

July 12, 2017

Mr. Nicholas Matz
City of Bellevue
PO Box 90012
Bellevue, WA 98009-9012

RE: 2016 Electric Service Reliability Report

Dear Nicholas,

Enclosed find Puget Sound Energy's Bellevue Electric Reliability Report for calendar year 2016. For the twelfth consecutive year, service reliability experienced by Bellevue customers in 2016 was well above that experienced by all PSE customers in the aggregate. Of the 96 distribution circuits serving Bellevue customers in 2016, 74 circuits had reliability numbers better than the system wide performance (14 circuits experienced no unplanned outages). 22 circuits had SAIDI or SAIFI figures that exceeded the 2016 system wide performance values.

The report format is the same as our 2015 report with the addition of a Preface and consists of:

- Preface discussing switch to IEEE 1366 methodology for SAIDI (see below)
- 2012 – 2016 System Average Interruption Duration Index (SAIDI) & System Average Interruption Frequency Index (SAIFI) Five Year History
- 2012 – 2016 Circuits That Exceeded PSE System SAIDI or SAIFI Five Year Review
- 2016 Circuits Exceeding PSE SAIDI or SAIFI
- 2016 Performance for Circuits Serving Bellevue
- 2016 Outages for Circuits Serving Bellevue
- 2016 Report Codes Legend

For 2016 we report PSE system-wide SAIDI and Bellevue circuit SAIDI consistent with our reporting to the Washington State Utilities & Transportation Commission (WUTC).

I have also included our 2016 Service Quality Report Card sent to PSE customers with their monthly billing statements and available at PSE.com.

Please contact me at (425)462-3852 or e-mail at andy.swayne@pse.com to discuss any questions or concerns you may have about the report materials.

Sincerely,



Andy Swayne
Senior Municipal Liaison Manager

CC: Tim Stever – City of Bellevue, Right-of-Way Manager/Franchise Supervisor
RaeLynn Asah – PSE, Supervisor Municipal Relations
Sharimila Swenson – PSE, Manager Local Government Affairs & Public Policy

Enclosures

PREFACE TO 2016 BELLEVUE ELECTRIC RELIABILITY REPORT

This preface summarizes a change in reporting for the 2016 calendar year.

System Average Interruption Duration Index (SAIDI)

In consultation with the Washington Utilities and Transportation Commission, for 2016 (and going forward) PSE is using the IEEE Standard 1366-2003 methodology for calculating SAIDI reported to the WUTC. The IEEE Standard 1366-2003 is a guide approved and published by the Institute of Electrical and Electronics Engineers that defines electric power reliability indices and factors that affect their calculations.

Prior to 2010 PSE used SAIDI calculations that excluded Major Storm event outages (affecting 5% or more of total PSE electric customers) to calculate single year figures. During the period 2010 – 2015 PSE calculated SAIDI as rolling five year average figures (the current year and four preceding years) including Major Storm outage events. Prior to 2016, eligible outages having duration longer than 1 minute were included in SAIDI calculations.

The switch in 2016 to the IEEE 1366 methodology returns to calculation of single year SAIDI figures and replaces the Major Storm event designation with Major Event Day events which are excluded from the SAIDI calculation. Eligible outages having durations longer than 5 minutes are included in the calculation. Detailed information about this methodology is contained in PSE's 2016 Service Quality and Electric Service Reliability Report filed with the WUTC. In summary the IEEE methodology takes this approach:

Major Event – An event, such as a storm, that causes serious reliability problems.

Major Event Days—Days when outage events can be excluded from the reliability performance calculation. Types of Major Event Days include:

SAIDI Exclusion Major Event Days—Any day in which the daily system SAIDI exceeds the threshold value for the current year.

5% Exclusion Major Event Days—Days that five percent or more of electric customers are experiencing an electric outage during a 24-hour period and subsequent days when the service to those customers is being restored.

