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Northeast OR	HERMISTON	HINKLE	5W82	MEADOWS	386	48,199	366	131.69	1.055
Northeast OR	HERMISTON	UMATILLA	5W658	UMATILLA	73	6,681	1,143	5.85	0.064
Northeast OR	HERMISTON	UMATILLA	5W660	MCNARY	35	13,652	900	15.17	0.039
Northeast OR	HERMISTON	UMATILLA	5W664	PORT FEEDER	-	-	54	-	-
Northeast OR	PENDLETON	ATHENA	5W703	CITY	235	50,841	839	60.60	0.280
Northeast OR	PENDLETON	ATHENA	5W705	HELIX	91	29,274	415	70.54	0.219
Northeast OR	PENDLETON	BUCKAROO	5W201	STATE HOSP.	1	70	375	0.19	0.003
Northeast OR	PENDLETON	BUCKAROO	5W202	REITH	4,024	784,323	1,526	513.97	2.637
Northeast OR	PENDLETON	BUCKAROO	5W203	MONTEE	549	73,434	1,646	44.61	0.334
Northeast OR	PENDLETON	PENDLETON	5W401	WEST HILLS	998	315,289	1,688	186.78	0.591
Northeast OR	PENDLETON	PENDLETON	5W402	HARRIS HTS	2,274	324,176	2,044	158.60	1.113
Northeast OR	PENDLETON	PENDLETON	5W403	MISSION	2,868	568,291	1,042	545.39	2.752
Northeast OR	PENDLETON	PENDLETON	7W451	BUSINESS	1	62	255	0.24	0.004
Northeast OR	PENDLETON	PENDLETON	7W452	NORTHWEST	82	5,841	515	11.34	0.159
Northeast OR	PENDLETON	PENDLETON	7W453	SOUTHWEST (PENDELTON)	5	654	343	1.91	0.015
Northeast OR	PENDLETON	PILOT ROCK	5W406	PILOT ROCK CITY	424	74,635	1,370	54.48	0.309
Northeast OR	PENDLETON	WESTON NEW (OR)	5W40	WESTON CANNERY	15	12,856	14	918.30	1.071
Northeast OR	PENDLETON	WESTON NEW (OR)	5W7	SCOTTS FEEDER	509	179,394	441	406.79	1.154
Northeast OR	WALLA WALLA	UMAPINE	5W105	UMAPINE FEEDER	1,127	210,147	965	217.77	1.168
Northeast OR	WALLA WALLA	UMAPINE	5W106	FERNDAL	2,107	232,843	1,329	175.20	1.585
South OR	GRANTS PASS	AGNESS AVE	5R172	SPALDING MILL	107	13,551	874	15.50	0.122
South OR	GRANTS PASS	AGNESS AVE	5R173	JONES CREEK	109	17,719	850	20.85	0.128
South OR	GRANTS PASS	AGNESS AVE	5R322	ANTEATER	595	80,106	957	83.71	0.622
South OR	GRANTS PASS	APPLEGATE	5R267	MURPHY	1,268	144,874	1,018	142.31	1.246
South OR	GRANTS PASS	APPLEGATE	5R278	HIGHWAY	4,385	735,070	1,595	460.86	2.749
South OR	GRANTS PASS	BEACON	5R104	SAVAGE ST	182	18,150	1,237	14.67	0.147
South OR	GRANTS PASS	BEACON	5R105	BEACON ST	84	10,055	829	12.13	0.101
South OR	GRANTS PASS	CAVE JUNCTION	5R52	FREE& EASY	4,938	1,938,651	2,302	842.16	2.145
South OR	GRANTS PASS	CAVE JUNCTION	5R53	ROUGH &READY	2,908	634,300	1,502	422.30	1.936
South OR	GRANTS PASS	CAVEMAN	5R295	QUAIL	67	15,883	1,114	14.26	0.060
South OR	GRANTS PASS	CAVEMAN	5R82	WASHINGTON	109	11,282	1,189	9.49	0.092
South OR	GRANTS PASS	CAVEMAN	5R98	MANZANITA	32	2,493	572	4.36	0.056
South OR	GRANTS PASS	CAVEMAN	5R99	CAVEMAN	169	34,554	1,180	29.28	0.143
South OR	GRANTS PASS	DOWELL	5R331	DOVE	165	18,562	1,426	13.02	0.116
South OR	GRANTS PASS	DOWELL	5R334	DUCK	118	38,367	2,406	15.95	0.049
South OR	GRANTS PASS	EASY VALLEY	5R123	G STREET	131	21,321	2,006	10.63	0.065
South OR	GRANTS PASS	EASY VALLEY	5R125	ROGUE	2,146	380,882	1,697	224.44	1.265
South OR	GRANTS PASS	EASY VALLEY	5R259	CHINOOK	2,566	410,717	1,289	318.63	1.991
South OR	GRANTS PASS	FIELDER CREEK	4R33	ELK FDR.	1,491	528,347	1,562	338.25	0.955
South OR	GRANTS PASS	FIELDER CREEK	4R34	BEAR FDR	610	259,235	859	301.79	0.710
South OR	GRANTS PASS	GLENDALE SUBSTATION	5R133	GLENDALE	4,866	1,433,496	1,855	772.77	2.623
South OR	GRANTS PASS	GLENDALE SUBSTATION	5R143	INDUSTRIAL	211	38,031	637	59.70	0.331
South OR	GRANTS PASS	JEROME PRAIRIE	5R62	WILD PRAIRIE	3,867	632,629	1,582	399.89	2.444

Oregon 2016 Circuit Metrics (including major events)