SAIDI—System Average Interruption Duration Index—This index is calculated based on the formula:

$$\text{SAIDI} = \frac{\sum \text{Customer Minute Interruptions}}{\text{Average Annual Electric Customer Count}}$$

SAIDI_{SQI}*: The SAIDI figures used in this report for 2016 are calculated with the numerator including customer minute interruptions during non-Major Event Days events. Outages that are longer than 5 minutes are included in this metric. *SQI – Service Quality Index

System Average Interruption Frequency Index (SAIFI)

Calculation of the System Average Interruption Frequency Index (SAIFI) reported to the Commission has not changed from past years. SAIFI figures remain calculated for a single calendar year and exclude 5% **Exclusion Major Event Days** outage events (designated Major Storm events in past years). SAIFI is calculated based on the formula:

$$\text{SAIFI} = \frac{\sum \text{Number of Customer Interruptions}}{\text{Average Annual Electric Customer Count}}$$

SAIFI_{SQI}*: The SAIFI figures used in this report are calculated with the numerator including customer interruptions during non-5% Exclusion Major Event Days (formerly called Major Storm events). Outages one minute and longer are included in this metric. *SQI – Service Quality Index

Momentary & Sustained Interruptions

Interruptions to customer service fall into two designations:

Momentary Interruption— The brief loss of power delivery to one or more customers caused by the opening and closing of an interrupting device:

SAIDI_{SQI} – any interruption five minutes or shorter

SAIFI_{SQI} – any interruption one minute or shorter

Sustained Interruption—Any interruption not classified as momentary:

SAIDI_{SQI} – Any interruption longer than five minutes

SAIFI_{SQI} – Any interruption longer than one minute

Outage Event Codes

In prior years PSE used Storm Codes to indicate whether an outage occurred during normal conditions (NON), weather event conditions (WTH) or major storm conditions (MAJ). In 2016 Storm Codes were discontinued and replaced with Event Codes to incorporate the IEEE designation of Major Event Days:

MEJ – IEEE Major Event Day & Major Storm (5% of customers effected)

MEN – IEEE Major Event Day – non Major Storm

NMJ – Non IEEE Major Event Day, but Major Storm (5% of customers effected)

NON – Non IEEE Major Event Day & non Major Storm

2016 BELLEVUE ELECTRIC RELIABILITY REPORT

This report summarizes electric service reliability for customers within the City of Bellevue for calendar year 2016. For the 11th consecutive year, service reliability as measured by SAIDI & SAIFI for Bellevue customers well exceeded that experienced by all PSE customers in the aggregate. Of the 96 distribution circuits serving Bellevue customers in 2016, 74 circuits had reliability numbers better than the system wide performance (14 circuits experienced no unplanned outages). 22 circuits had SAIDI and/or SAIFI figures that exceeded 2016 system wide performance values.

SYSTEM AVERAGE INTERRUPTION DURATION INDEX (SAIDI) & SYSTEM AVERAGE INTERRUPTION FREQUENCY INDEX (SAIFI) FIVE YEAR HISTORY

SAIDI figures in minutes, all outages including storm
SAIFI figures in outage events, all non-storm outages

	SAIDI		SAIFI	
	BELLEVUE	PSE	BELLEVUE	PSE
2012	52.4	245.0	0.40	0.92
2013	100.7	247.0	0.41	0.86
2014	160.2	312.0	0.60	1.04
2015	186.9	361.0	0.71	1.11
2016	107.0	148.0	0.74	1.06

PSE SAIDI figures for 2012 - 2015 are five year rolling average figures.

The 2012 Bellevue SAIDI figure was calculated as a single year figure.

The 2013 Bellevue SAIDI figure was calculated as a four year rolling average for years 2010 - 2013.

The 2014 - 2015 Bellevue SAIDI figures were calculated as a five year rolling average figures.

2016 SAIDI figures were calculated using the IEEE 1366 method for the single year 2016.

PSE analyzes the reliability of its circuits using two standard benchmarks of the electric utility industry, SAIDI and SAIFI.

SAIDI_{Total 5-year Average}: The System Average Interruption Duration Index is a measure of how long the average customer is out of service during a rolling five year period, and is determined as:

$$\frac{\text{Total customer outage minutes for the current and past four years}^*}{\text{Average electric customer count over the current and past four years}^*}$$

* Single year SAIDI figures are calculated for the five years then averaged

SAIDI_{IEEE} is determined as:

$$\frac{\text{Sum of the customer outage minutes}^*}{\text{Total number of customers served}}$$

*SAIDI_{IEEE} figures are single year figures excluding Major Event Day outage events.

Some customers will experience outages longer than the average and some shorter.

SAIFI: The System Average Interruption Frequency Index is a measure of how often the average

$$\frac{\text{Sum of the number of customers affected by each outage}}{\text{Total number of customers served}}$$

SAIFI figures are single year figures excluding 5% Exclusion Major Event Day outage events

Some customers will experience more outages than the average and some fewer.

**CIRCUITS THAT EXCEEDED PSE SYSTEM SAIDI OR SAIFI
BY YEAR 2012 - 2016**

During the 2012-2016 five year period 64 circuits serving customers in Bellevue performed below system wide performance in one or more years. Of these 64 circuits...

- 35 (55%) circuits performed below system wide performance once in five years
- 15 (23%) circuits performed below system wide performance twice in five years
- 12 (19%) circuits performed below system wide performance in three of the five years
- 2 (3%) circuit performed below system wide performance in four of the five years

Performance for years 2012 & 2016* uses single year SAIDI figures.

Performance for year 2013 uses four year average (2010 - 2013) SAIDI figures.

Performance for years 2014 - 2015 use five year average SAIDI figures.

CIRCUIT	Repeat Counts					1	2	3	4
	2012	2013	2014	2015	2016				
ARD-11	█						1		
ARD-13						1			
ARD-15		█		█			1		
BTR-22	█		█	█					1
CEN-11		█	█					1	
CEN-12		█				1			
CEN-13						1			
CEN-14			█				1		
CLY-23				█	█		1		
CLY-25	█					1			
CLY-27		█	█				1		
COL-22			█			1			
COL-23					█	1			
COL-25			█			1			
COL-26	█		█		█			1	
EGT-11				█		1			
EGT-12				█		1			
EGT-13	█	█		█				1	
EGT-15	█					1			
EGT-16				█		1			
EGT-25	█	█			█			1	
EGT-26					█	1			
EGT-27		█				1			
EGT-28					█	1			
EVE-23	█	█		█	█				1
FAC-12		█				1			
FAC-14			█			1			
FAC-24					█	1			
GOO-13	█					1			
HAZ-12					█	1			
HOU-23				█		1			
HOU-25					█		1		
KWH-25			█	█	█			1	
LHL-22		█		█				1	
LHL-23			█			1			
LHL-25			█			1			
LHL-26					█	1			

LOC-25						1			
LOC-32	■					1			
LOC-34	■					1			
LOC-35	■					1			
MED-35			■	■			1		
MED-36	■				■		1		
MLK-13		■				1			
MLK-15			■			1			
NOB-12					■	1			
NOB-22		■				1			
NOB-24			■			1			
NRU-23			■	■	■			1	
NRU-25		■		■	■		1		
NRU-26					■	1			
NRU-27			■		■			1	
OVE-12	■	■					1		
OVE-15			■	■	■				1
PHA-13						1			
PHA-15	■						1		
PHA-16								1	
PHA-17									1
SBE-22	■							1	
SBE-23		■				1			
SOM-13			■					1	
SOM-15	■	■			■				1
SOM-16			■						1
SOM-17	■								1
Totals	19	20	25	23	22	35	15	12	2
	2012	2013	2014	2015	2016	55%	23%	19%	3%

* 2016 SAIDI figures were calculated using the IEEE 1366 method

CIRCUITS THAT EXCEED 2016 PSE SYSTEM SAIDI AND/OR SAIFI
SQI: SAIDI = 155 SAIFI = 1.30
PSE: SAIDI = 148 SAIFI = 1.06
Bellevue: SAIDI = 107 SAIFI = 0.74

Notes: SAIDI figures reflect all non-major event day outages, scheduled & unscheduled; SAIFI figures reflect all non-5% exclusion major event day outages, scheduled & unscheduled SAIDI (IEEE 1366 method) & SAIFI figures are calculated single year figures for 2016.