Oregon Regions	Op Area Name	Substation Name	Circuit Id	Circuit Name	Customers in Incident Sustained	Customer Minutes Lost	Circuit Customer Count	SAIDI	SAIFI
South OR	GRANTS PASS	JEROME PRAIRIE	5R63	WOOD RIVER	7,080	1,255,461	1,553	808.41	4.559
South OR	GRANTS PASS	MERLIN	5R232	MERLIN-HUGO	648	112,287	2,033	55.23	0.319
South OR	GRANTS PASS	MERLIN	5R234	PARADISE	590	161,954	1,170	138.42	0.504
South OR	GRANTS PASS	MERLIN	5R248	PLEASANT VALLEY-MERLIN FEEDER	3,085	553,598	1,757	315.08	1.756
South OR	GRANTS PASS	MERLIN	5R251	BADGER	71	14,699	903	16.28	0.079
South OR	GRANTS PASS	NEW O'BRIEN	5R106	O'BRIEN	1,220	383,964	447	858.98	2.729
South OR	GRANTS PASS	PARK STREET (OR)	5R114	FRUITDALE	4,550	525,289	2,075	253.15	2.193
South OR	GRANTS PASS	PARK STREET (OR)	5R115	ALLEN CREEK	175	31,720	975	32.53	0.179
South OR	GRANTS PASS	PARK STREET (OR)	5R121	NEW HOPE	43	6,506	1,821	3.57	0.024
South OR	GRANTS PASS	PARK STREET (OR)	5R164	EXPRESS	71	15,473	318	48.66	0.223
South OR	GRANTS PASS	PARK STREET (OR)	5R169	PORTOLA	1,823	118,534	1,501	78.97	1.215
South OR	GRANTS PASS	PROVOLT	5R67	NORTH-SOUTH	3,250	623,125	1,392	447.65	2.335
South OR	GRANTS PASS	ROGUE RIVER	4R7	EVANS VALLEY	224	16,158	226	71.49	0.991
South OR	GRANTS PASS	ROGUE RIVER	5R77	SAVAGE/WIMER	4,228	571,023	1,794	318.30	2.357
South OR	GRANTS PASS	ROGUE RIVER	5R78	ROCKY POINT (ROGUE RIVER)	1,165	96,430	1,041	92.63	1.119
South OR	GRANTS PASS	SELMA	5R65	DEER CREEK	7,525	1,658,787	1,175	1,411.73	6.404
South OR	KLAMATH FALLS	BEATTY	5L1	BEATTY	823	80,047	402	199.12	2.047
South OR	KLAMATH FALLS	BLY	5L14	TOWN (BLY)	876	92,740	434	213.69	2.018
South OR	KLAMATH FALLS	BONANZA (OR)	5L7	POE VALLEY	2,374	228,813	462	495.27	5.139
South OR	KLAMATH FALLS	BRYANT	5L2	GARY STREET	2,275	55,137	2,092	26.36	1.087
South OR	KLAMATH FALLS	BRYANT	5L3	WASHBURN	1,827	28,473	1,808	15.75	1.011
South OR	KLAMATH FALLS	BRYANT	5L4	SUMMERS LANE	1,952	64,144	1,938	33.10	1.007
South OR	KLAMATH FALLS	BRYANT	5L5	MOYINA HTS.	2,576	45,404	2,399	18.93	1.074
South OR	KLAMATH FALLS	CASEBEER SUB	4L16	LANGELL VLY	4,485	252,472	1,143	220.89	3.924
South OR	KLAMATH FALLS	CHILOQUIN	5L57	CRATER LAKE	3,613	783,009	1,038	754.34	3.481
South OR	KLAMATH FALLS	CHILOQUIN MARKET	5L37	WILLIAMSON	548	32,484	539	60.27	1.017
South OR	KLAMATH FALLS	DAIRY	5L42	SWAN LAKE	988	86,976	275	316.28	3.593
South OR	KLAMATH FALLS	DAIRY	5L43	DAIRY	1,523	86,369	463	186.54	3.289
South OR	KLAMATH FALLS	HAMAKER	5L55	KENO	349	62,146	1,666	37.30	0.209
South OR	KLAMATH FALLS	HAMAKER	5L56	MOUNTAIN	22	2,310	160	14.44	0.138
South OR	KLAMATH FALLS	HENLEY	5L58	HENLEY	1,188	91,806	234	392.33	5.077
South OR	KLAMATH FALLS	HENLEY	5L59	WEST	2,356	167,760	530	316.53	4.445
South OR	KLAMATH FALLS	HORNET	5L44	HOMEDALE	8,644	465,229	2,704	172.05	3.197
South OR	KLAMATH FALLS	HORNET	5L45	CRYSTAL SPR	4,513	247,237	1,489	166.04	3.031
South OR	KLAMATH FALLS	LAKEPORT	5L49	WOCUS	31	5,932	189	31.39	0.164
South OR	KLAMATH FALLS	LAKEPORT	5L54	SOUTH (LAKEPORT)	4,063	322,503	2,377	135.68	1.709
South OR	KLAMATH FALLS	LAKEPORT	5L61	JELDWEN	-	-	7	-	-
South OR	KLAMATH FALLS	MERRILL (OR)	5L26	LAKE (MERRILL)	5,213	344,698	1,094	315.08	4.765
South OR	KLAMATH FALLS	MERRILL (OR)	5L27	NORTH (MERRILL)	3,116	231,994	550	421.81	5.665
South OR	KLAMATH FALLS	MODOC	5L36	MODOC	150	20,395	838	24.34	0.179
South OR	KLAMATH FALLS	ROSS AVENUE	5L46	ELDORADO	2,104	87,152	1,380	63.15	1.525
South OR	KLAMATH FALLS	ROSS AVENUE	5L48	BROAD ST.	1,215	21,973	1,167	18.83	1.041
South OR	KLAMATH FALLS	RUNNING Y	4L50	ROCKY POINT FEEDER (RUNNING Y)	4,986	1,099,098	1,421	773.47	3.509

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South OR	KLAMATH FALLS	SHASTA WAY	7L25	SHASTA WAY	16	3,468	428	8.10	0.037
South OR	KLAMATH FALLS	SPRAGUE RIVER	5L8	SPRAGUE RIVER	1,041	164,860	492	335.08	2.116
South OR	KLAMATH FALLS	TEXUM	5L112	ANDERSON	1,206	20,223	1,186	17.05	1.017
South OR	KLAMATH FALLS	TEXUM	5L113	TOWER	709	10,440	283	36.89	2.505
South OR	KLAMATH FALLS	TEXUM	5L116	ALTAMONT	3,557	337,311	1,467	229.93	2.425
South OR	KLAMATH FALLS	TURKEY HILL	5L20	MALIN CITY	5,428	482,137	914	527.50	5.939
South OR	KLAMATH FALLS	TURKEY HILL	5L23	RURAL (TURKEY HILL)	1,643	85,566	321	266.56	5.118
South OR	KLAMATH FALLS	WEST SIDE HE PLANT	5L12	ORINDALE	10	669	763	0.88	0.013
South OR	KLAMATH FALLS	WEST SIDE HE PLANT	5L15	CALIFORNIA	10	1,914	1,349	1.42	0.007
South OR	KLAMATH FALLS	WEST SIDE HE PLANT	5L16	MAIN ST (WEST SIDE HE PLANT)	3	401	107	3.75	0.028
South OR	KLAMATH FALLS	WEST SIDE HE PLANT	5L17	PINE ST (WEST SIDE HE PLANT)	1	59	488	0.12	0.002
South OR	KLAMATH FALLS	WEST SIDE HE PLANT	5L18	RIVERSIDE (WEST SIDE HE PLANT)	8	350	573	0.61	0.014
South OR	KLAMATH FALLS	WEST SIDE HE PLANT	5L19	LAKESHORE	310	17,191	295	58.27	1.051
South OR	LAKEVIEW	MILE-HI	5L104	INDUSTRIAL	818	142,250	715	198.95	1.144
South OR	LAKEVIEW	MILE-HI	5L105	BUSINESS	5,153	790,661	1,783	443.44	2.890
South OR	MEDFORD	ASHLAND (MTN.AVE, PUD)	5R241	CITY	1	101	9	11.17	0.111
South OR	MEDFORD	ASHLAND (MTN.AVE, PUD)	5R245	VALLEY VIEW	2,009	218,207	959	227.54	2.095
South OR	MEDFORD	BEALL LANE	5R361	BULLDOG	2,203	284,819	1,686	168.93	1.307
South OR	MEDFORD	BEALL LANE	5R364	BOBCAT	53	14,217	2,149	6.62	0.025
South OR	MEDFORD	BELKNAP	5R1	KOGAP	2,154	161,586	995	162.40	2.165
South OR	MEDFORD	BELKNAP	5R2	RIVERSIDE (BELKNAP)	31	918	658	1.39	0.047
South OR	MEDFORD	BELKNAP	5R3	BARNETT	181	49,936	1,626	30.71	0.111
South OR	MEDFORD	BELKNAP	5R47	STEWART	360	63,006	2,074	30.38	0.174
South OR	MEDFORD	BROOKHURST	5R118	SPRINGBROOK	1	41	1,744	0.02	0.001
South OR	MEDFORD	BROOKHURST	5R135	ROBERTS (BROOKHURST)	150	46,904	1,619	28.97	0.093
South OR	MEDFORD	BROOKHURST	5R32	ROXY	189	39,797	1,689	23.56	0.112
South OR	MEDFORD	BROOKHURST	5R33	CRATER LAKE	286	62,750	1,635	38.38	0.175
South OR	MEDFORD	BROOKHURST	5R75	SUNRISE (BROOKHURST)	115	17,743	1,216	14.59	0.095
South OR	MEDFORD	CAMPBELL	5R216	VOORHIES	15	861	842	1.02	0.018
South OR	MEDFORD	CAMPBELL	5R218	PHOENIX	193	38,388	1,511	25.41	0.128
South OR	MEDFORD	CAMPBELL	5R227	FERN VALLEY	2,439	67,328	1,191	56.53	2.048
South OR	MEDFORD	CAMPBELL	5R312	COBRA	3,520	366,163	1,429	256.24	2.463
South OR	MEDFORD	DODGE BRIDGE	4R1	SALMON	5,439	885,661	1,588	557.72	3.425
South OR	MEDFORD	DODGE BRIDGE	4R35	MEADOWS ROAD	143	20,457	1,344	15.22	0.106
South OR	MEDFORD	FOOTHILLS	5R38	HOSPITAL	263	48,506	763	63.57	0.345
South OR	MEDFORD	FOOTHILLS	5R39	PIERCE ROAD	174	38,052	1,156	32.92	0.151
South OR	MEDFORD	FRALEY	5R87	TABLE ROCK	56	10,131	502	20.18	0.112
South OR	MEDFORD	FRALEY	5R88	DODGE BRIDGE	222	31,180	364	85.66	0.610
South OR	MEDFORD	GOLD HILL	5R103	GOLD HILL	4,351	392,845	1,973	199.11	2.205
South OR	MEDFORD	GRIFFIN CREEK	5R204	HULL RD	2,872	197,775	2,584	76.54	1.111
South OR	MEDFORD	GRIFFIN CREEK	5R206	GRIFFIN CREEK	359	62,037	1,698	36.54	0.211
South OR	MEDFORD	HUMBUG CREEK	5R287	HUMMINGBIRD	1,738	163,704	670	244.33	2.594
South OR	MEDFORD	MEDCO	5R280	BOISE CASCADE	1	212	1	212.15	1.000