CIRCUIT	SAIDI	SAIFI	2016 Events Comments	Actions & Projects Completed in 2016	Planned Actions & Projects
Circuits with planned actions or investigations					
SOM-16	405.7	3.18	Three circuit outages resulted from trees in the overhead feeder along Coal Creek Parkway.		PSE Planning is reviewing options to improve this system infrastructure.
KWH-25	368.6	1.29	A circuit outage occurred when several spans of overhead feeder along NE 24th ST came down (believed to be caused by a tree fall, but cause not recorded in the outage event log).	Overhead feeder was reinstalled on poles.	PSE Planning is reviewing options to sectionalize an overhead segment of this circuit to reduce impact from future extended outage events.
HAZ-12	268.8	2.55	Hazelwood substation was taken off line for equipment replacement/upgrades with temporary circuit configuration impacting circuit performance during the Summer of 2016.	Substation and feeder construction were completed and the system switched to normal.	PSE Planning is reviewing options to improve this system infrastructure.
EGT-25	225.2	1.05	An underground feeder cable failed causing a circuit outage.	Underground feeder cables were replaced.	Additional feeder cables will be replaced in the near future (2017).
SBE-22	186.2	1.35	A circuit outage resulted from trees in the overhead feeder along Bellevue Way SE.	PSE tree crews did 'hot spot' trimming to restore required vegetation clearance.	This area is scheduled for an underground conversion in 2017 in association with Sound Transit East Link project construction.
Circuits with completed 2016 actions - no additional corrective action needed					
CEN-11	841.1	2.07	Several outages were scheduled outages supporting relocation work for the Sound Transit East Link project.	Switch U837 was replaced with a SCADA enabled switch.	
SOM-17	392.3	2.66	Two circuit outages resulted from trees in the overhead feeder along Coal Creek Parkway. A third circuit outage resulted from a failed underground feeder cable.		
COL-23	345.4	2.00	An animal contact tripped the substation transformer resulting in a circuit outage. One circuit outage resulted from a failed pad-mount switch.	Switch U2527 and cable connections were replaced.	
MED-36	281.8	2.40	A car-pole accident caused a circuit outage. A tree limb fell into overhead feeder during trimming work causing a circuit outage.		
OVE-15	266.5	2.34	An animal contact tripped the substation transformer resulting in a circuit outage. A car-pole accident caused an extended large outage.		
HOU-25	224.0	2.18	A tree in overhead feeder caused a circuit outage with the resulting fault causing damage to an overhead disconnect switch. The damage switch failed causing a second circuit outage.	The failed switch and associated equipment and cable connections were replaced.	
NRU-27	204.8	0.85	Failed distribution junction boxes resulted in two extended large outages. A scheduled outage to replace distribution cables resulted in an extended outage to a local area.	Failed and suspect junction boxes and cable elbows were replaced.	
EGT-28	199.0	1.05	A failed feeder cable splice caused a circuit outage (including extended investigation to find and isolate the problem).	The underground feeder cables were repaired.	
COL-26	193.3	1.39	An animal contact tripped the substation transformer resulting in a circuit outage.		
NRU-23	189.3	0.59	Failed distribution cables caused an extended to a local area outage. A scheduled outage to replace distribution cables resulted in an extended outage to a local area.	Distribution cables were repaired and replaced.	
FAC-24	177.5	0.78	A failed distribution junction box resulted in an extended outage to a local area. A car-transformer accident caused an extended outage to a local area.	Failed and suspect junction boxes and cable elbows were replaced.	
CEN-13	173.7	0.35	A SCADA equipped switch operated (unexpectedly) causing a large outage.	The switch was configured to operate in local control pending communications verification.	
EGT-26	156.1	0.89	A failed distribution cable elbow resulted in an extended outage to a local area.	The failed elbow was replaced.	
PHA-17	148.2	1.16	A car-pole accident required dropping the circuit to make the area safe and replace the pole.	The broken pole was replaced.	
PHA-16	100.9	1.15	An equipment problem in the substation caused an unsafe condition requiring the substation inspector to open the circuit. Customers were temporarily switched to PHA-17 while repairs were completed.	Failed and suspect equipment was replaced.	
EVE-23	124.5	1.09	Failed switches along West Lake Sammamish Parkway resulted in a circuit outage. Servicemen isolated the failed switches and restored feeder operation.	All three switches and the arrestors on this pole were replaced.	
Circuits for which no corrective action is needed					
ARD-11	230.0	0.79	A scheduled outage to replace a three phase underground cable run along Bel-Red Road resulted in an extended large outage.		