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South OR	MEDFORD	MEDFORD	5R21	MELROSE	8,819	458,213	1,595	287.28	5.529
South OR	MEDFORD	MEDFORD	5R23	SPRING ST.	1,622	65,425	1,592	41.10	1.019
South OR	MEDFORD	MEDFORD	5R250	BIG Y	894	113,945	1,849	61.62	0.484
South OR	MEDFORD	MEDFORD	5R253	APPLE	23	1,640	1,105	1.48	0.021
South OR	MEDFORD	MEDFORD	5R257	PEAR	19	2,990	565	5.29	0.034
South OR	MEDFORD	MEDFORD	5R659	MCLEAN	2	96	665	0.14	0.003
South OR	MEDFORD	NEW JACKSONVILLE SUB-DIST	5R284	STAGE RD	689	198,429	2,039	97.32	0.338
South OR	MEDFORD	NEW JACKSONVILLE SUB-DIST	5R285	JACKSONVILLE HWY	2,158	520,745	2,109	246.92	1.023
South OR	MEDFORD	OAK KNOLL	5R55	SISKIYOU	5,102	883,314	1,465	602.94	3.483
South OR	MEDFORD	OAK KNOLL	5R56	HIGHWAY 99	163	35,688	109	327.41	1.495
South OR	MEDFORD	PROSPECT CENTRAL	5R40	NEW CASCADE	544	100,399	334	300.60	1.629
South OR	MEDFORD	RED BLANKET	7R5	PROSPECT	6	1,736	382	4.54	0.016
South OR	MEDFORD	ROXY ANN	5R350	St. Bernard	212	48,300	1,154	41.85	0.184
South OR	MEDFORD	ROXY ANN	5R354	RACCOON	336	90,427	1,407	64.27	0.239
South OR	MEDFORD	RUCH	5R68	APPLEGATE	3,826	467,754	899	520.30	4.256
South OR	MEDFORD	RUCH	5R69	RUCH	1,622	78,110	539	144.92	3.009
South OR	MEDFORD	SAGE ROAD (OR)	5R211	COLUMBUS	2,003	357,346	1,921	186.02	1.043
South OR	MEDFORD	SAGE ROAD (OR)	5R226	BOISE	935	13,054	903	14.46	1.035
South OR	MEDFORD	SAGE ROAD (OR)	5R27	MCANDREWS	173	27,298	116	235.33	1.491
South OR	MEDFORD	SAGE ROAD (OR)	5R28	ROSS	3,844	594,935	1,722	345.49	2.232
South OR	MEDFORD	SAGE ROAD (OR)	5R29	EDWARDS	822	171,448	725	236.48	1.134
South OR	MEDFORD	SCENIC	5R174	UPTON	2,001	421,953	1,979	213.22	1.011
South OR	MEDFORD	SCENIC	5R180	HEAD RD	1,274	108,032	1,149	94.02	1.109
South OR	MEDFORD	SCENIC	5R182	TAYLOR RD	242	55,376	1,533	36.12	0.158
South OR	MEDFORD	SCENIC	5R184	CHENEY	178	48,188	1,412	34.13	0.126
South OR	MEDFORD	STEVENS ROAD	4R13	HENRY MILLER	2,290	218,664	2,106	103.83	1.087
South OR	MEDFORD	STEVENS ROAD	4R17	Stingray	103	12,234	2,433	5.03	0.042
South OR	MEDFORD	STEVENS ROAD	4R41	ANTELOPE	794	177,981	1,110	160.34	0.715
South OR	MEDFORD	TAKELMA	4R9	LOST CK. (TAKELMA)	3,286	421,869	2,573	163.96	1.277
South OR	MEDFORD	TALENT	5R237	TALENT	3,049	243,922	2,436	100.13	1.252
South OR	MEDFORD	TALENT	5R238	ANDERSON CRK	1,278	88,871	1,661	53.50	0.769
South OR	MEDFORD	TALENT	5R239	HARTLEY ROAD	1,232	306,810	1,512	202.92	0.815
South OR	MEDFORD	TALENT	5R240	NORTH HWY	63	12,980	1,181	10.99	0.053
South OR	MEDFORD	TOLO	5R90	TBL ROCK LBR	29	3,967	157	25.27	0.185
South OR	MEDFORD	TOLO	5R91	SAMS VALLEY	1,673	345,336	635	543.84	2.635
South OR	MEDFORD	TOLO	5R92	KIRTLAND RD	204	47,648	198	240.65	1.030
South OR	MEDFORD	VILAS ROAD	5R110	MCLAUGHLIN	249	19,467	926	21.02	0.269
South OR	MEDFORD	VILAS ROAD	5R146	KING CENTER	29	5,150	1,380	3.73	0.021
South OR	MEDFORD	VILAS ROAD	5R305	WEBFOOT	11	1,397	783	1.78	0.014
South OR	MEDFORD	WHITE CITY	5R11	EAGLE POINT	2,562	230,916	1,409	163.89	1.818
South OR	MEDFORD	WHITE CITY	5R66	4 CORNERS	123	40,814	1,702	23.98	0.072
South OR	ROSEBURG/MYRTLECREEK	CANYONVILLE	5U46	CANYONVILLE	32	2,700	406	6.65	0.079
South OR	ROSEBURG/MYRTLECREEK	CANYONVILLE	5U52	BEALS CREEK FEEDER	646	158,346	882	179.53	0.732

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South OR	ROSEBURG/MYRTLECREEK	CARNES	5U44	RND PRARIE	912	84,736	414	204.68	2.203
South OR	ROSEBURG/MYRTLECREEK	CLEARWATER #1 SUB	6U17	BRIGGS	7	1,081	2	540.37	3.500
South OR	ROSEBURG/MYRTLECREEK	CLEARWATER #2 SUB	6U33	CLEARWATER	98	1,008	100	10.08	0.980
South OR	ROSEBURG/MYRTLECREEK	CLOAKE	4U37	RUSA	1	67	1	67.00	1.000
South OR	ROSEBURG/MYRTLECREEK	CLOAKE	4U38	HARVARD	3,626	293,049	2,895	101.23	1.253
South OR	ROSEBURG/MYRTLECREEK	CLOAKE	4U39	GOEDECK	1,860	206,482	1,244	165.98	1.495
South OR	ROSEBURG/MYRTLECREEK	GARDEN VALLEY	4U80	EDENBOWER	806	78,921	802	98.41	1.005
South OR	ROSEBURG/MYRTLECREEK	GARDEN VALLEY	4U81	VALLEY	1,719	191,944	1,330	144.32	1.292
South OR	ROSEBURG/MYRTLECREEK	GLIDE SUBSTATION	5U83	IDLEYLD	4,358	690,194	986	699.99	4.420
South OR	ROSEBURG/MYRTLECREEK	GLIDE SUBSTATION	5U84	LITTLE RIVER	3,939	553,620	1,344	411.92	2.931
South OR	ROSEBURG/MYRTLECREEK	GREEN SUBSTATION	5U32	SAFARI	2,540	255,023	2,052	124.28	1.238
South OR	ROSEBURG/MYRTLECREEK	GREEN SUBSTATION	5U33	SUNNYSLOPE	1,640	168,113	1,618	103.90	1.014
South OR	ROSEBURG/MYRTLECREEK	ILLAHEE FLATS	6U13	ILLAHEE FLATS SINGLE PHASE RECLOSER	74	3,479	25	139.17	2.960
South OR	ROSEBURG/MYRTLECREEK	LEMOLO # 1	5U920	DIAMOND LAKE	1,444	286,457	181	1,582.64	7.978
South OR	ROSEBURG/MYRTLECREEK	MYRTLLE CREEK	5U76	SUPER Y	5,065	844,171	1,529	552.11	3.313
South OR	ROSEBURG/MYRTLECREEK	MYRTLLE CREEK	5U77	BOOMER HILL	921	601,723	2,291	262.65	0.402
South OR	ROSEBURG/MYRTLECREEK	OAKLAND (OR)	5U11	UMPQUA	1,416	161,347	1,304	123.73	1.086
South OR	ROSEBURG/MYRTLECREEK	OAKLAND (OR)	5U12	STAGECOACH	561	52,918	549	96.39	1.022
South OR	ROSEBURG/MYRTLECREEK	RIDDLE	5U1	TRI CITY	2,026	214,556	986	217.60	2.055
South OR	ROSEBURG/MYRTLECREEK	RIDDLE	5U2	COW CREEK	1,061	349,278	1,544	226.22	0.687
South OR	ROSEBURG/MYRTLECREEK	RIDDLE	5U3	HANNA	24	20,291	274	74.05	0.088
South OR	ROSEBURG/MYRTLECREEK	RIDDLE-VENEER	5U50	RFP-LVL (EWP)	3	755	29	26.05	0.103
South OR	ROSEBURG/MYRTLECREEK	ROSEBURG	4U10	DIAMOND	5,212	851,630	2,454	347.04	2.124
South OR	ROSEBURG/MYRTLECREEK	ROSEBURG	4U22	DIXON	3,008	566,975	1,102	514.50	2.730
South OR	ROSEBURG/MYRTLECREEK	ROSEBURG	4U5	DOUGLAS	2,497	254,411	2,057	123.68	1.214
South OR	ROSEBURG/MYRTLECREEK	SLIDE CREEK	6U76	SLIDE CREEK CAMP	8	424	4	106.10	2.000
South OR	ROSEBURG/MYRTLECREEK	SOUTHGATE	4U30	SHADY POINT	3,500	278,525	1,561	178.43	2.242
South OR	ROSEBURG/MYRTLECREEK	SOUTHGATE	4U31	BOOTH	3,286	241,947	1,568	154.30	2.096
South OR	ROSEBURG/MYRTLECREEK	STEAMBOAT	6U18	STEAMBOAT	66	2,476	22	112.57	3.000
South OR	ROSEBURG/MYRTLECREEK	SUTHERLIN	5U35	NON-PAREIL	1,352	263,852	1,301	202.81	1.039
South OR	ROSEBURG/MYRTLECREEK	SUTHERLIN	5U36	DEADY	1,631	141,795	1,298	109.24	1.257
South OR	ROSEBURG/MYRTLECREEK	SUTHERLIN	5U56	Industrial	537	56,344	472	119.37	1.138
South OR	ROSEBURG/MYRTLECREEK	TILLER	5U89	JACKSON CRK	751	102,678	310	331.22	2.423
South OR	ROSEBURG/MYRTLECREEK	TOKETEE	8U12	TOKETEE CITY	57	24,307	19	1,279.30	3.000
South OR	ROSEBURG/MYRTLECREEK	WINCHESTER	4U18	WILBUR	3,427	323,312	1,631	198.23	2.101
South OR	ROSEBURG/MYRTLECREEK	WINCHESTER	5U15	NEWTON CREEK	3,964	371,694	1,712	217.11	2.315
South OR	ROSEBURG/MYRTLECREEK	WINCHESTER	5U17	FISHER	897	85,905	756	113.63	1.187
South OR	ROSEBURG/MYRTLECREEK	WINCHESTER	5U19	EVANS	933	115,092	757	152.04	1.232
South OR	ROSEBURG/MYRTLECREEK	WINSTON	5U48	BROCKWAY	1,762	160,136	853	187.73	2.066
South OR	ROSEBURG/MYRTLECREEK	WINSTON	5U49	DILLARD	2,744	471,460	1,444	326.50	1.900
Willamette Valley	ALBANY	HAZELWOOD	4M335	WEST HIGH	1,496	372,790	1,463	254.81	1.023
Willamette Valley	ALBANY	HAZELWOOD	4M336	RIVERVIEW (HAZELWOOD)	1,551	540,656	1,230	439.56	1.261
Willamette Valley	ALBANY	JEFFERSON (OR)	4M117	MARION	3,819	442,852	707	626.38	5.402

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Willamette Valley	ALBANY	JEFFERSON (OR)	4M125	MINT	6,064	1,216,551	2,428	501.05	2.498
Willamette Valley	ALBANY	MURDER CREEK	4M243	SCRAVEL HILL	13,179	1,921,524	3,465	554.55	3.803
Willamette Valley	ALBANY	MURDER CREEK	4M245	RURAL NW	4,840	491,891	1,838	267.62	2.633
Willamette Valley	ALBANY	MURDER CREEK	4M249	DURA-PACIFIC	14	1,380	7	197.08	2.000
Willamette Valley	ALBANY	MURDER CREEK	4M250	INDUSTRIAL	3,695	303,267	1,206	251.47	3.064
Willamette Valley	ALBANY	MURDER CREEK	5M131	WAH CHANG SOUTH	2	199	1	198.83	2.000
Willamette Valley	ALBANY	MURDER CREEK	5M132	WAH CHANG WEST	1	188	0	#DIV/0	#DIV/0
Willamette Valley	ALBANY	OREMET	4M295	OAK CREEK	102	21,760	101	215.45	1.010
Willamette Valley	ALBANY	OREMET	4M296	ROGERSDALE	2,701	324,713	2,149	151.10	1.257
Willamette Valley	ALBANY	QUEEN AVE	4M217	SANTIAM	3,812	303,746	1,953	155.53	1.952
Willamette Valley	ALBANY	QUEEN AVE	4M258	HILL STREET	314	78,389	2,161	36.27	0.145
Willamette Valley	ALBANY	QUEEN AVE	4M261	WAVERLY	989	179,997	3,363	53.52	0.294
Willamette Valley	ALBANY	QUEEN AVE	4M262	GEARY STREET	470	68,067	2,725	24.98	0.172
Willamette Valley	ALBANY	VINE STREET	4M15	FERRY	46	9,064	2,171	4.18	0.021
Willamette Valley	ALBANY	VINE STREET	4M16	WATER STREET	1,641	261,201	3,964	65.89	0.414
Willamette Valley	ALBANY	WESTERN KRAFT	5M24	WEST MAIN	1	235	1	235.07	1.000
Willamette Valley	CORVALLIS	BUCHANAN	4M130	HEWLETT PACKARD	268	17,388	2,625	6.62	0.102
Willamette Valley	CORVALLIS	BUCHANAN	4M133	PEORIA	8,945	801,688	2,440	328.56	3.666
Willamette Valley	CORVALLIS	BUCHANAN	4M134	N. NINTH ST.	610	143,822	2,569	55.98	0.237
Willamette Valley	CORVALLIS	CIRCLE BLVD	4M394	H. P. #1	1	109	1	109.13	1.000
Willamette Valley	CORVALLIS	CIRCLE BLVD	4M429	H. P. #5	1	194	1	193.97	1.000
Willamette Valley	CORVALLIS	DIXON	7M26	FOURTH ST.	-	-	237	-	-
Willamette Valley	CORVALLIS	DIXON	7M29	SECOND ST.	-	-	273	-	-
Willamette Valley	CORVALLIS	GRANT	4M265	HIGH SCHOOL	3,290	703,534	2,480	283.68	1.327
Willamette Valley	CORVALLIS	GRANT	4M266	CHINTIMINI	3,627	828,130	2,545	325.40	1.425
Willamette Valley	CORVALLIS	GRANT	4M268	KINGS ROAD	3,426	695,265	2,524	275.46	1.357
Willamette Valley	CORVALLIS	GRANT	4M269	29TH STREET	5,884	1,201,911	3,292	365.10	1.787
Willamette Valley	CORVALLIS	HILLVIEW	4M180	WEST HILLS	223	18,805	1,839	10.23	0.121
Willamette Valley	CORVALLIS	HILLVIEW	4M181	PHILOMATH	18	2,164	634	3.41	0.028
Willamette Valley	CORVALLIS	HILLVIEW	4M182	SUNSET	445	67,657	1,523	44.42	0.292
Willamette Valley	CORVALLIS	HILLVIEW	4M185	PLYMOUTH	4,952	399,273	2,184	182.82	2.267
Willamette Valley	CORVALLIS	MARYS RIVER	4M151	GREENBERRY	1,158	131,428	3,551	37.01	0.326
Willamette Valley	CORVALLIS	MARYS RIVER	4M152	AVERY	6	568	190	2.99	0.032
Willamette Valley	COTTAGE GROVE/J.CITY	COBURG	4M220	DETERING	1,793	412,550	526	784.32	3.409
Willamette Valley	COTTAGE GROVE/J.CITY	GOSHEN (OR)	4M360	GOSHEN FDR	1,860	218,842	1,588	137.81	1.171
Willamette Valley	COTTAGE GROVE/J.CITY	HARRISBURG SUB	4M400	TERRITORIAL	5,838	1,617,902	1,809	894.36	3.227
Willamette Valley	COTTAGE GROVE/J.CITY	JUNCTION CITY	4M102	6TH STREET	1,326	175,050	1,137	153.96	1.166
Willamette Valley	COTTAGE GROVE/J.CITY	JUNCTION CITY	4M99	PRAIRIE ROAD	31	1,680	929	1.81	0.033
Willamette Valley	COTTAGE GROVE/J.CITY	LANCASTER	4M209	MONROE	1,408	268,037	1,079	248.41	1.305
Willamette Valley	COTTAGE GROVE/J.CITY	VILLAGE GREEN	4M84	NORTH SIDE	8,122	445,961	2,339	190.66	3.472
Willamette Valley	COTTAGE GROVE/J.CITY	VILLAGE GREEN	4M86	MADISON	1,921	194,015	1,576	123.11	1.219
Willamette Valley	DALLAS/INDEPENDENCE	DALLAS	4M100	RURAL (DALLAS)	5,622	249,799	4,441	56.25	1.266
Willamette Valley	DALLAS/INDEPENDENCE	DALLAS	4M201	INDUSTRIAL	27	200	27	7.42	1.000