- Figure exceeded PSE system wide average figure
- Figure exceeding system wide average and Service Quality Index
- SAIDI & SAIFI figure results in part from circuit outages due to 2016 substation outage

2016 PERFORMANCE FOR CIRCUITS SERVING BELLEVUE

CIRCUIT	CUSTOMERS (METERS)	UNPLANNED		SAIDI ²	SAIFI ²
		UNPLANNED OUTAGES ¹	OUTAGE MINUTES ¹		
	<i>2016 PSE Companywide performance figures</i>			<i>148</i>	<i>1.06</i>
ARD-11	213	1	748	229.96	0.79
ARD-13	635	3	90,531	95.96	1.01
ARD-15	1,294	1	34,728	26.85	0.21
ARD-43	10	0	0	0.00	0.00
BTR-14	1,145	2	1,254	1.10	0.01
BTR-21	1,126	5	63,748	62.69	0.29
BTR-22	650	12	50,973	79.51	0.49
BTR-23	643	1	1,205	2.90	0.04
CEN-11	30	3	2,237	841.07	2.07
CEN-12	15	0	0	0.00	0.00
CEN-13	239	1	38,328	173.68	0.35
CEN-14	307	1	3,502	11.41	0.20
CEN-22	432	1	14,434	89.70	0.68 ³
CEN-25	874	4	70,230	80.36	0.61 ³
CLY-22	345	0	0	1.65	0.00
CLY-23	538	1	609	27.11	0.07
CLY-25	1,518	3	34,108	29.04	0.30
CLY-26	1,200	6	23,189	36.82	0.24
CLY-27	727	0	0	47.50	0.19
COL-22	1	1	101	101.46	1.00 ³
COL-23	204	2	51,352	345.39	2.00 ³
COL-24	26	1	2,740	105.37	1.04 ³
COL-25	240	4	26,215	109.23	1.04 ³
COL-26	1,830	12	350,575	193.28	1.39 ³
EGT-11	1,116	10	126,820	137.49	0.46
EGT-12	2,814	12	46,343	133.42	0.98
EGT-13	7	0	0	0.00	0.00
EGT-15	343	1	6,844	19.95	0.13
EGT-16	440	10	11,397	25.90	0.13
EGT-25	677	6	152,483	225.23	1.05
EGT-26	118	2	34,740	156.08	0.89
EGT-27	595	12	6,986	12.40	0.15
EGT-28	1,962	22	382,985	199.01	1.05
EVE-23	2,936	16	231,586	124.48	1.09
FAC-12	1,266	14	100,052	79.03	0.49
FAC-13	554	1	36	0.80	0.00
FAC-14	454	2	2,621	24.64	0.19
FAC-21	97	0	0	0.00	0.00
FAC-23	228	4	11,629	51.27	0.54
FAC-24	80	2	13,707	177.50	0.78
FAC-25	1,503	9	147,268	111.53	0.42
GOO-13	1,802	1	201	8.97	0.04
GOO-21	216	5	16,265	111.54	0.86
HAZ-12	2,176	7	378,702	268.81	2.55
HAZ-13	1,204	6	5,708	8.90	0.04
HOU-23	1,323	4	12,154	9.19	0.05
HOU-25	499	14	93,468	223.99	2.18
KWH-22	886	5	1,236	1.45	0.01
KWH-23	942	18	110,843	144.40	0.61
KWH-25	1,621	17	597,578	368.65	1.29
KWH-26	271	1	131	0.48	0.00
LHL-22	1,012	4	61,462	71.51	0.92
LHL-23	1,262	3	6,298	38.45	0.17
LHL-25	2,124	25	97,149	60.15	0.41
LHL-26	552	6	60,157	109.23	1.04
LOC-22	2,243	1	1,779	1.80	0.01
LOC-23	1,676	2	28	14.13	0.71