Oregon 2016 Circuit Metrics (including major events)

Oregon Regions	Op Area Name	Substation Name	Circuit Id	Circuit Name	Customers in Incident Sustained	Customer Minutes Lost	Circuit Customer Count	SAIDI	SAIFI
Willamette Valley	DALLAS/INDEPENDENCE	DALLAS	4M202	ELLENDALE	1,013	244,703	2,832	86.41	0.358
Willamette Valley	DALLAS/INDEPENDENCE	DALLAS	4M238	DALLAS	5,748	856,206	2,242	381.89	2.564
Willamette Valley	DALLAS/INDEPENDENCE	INDEPENDENCE	4M22	RICKREAL	10,466	831,193	3,264	254.65	3.206
Willamette Valley	DALLAS/INDEPENDENCE	INDEPENDENCE	4M25	BUENA VISTA	6,776	838,971	1,910	439.25	3.548
Willamette Valley	LEBANON	BROWNSVILLE	4M17	CALAPOOIA	8,408	1,224,761	2,747	445.85	3.061
Willamette Valley	LEBANON	CROWFOOT	4M204	CROWFOOT	9,848	843,639	1,476	571.57	6.672
Willamette Valley	LEBANON	CROWFOOT	4M206	US PLYWOOD (LEBANON)	7,831	545,628	1,769	308.44	4.427
Willamette Valley	LEBANON	LEBANON	4M61	TANGENT	8,214	374,885	2,414	155.30	3.403
Willamette Valley	LEBANON	LEBANON	4M62	RALSTON	6,065	187,612	1,975	94.99	3.071
Willamette Valley	LEBANON	LEBANON	4M63	TENNESSEE	8,622	411,409	1,768	232.70	4.877
Willamette Valley	LEBANON	LEBANON	4M79	CROWN Z	3,999	168,237	1,110	151.57	3.603
Willamette Valley	LEBANON	SWEET HOME	4M37	HOLLEY	11,598	2,070,713	1,986	1,042.66	5.840
Willamette Valley	LEBANON	SWEET HOME	4M38	NARROWS	3,401	336,687	952	353.66	3.572
Willamette Valley	LEBANON	SWEET HOME	4M93	AMES CREEK	5,609	910,192	1,634	557.03	3.433
Willamette Valley	LEBANON	SWEET HOME	4M94	FOSTER	8,336	677,226	2,257	300.06	3.693
Willamette Valley	STAYTON	NEW LYONS	4M120	MILL CITY	1,066	155,428	1,867	83.25	0.571
Willamette Valley	STAYTON	NEW LYONS	4M70	MEHAMA	3,878	744,056	907	820.35	4.276
Willamette Valley	STAYTON	NEW STAYTON	4M19	AUMSVILLE	13,540	1,068,380	3,062	348.92	4.422
Willamette Valley	STAYTON	NEW STAYTON	4M353	WEST STAYTON	15,566	1,423,955	3,407	417.95	4.569
Willamette Valley	STAYTON	NEW STAYTON	4M370	CASCADE	6,494	847,327	1,561	542.81	4.160
Willamette Valley	STAYTON	NEW STAYTON	4M50	3RD STREET	2,726	185,627	906	204.89	3.009
Willamette Valley	STAYTON	SCIO	5M126	THOMAS	11,233	1,362,549	1,538	885.92	7.304

Oregon 2016 Circuit Metrics (Zero Outage Circuits)

Reliability Region	Op Area Name	Substation Name	Circuit Id	Circuit Name	Kv	Customer Count	SAIDI	SAIFI
Central OR	MADRAS	PRINEVILLE	5D50	PINE CONE	12.5	78	0	0
CoastPlus	COOS BAY/COQUILLE	JORDAN POINT	5C11	WEYCO#2	12.5	1	0	0
CoastPlus	COOS BAY/COQUILLE	SOUTH DUNES	5C9	DOUGLAS CHIP	12.5	2	0	0
CoastPlus	PORTLAND	ALBINA	5P111	ALBINA 11C01-UG	11.7	684	0	0
CoastPlus	PORTLAND	ALBINA	5P194	11C24-UG	11.7	27	0	0
CoastPlus	PORTLAND	ALBINA	5P196	11C16-UG	11.7	445	0	0
CoastPlus	PORTLAND	ALBINA	5P200	11C20-UG	11.7	457	0	0
CoastPlus	PORTLAND	ALBINA	5P91	11C11-UG	11.7	322	0	0
CoastPlus	PORTLAND	ALBINA	5P92	11C12-UG	11.7	45	0	0
CoastPlus	PORTLAND	BLOSS	5P172	FURNACE	12.5	1	0	0
CoastPlus	PORTLAND	HOLLADAY (OR)	5P146	HOLLADAY #2-UG	11.7	22	0	0
CoastPlus	PORTLAND	HOLLADAY (OR)	5P157	HOLLADAY #5-UG	11.7	330	0	0
CoastPlus	PORTLAND	LINCOLN (OR)	5P418	11D17	11.7	130	0	0
CoastPlus	PORTLAND	LINCOLN (OR)	5P420	11D14	11.7	21	0	0
CoastPlus	PORTLAND	LINCOLN (OR)	5P422	11D06-UG	11.7	543	0	0
CoastPlus	PORTLAND	LINCOLN (OR)	5P424	11D03-UG	11.7	1	0	0
CoastPlus	PORTLAND	LINCOLN (OR)	5P426	11D04-UG	11.7	321	0	0
CoastPlus	PORTLAND	LINCOLN (OR)	5P430	11D05-UG	11.7	366	0	0
CoastPlus	PORTLAND	LINCOLN (OR)	5P434	11D12-UG	11.7	15	0	0
CoastPlus	PORTLAND	LINCOLN (OR)	5P436	11G18-UG	11.7	103	0	0
CoastPlus	PORTLAND	LINCOLN (OR)	5P438	11D08-UG	11.7	17	0	0
CoastPlus	PORTLAND	LINCOLN (OR)	5P456	11D09-UG	11.7	184	0	0
CoastPlus	PORTLAND	LINCOLN (OR)	5P458	11D07-UG	11.7	216	0	0
CoastPlus	PORTLAND	LINCOLN (OR)	5P460	11D01-UG	11.7	1	0	0
CoastPlus	PORTLAND	LINCOLN (OR)	5P462	11G13-UG	11.7	32	0	0
CoastPlus	PORTLAND	LINCOLN (OR)	5P464	11G16-UG	11.6	172	0	0
Northeast OR	ENTERPRISE	MINAM	5W18	MINAM	12.5	12	0	0
Northeast OR	PENDLETON	PENDLETON	7W454	EAST END	4.1	248	0	0
South OR	KLAMATH FALLS	WEST SIDE HE PLANT	8L10	CITY WTR PMP	2.4	1	0	0
South OR	MEDFORD	SAGE ROAD (OR)	5R209	TIMBER PROD	12.5	1	0	0
South OR	MEDFORD	WHITE CITY	5R12	INDUSTRIAL	12.5	30	0	0
South OR	MEDFORD	WHITE CITY	5R13	FIR-PLY	12.5	24	0	0
South OR	MEDFORD	WHITE CITY	5R14	AGATE	12.5	104	0	0
South OR	MEDFORD	WHITE CITY	5R19	3M	12.5	104	0	0
South OR	MEDFORD	WHITE CITY	5R76	AVE C	12.5	76	0	0
South OR	ROSEBURG/MYRTLECREEK	RIDDLE-VENEER	5U23	FORD MILL	12.5	1	0	0
Willamette Valley	ALBANY	OREMET	5M19	OREMET	12.5	3	0	0
Willamette Valley	CORVALLIS	MARYS RIVER	4M153	GALLAGHER	20.8	159	0	0

Vegetation Management

OREGON
Tree Program Reporting
Report as of December 31, 2016
Distribution Four Year Cycle 1/1/2016-12/31/2019

	Total	Current Year Reporting					Total Cycle Reporting			
	Total Line Miles	1/1/2016-12/31/2016	1/1/2016-12/31/2016	1/1/2016-12/31/2016	1/1/2016-12/31/2016	1/1/2016-12/31/2016	1/1/2016 through end of cycle	1/1/2016 through end of cycle	1/1/2016 through end of cycle	1/1/2016 through end of cycle
		Miles Planned	Actual Miles	Ahead/Behind	% Ahead/Behind	Miles Planned	Miles Actual	Ahead/Behind	% Ahead/Behind	
	column a	column b	column c	column d	column e	column f	column g	column h	column i	
Oregon	14,004	3,610	3,743	131	103.7%	3,610	3,743	131	103.7%	
ALBANY	536	134	317	183	236.6%	134	317	183	236.6%	
CORVALLIS	301	75	0	-75	0.0%	75	0	-75	0.0%	
COTTAGE GROVE	52	13	0	-13	0.0%	13	0	-13	0.0%	
DALLAS	411	103	0	-103	0.0%	103	0	-103	0.0%	
JUNCTION CITY	156	39	0	-39	0.0%	39	0	-39	0.0%	
LEBANON	700	175	0	-175	0.0%	175	0	-175	0.0%	
LINCOLN CITY	165	41	0	-41	0.0%	41	0	-41	0.0%	
STAYTON	444	111	383	272	345.0%	111	383	272	345.0%	
COOS BAY	649	162	190	28	117.3%	162	190	28	117.1%	
GRANTS PASS	1,624	406	413	7	101.7%	406	413	7	101.7%	
ROSEBURG	1,201	300	317	17	105.7%	300	317	17	105.6%	
KLAMATH FALLS	1,870	468	509	41	108.8%	468	509	42	108.9%	
LAKEVIEW	60	15	0	-15	0.0%	15	0	-15	0.0%	
MEDFORD	1,918	480	446	-34	92.9%	480	446	-34	93.0%	
CENTRAL OREGON	1,344	336	456	120	135.7%	336	456	120	135.7%	
CLATSOP	375	94	129	35	137.2%	94	129	35	137.6%	
ENTERPRISE	434	109	77	-32	70.6%	109	77	-32	71.0%	
HERMISTON	258	65	78	13	120.0%	65	78	14	120.9%	
HOOD RIVER	308	77	83	6	107.8%	77	83	6	107.8%	
PENDLETON	631	158	159	1	100.6%	158	159	1	100.8%	
PORTLAND	436	218	103	-115	47.2%	218	103	-115	47.2%	
WALLA WALLA	131	33	83	50	251.5%	33	83	50	251.5%	

Distribution cycle \$/tree:* \$60.04
 Distribution cycle \$/mile: \$4,131
 Distribution cycle removal %* 34%

Transmission

Total Line Miles	Line Miles Scheduled	Line Miles Worked	Miles Ahead(behind) Schedule	Miles on Schedule	% of miles on/behind Schedule
2,948	13	55	42	2,990	101%

Notes:

- Column a: Total overhead pole miles by district
- Column b: Total overhead pole miles planned for the period January 1, 2016 through December 31, 2016
- Column c: Actual overhead pole miles worked during the period January 1 2016 through December 31, 2016
- Column d: Miles ahead or behind for the period January 1, 2016 through December 31, 2016 (column c-column b)
- Column e: Percent of actual compared to planned for the period January 1, 2016 through December 31 ((column c÷b)×100)
- Column f: Total overhead pole miles planned for the period January 1, 2016 through end of cycle
- Column g: Actual overhead pole miles worked during the period January 1 2016 through end of cycle
- Column h: Miles ahead or behind for the period January 1, 2016 through end of cycle (column g-column f)
- Column i: Percent of actual compared to planned for the period January 1, 2016 through end of cycle ((column g÷f)×100).

OREGON
Tree Program Reporting (C)

	2016 est. ^{1,2}	2017 est. ^{1,2}	2018 est. ^{1,2}	2019 est. ^{1,2}	2020 est. ^{1,2}	2021 est. ^{1,2}
Distribution Tree Budget	17,800,000	17,897,000	18,210,000	18,529,000	18,853,000	19,183,000
Transmission Tree Budget	3,225,795	3,225,795	3,225,795	3,225,795	3,225,795	3,225,795
Total Tree Budget	\$ 21,025,795	\$ 21,122,795	\$ 21,435,795	\$ 21,754,795	\$ 22,078,795	\$ 22,408,795

	CY2010	2011	2012	2013	2014	2015
Distribution Tree Actuals	14,064,912	13,853,185	16,995,719	18,251,251	23,191,320	21,923,393
Transmission Tree Actuals	3,125,438	3,762,895	3,734,977	4,363,149	2,370,822	2,355,070
Total Tree Actuals	\$ 17,190,350	\$ 17,616,080	\$ 20,730,696	\$ 22,614,400	\$ 25,562,142	\$ 24,278,463

	Distribution			Transmission		
	Actuals	Budget	Variance	Actuals	Budget	Variance
Calendar year 2016						
Jan	\$ 1,327,316	1,354,787	\$ (27,471)	\$ 126,966	244,184	\$ (117,218)
Feb	\$ 1,676,175	1,497,396	\$ 178,779	\$ 137,910	269,887	\$ (131,977)
Mar	\$ 1,606,532	1,640,005	\$ (33,473)	\$ 260,786	295,591	\$ (34,805)
Apr	\$ 1,583,420	1,497,396	\$ 86,024	\$ 289,768	269,887	\$ 19,881
May	\$ 1,468,421	1,497,396	\$ (28,975)	\$ 453,226	269,887	\$ 183,339
Jun	\$ 1,512,922	1,568,701	\$ (55,779)	\$ 457,886	282,739	\$ 175,147
Jul	\$ 1,429,149	1,354,787	\$ 74,362	\$ 231,335	244,184	\$ (12,849)
Aug	\$ 1,506,311	1,640,005	\$ (133,694)	\$ 497,279	295,591	\$ 201,688
Sep	\$ 1,506,172	1,497,396	\$ 8,776	\$ 386,437	269,887	\$ 116,550
Oct	\$ 1,378,099	1,497,396	\$ (119,297)	\$ 302,232	269,887	\$ 32,345
Nov	\$ 1,082,294	1,354,787	\$ (272,493)	\$ 283,639	244,184	\$ 39,455
Dec	\$ 1,412,526	1,497,396	\$ (84,870)	\$ 318,322	269,887	\$ 48,435
Total	\$ 17,489,336	\$ 17,897,448	\$ (408,112)	\$ 3,745,786	\$ 3,225,795	\$ 519,991

Average # Tree Crews on Property (YTD)

78

¹ Amounts acquired from Vegetation Management ten year plan. 2013-2015 include \$3M additional funding .

² Tree removals reduce costs in future years, while herbicide costs are assumed to increase in same time period.

INSPECTION AND MAINTENANCE PROGRAMS

Inspection and Repairs

In Calendar Year 2016 (January 01 through December 31, 2016), among distribution and transmission facilities (both overhead and underground), 1,717 'A' Priority conditions were recorded and 1,715 were corrected.

For 'B' priority conditions, 16,551 were identified and 21,320 were corrected in CY2016.

For 'C' priority conditions, 549 were corrected in CY2016. Reporting of 'C' priority conditions was terminated early 2014, however some are still occasionally entered into the inspection system inadvertently. 45 were identified in 2016 and these will be reviewed and reprioritized as required.