LOC-24	51	0	0	0.00	0.00
LOC-25	0	0	0	0.00	0.00
LOC-32	165	0	0	0.00	0.00
LOC-33	310	1	477	32.65	0.12
LOC-34	308	0	0	0.00	0.00
LOC-35	22	1	1,457	66.23	1.05
MED-35	190	6	1,931	50.58	0.18
MED-36	669	7	188,548	281.84	2.40
MLK-12	425	5	17,933	42.20	0.32
MLK-13	1,609	5	67,301	92.32	0.47
MLK-15	1,633	10	88,684	69.72	0.56
MLK-16	1,513	7	61,891	42.96	0.29
NOB-11	62	0	0	0.00	0.00
NOB-12	275	1	2,302	11.28	0.08
NOB-13	31	1	80	25.42	0.35
NOB-14	544	0	0	1.74	0.01 ⁴
NOB-21	5	0	0	0.00	0.00
NOB-22	169	0	0	0.00	0.00
NOB-23	1,081	4	7,511	7.84	0.06
NOB-24	976	6	1,203	9.26	0.08
NRU-23	847	15	101,639	189.28	0.59
NRU-25	852	4	14,750	37.53	0.36
NRU-26	182	2	509	6.27	0.02
NRU-27	631	9	93,326	204.83	0.85
OVE-12	546	6	47,448	86.90	1.04 ³
OVE-15	665	10	177,200	266.47	2.34 ³
PHA-13	1,048	14	17,814	17.06	0.08
PHA-15	179	2	7,862	43.92	0.25
PHA-16	2,062	15	203,352	100.90	1.15
PHA-17	700	6	98,883	148.19	1.16
ROS-17	1,224	12	82,308	117.18	0.41
SBE-22	341	3	55,700	186.24	1.35
SBE-23	359	7	1,700	67.31	0.10
SBE-25	363	6	10,938	30.13	0.18
SBE-26	1,742	10	4,231	10.94	0.08
SOM-13	969	2	532,937	127.40	1.00
SOM-15	1,752	12	68,689	73.16	0.40
SOM-16	2,556	19	900,652	405.65	3.18
SOM-17	1,752	14	660,471	392.30	2.66
Totals	78,049	529	7,099,188		
Scheduled Outages		128	816,042		

Notes

- 1 Figures exclude Major Event Day and Major Storm outages.
- 2 SAIDI are 2016 single year figures calculated using the IEEE 1366 method which excludes Major Event Day outage events.
SAIFI are 2016 single year figures which exclude 5% Exclusion Major Event Day outage events.
- 3 Includes one circuit outage resulting from substation bank outage.
- 4 SAIDI & SAIFI figures greater than zero reflect inclusion scheduled outages (including customer requested outages).

2016 OUTAGES FOR CIRCUITS SERVING BELLEVUE
EXCLUDING SCHEDULED OUTAGES

BY CAUSE

CAUSE CODE	CAUSE DESCRIPTION	OUTAGES		OUTAGE MINUTES	
		COUNT	PERCENT	COUNT	PERCENT
AC	ACCIDENT	17	3.2%	178,761	2.5%
BA	BIRD OR ANIMAL	108	20.4%	744,050	10.5%
CE	CUSTOMER EQUIPMENT	3	0.6%	275	0.0%
CP	CAR EQUIPMENT	6	1.1%	225,210	3.2%
DU	DIG UP UNDERGROUND	15	2.8%	32,206	0.5%
EF	EQUIPMENT FAILURE	220	41.6%	3,248,240	45.8%
FI	FAULTY INSTALLATION	14	2.6%	5,739	0.1%
LI	LIGHTNING	2	0.4%	3,679	0.1%
OD	OUTSIDE DISTURBANCE	7	1.3%	111,955	1.6%
OE	OUTAGE WHILE WORKING	6	1.1%	4,082	0.1%
TV	TREE	61	11.5%	1,336,579	18.8%
UN	UNKNOWN CAUSE	70	13.2%	1,208,413	17.0%
Totals		529	100%	7,099,189	100%