Pole and Overhead Facilities

- PacifiCorp is currently on a 10-year cycle for the Detail inspection and treatment of overhead Distribution and Transmission facilities. In CY2016, 37,737 Distribution, 3,316 Local Transmission and 6,429 Main Grid Transmission Detail inspections were performed. Detail inspections were performed on 10.4% of the total 457,613 overhead facilities. Additionally 539 Distribution poles were given a second Detail inspection in CY2016 due to failure of the internal audit process of the initial inspection results or as a follow up aerial inspection of woodpecker damage.
- 37,508 Distribution poles, 3,273 Local Transmission poles and 1,075 Main Grid Transmission poles were Tested and Treated. Test and Treatment was performed on 9.1% of the total 457,613 overhead facilities.
- PacifiCorp replaced or reinforced 739 poles that were rejected through the Test and Treat inspection program. The CY2016 rejection rate was 2.21% for Distribution, 2.69% for Local Transmission and 4.37% for Main Grid Transmission. The overall reject rate for CY2016 was 2.30%.

A. Visual Inspections

The visual inspection of the Distribution and Transmission system is on a 2-year cycle. In CY2016, 202,579 Distribution, 17,251 Local Transmission and 17,871 Main Grid inspections were performed for a total of 237,701 inspections which equates to 51.9% of the total overhead facilities. Random re-inspections were performed by operations managers to ensure uniform results and adherence.

B. Underground Facilities

The inspection of underground facilities is on a 10-year cycle. It includes a detail inspection of primary underground facilities and an infrared inspection of accessible terminals and splices. During CY2016, 10,960 inspections were performed; 9.3% of 118,154 underground facilities.

C. Marina Inspection Program

The inspection of marinas is annual. In CY2016, 100% of marinas were inspected.

D. Line Equipment Maintenance

Line Equipment – Overhead Reclosers, Sectionalizers, Regulators, Switches

Line equipment is inspected during the 2-year cycle Visual Survey; therefore, inspection requirements have been met for Reclosers, Sectionalizers and Regulators and Switches.

SUBSTATION MAINTENANCE PROGRAMS

A. Performance Measure X3 Substation Maintenance Programs

1. Description - Substations are critical utility network facilities requiring more frequent inspections and testing of all its equipment. The Company will provide, at the annual meetings, information of its Substation maintenance programs.
2. Program Interval - The program interval will be dictated by the substation equipment operational requirements.
3. Program Expenditures - PacifiCorp is to submit an annual actual versus budgeted expenditures for all substations equipment maintenance programs.

B. Substation Security Inspections

Substation security inspections are performed on cycles based on policy. This includes a detailed inspection of the fence, gates, warning signs, grounding systems, etc. The inspector is trained to look for security violations and public hazards. Copies of the inspection results are filed at the substation and field office. Field personnel are instructed to immediately correct all perimeter security violations.

Reference PacifiCorp Maintenance Policy 034 - Substation Inspection Policy and form 3274F-Substation Inspection.

PacifiCorp operates 280 substation and communication facilities in Oregon. PacifiCorp performed 99% of the planned substation security inspections in CY2016.

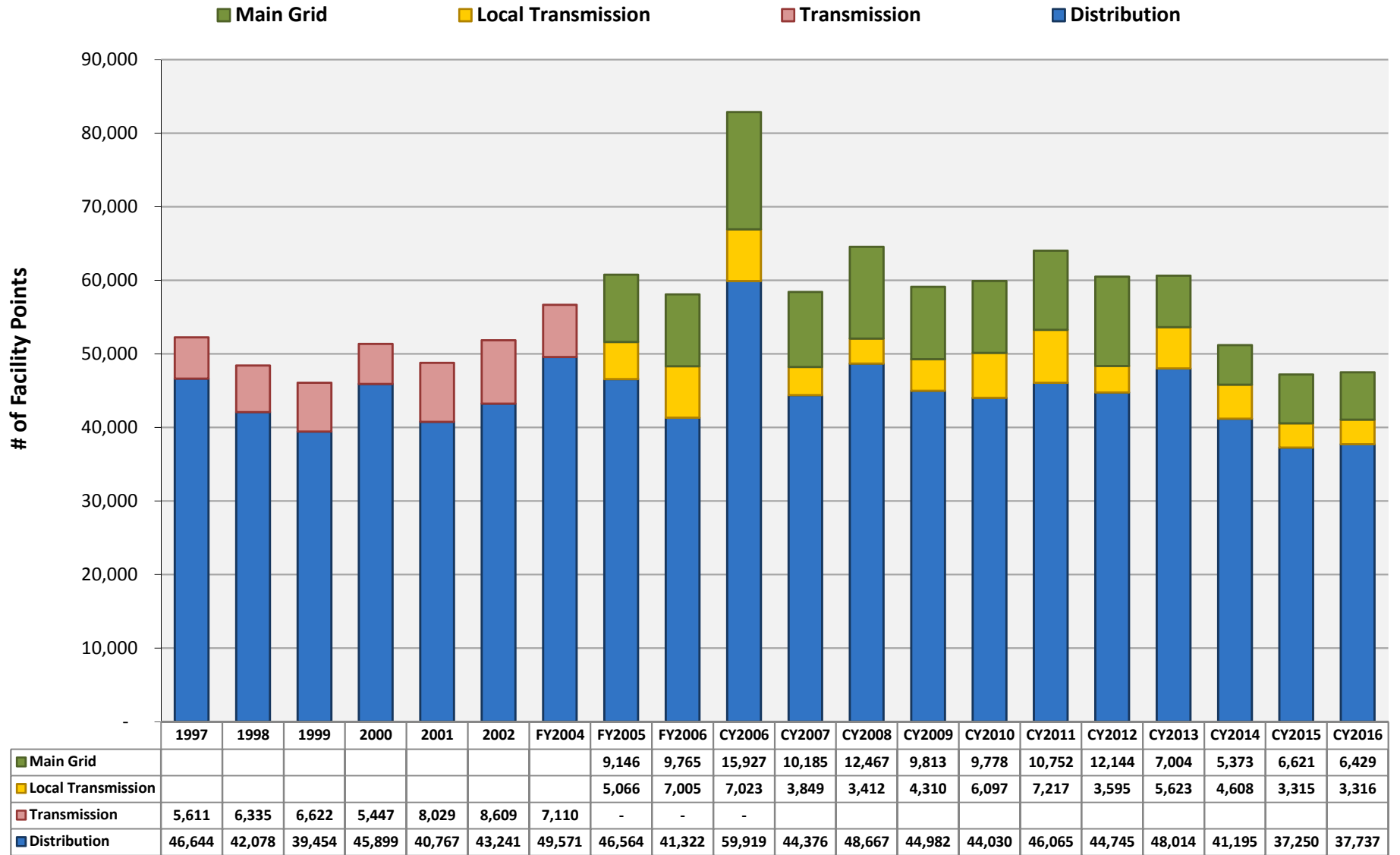
C. Substation Equipment Inspections

Batteries, Capacitor Banks, Circuit Breakers, Switches, LTC's, Regulators, Transformers, and protective relays are inspected on cycles based on policy. Inspections check pressure, temperature, voltage, LTC and regulator operation, cooling equipment, insulators, relay targets, etc.

Reference PacifiCorp Maintenance Policy 034 - Substation Inspection Policy and form 3274F-Substation Inspection.

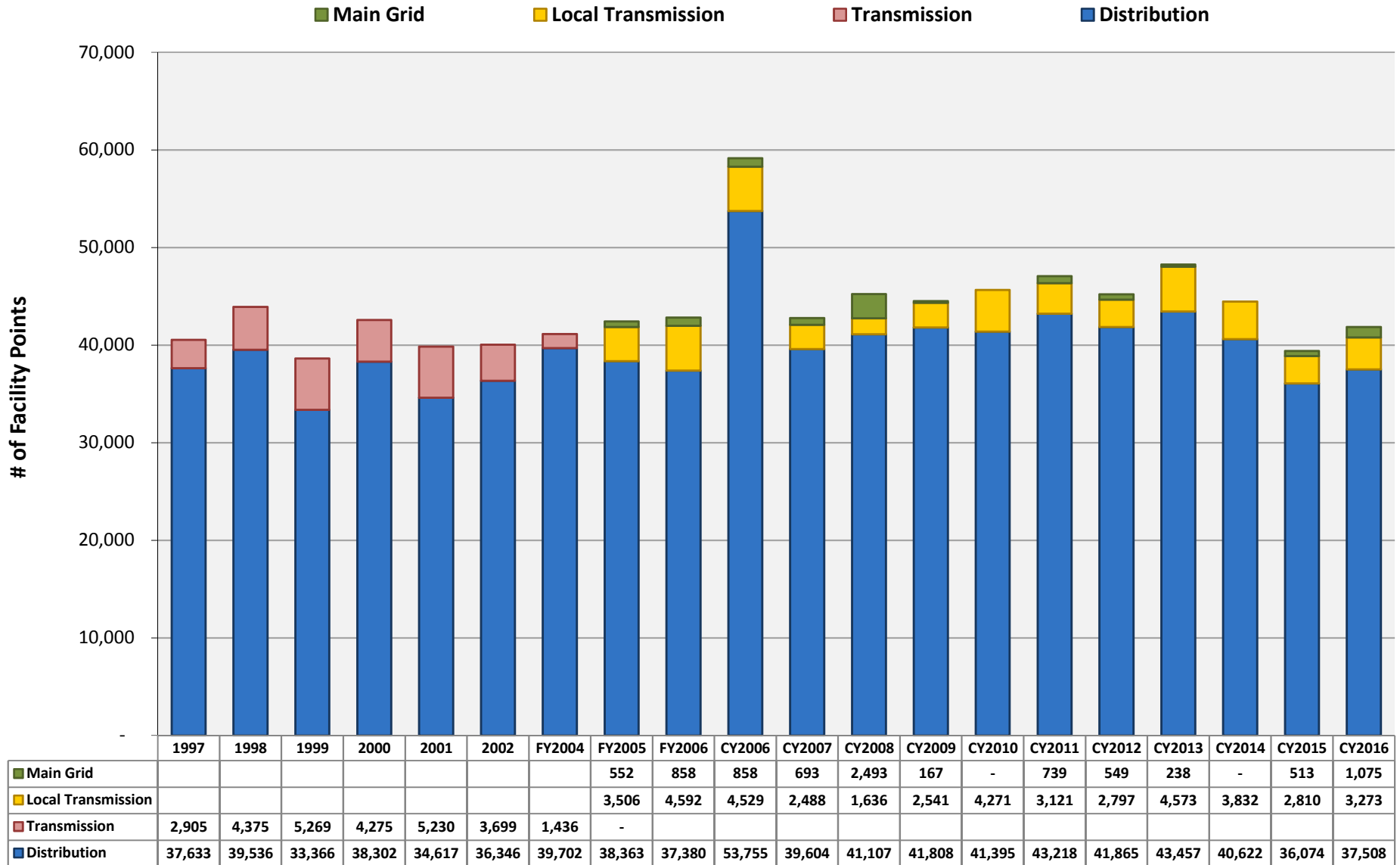
PacifiCorp performed 99% of the planned substation equipment inspections in Oregon in CY2016.

CY2016 Overhead Detail Inspection History



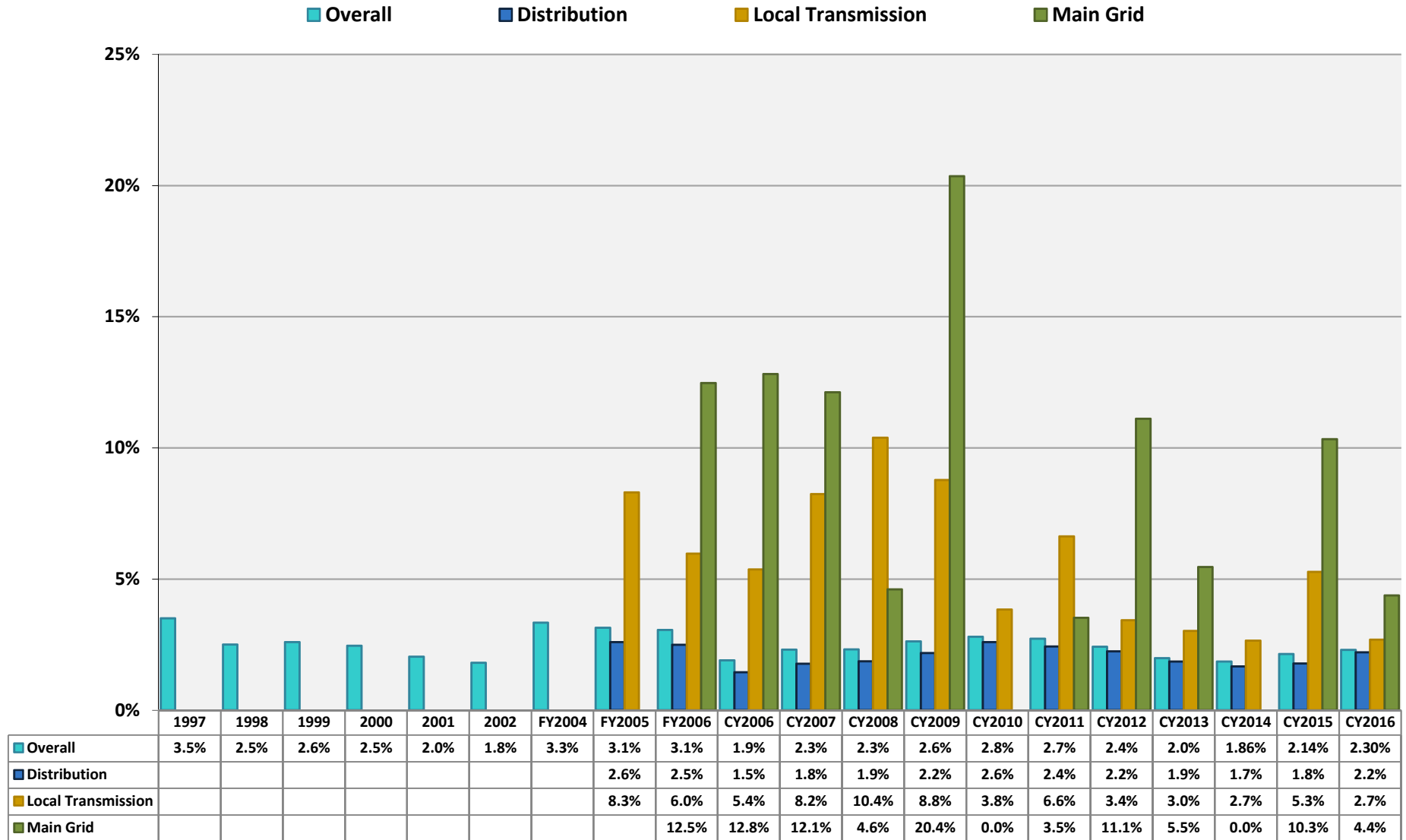
(Transmission breakout not available for years prior FY2005)

CY2016 Pole Test and Treat History



(Transmission breakout not available for years prior FY2005)

CY2016 Pole Reject Rate History



(Breakout not available for years prior FY2005; in FY2005, Distribution and blended Transmission breakout available; effective FY2006, full breakout views available. Main Grid rates combine intrusive inspection rejects with detail inspection BOPOLE.)

Budget

Inspection and Maintenance Budget

Pole Inspect & Treat			ACTUALS	BUDGET
Distribution	T&T	515	\$1,943,516	\$2,087,469
	Detail	520	\$0	\$0
Transmission	T&T	843, 883	\$332,916	\$326,724
	Detail	840, 880	\$244,203	\$191,641
Total			\$2,520,635	\$2,605,834

Pole Replacements			ACTUALS	BUDGET
Distribution			\$4,162,663	\$3,772,456
Transmission			\$2,955,967	\$2,773,853
Total			\$7,118,630	\$6,546,309

Repair and Replace Facilities			ACTUALS	BUDGET
Distribution	500, 501, 502, 503, 504, 505, 509, 518, 526, 527, 595, 625, 626, 905		\$13,188,534	\$13,407,055
Transmission	845, 847, 846, 865, 884, 886, 848, 889		\$697,101	\$645,899
Total			\$13,885,635	\$14,052,954

Visual Inspections (Includes Equipment Inspections)			ACTUALS	BUDGET
Distribution		521	\$317,075	\$385,539
Transmission		841, 881	\$282,918	\$185,897
Total			\$599,993	\$571,436

Underground Inspections			ACTUALS	BUDGET
Distribution		508	\$893,948	\$921,159
Total			\$893,948	\$921,159

Substation Maintenance			ACTUALS	BUDGET
Distribution Preventative Maintenance			\$1,900,920	\$2,127,868
Distribution Corrective Maintenance			\$903,931	\$768,403
Transmission Preventative Maintenance			\$1,306,723	\$1,346,797
Transmission Corrective Maintenance			\$929,010	\$775,082
Total			\$5,040,584	\$5,018,150