BY EQUIPMENT

EQUIP CODE	EQUIPMENT DESCRIPTION	OUTAGES		OUTAGE MINUTES	
		COUNT	PERCENT	COUNT	PERCENT
ACE	ALL CUSTOMER EQUIPMENT	1	0.2%	68	0.0%
OAR	OVERHEAD ARRESTER	3	0.6%	117,501	1.7%
OCE	CUSTOMER EQUIPMENT	1	0.2%	76	0.0%
OCN	OVERHEAD SECONDARY CONNECTOR	14	2.6%	11,233	0.2%
OCO	OVERHEAD CONDUCTOR	33	6.2%	1,948,244	27.4%
OFC	OVERHEAD CUT-OUT	8	1.5%	17,463	0.2%
OFU	OVERHEAD LINE FUSE / FUSE LINK	43	8.1%	304,637	4.3%
OJU	OVERHEAD JUMPER WIRE	8	1.5%	97,219	1.4%
OMP	OVERHEAD METER POINT (EDOM100)	4	0.8%	610	0.0%
OPO	OVERHEAD POLE (EDOP100)	11	2.1%	386,782	5.4%
OSV	OVERHEAD SERVICE	28	5.3%	7,226	0.1%
OTF	OVERHEAD TRANSFORMER FUSE	79	14.9%	85,421	1.2%
OTR	OVERHEAD TRANSFORMER	23	4.3%	75,530	1.1%
PMF	PADMOUNT SWITCH FUSE	10	1.9%	56,765	0.8%
PMP	PADMOUNT METER POINT (EDUM100)	1	0.2%	925	0.0%
PTF	PADMOUNT TRANSFORMER FUSE	4	0.8%	3,013	0.0%
SCB	POWER CIRCUIT BREAKER	5	0.9%	601,828	8.5%
SWD	SWITCH - DISTRIBUTION DISCONNECT	1	0.2%	165,727	2.3%
TER	TERMINATION (POWER CABLE)	1	0.2%	124	0.0%
UEL	UNDERGROUND ELBOW	6	1.1%	101,272	1.4%
UFJ	UNDERGROUND J-BOX	10	1.9%	145,929	2.1%
UGF	UNDERGROUND SUBMERSIBLE FUSE	2	0.4%	18,034	0.3%
UGV	UNDERGROUND VAULT	1	0.2%	14,725	0.2%
UHH	UNDERGROUND HANDHOLE - SECONDARY	6	1.1%	2,992	0.0%
UJU	UNDERGROUND PRIMARY JUMPER	1	0.2%	17,170	0.2%
UPC	UNDERGROUND PRIMARY CABLE	77	14.5%	1,849,006	26.0%
UPS	UNDERGROUND PADMOUNT SWITCH (EDUS100)	3	0.6%	30,681	0.4%
UPT	UNDERGROUND PADMOUNT TRANSFO	20	3.8%	144,272	2.0%
USC	UNDERGROUND SECONDARY CABLE	22	4.2%	10,984	0.2%
USE	UNDERGROUND SECONDARY CONNECT	4	0.8%	3,107	0.0%
USP	UNDERGROUND PRIMARY SPLICE	1	0.2%	345,518	4.9%
USV	UNDERGROUND SERVICE	53	10.0%	19,339	0.3%
UTC	UNDERGROUND TERMINAL FUSE	17	3.2%	139,256	2.0%
UTR	UNDERGROUND SUBMERSIBLE TRANSFORMER	22	4.2%	136,346	1.9%
VCB	VACUUM CIRCUIT BREAKER (POWER)	6	1.1%	240,166	3.4%
Totals		529	100%	7,099,189	100%

2016 OUTAGES FOR CIRCUITS SERVING BELLEVUE
EXCLUDING CUSTOMER REQUESTED & SCHEDULED OUTAGES

DATE	CIRCUIT	EQUIPMENT	CAUSE	CUSTOMERS OUT	CUSTOMER MINUTES	EVENT CODE
12/29/2016	ARD-11	UPC	EF	3	748	NON
4/20/2016	ARD-13	PMF	BA	4	586	NON
8/11/2016	ARD-13	OMP	AC	1	298	NON
8/31/2016	ARD-13	UPC	EF	948	89,647	NON
6/15/2016	ARD-15	UTC	BA	265	34,728	NON
3/1/2016	BTR-14	OTR	LI	19	8,847	MEJ
10/31/2016	BTR-14	UTC	TV	6	693	NON
11/1/2016	BTR-14	PMF	UN	3	561	NON
3/14/2016	BTR-21	OCO	TV	13	6,841	NMJ
4/18/2016	BTR-21	OCN	EF	2	191	NON
4/18/2016	BTR-21	UPC	EF	152	34,874	NON
7/18/2016	BTR-21	OTF	BA	3	86	NON
9/19/2016	BTR-21	UPC	EF	152	28,317	NON
10/27/2016	BTR-21	OCO	UN	15	280	NON
3/1/2016	BTR-22	UJU	EF	24	4,447	MEN
3/13/2016	BTR-22	OCO	TV	119	46,207	MEJ
4/18/2016	BTR-22	OTF	UN	3	225	NON
4/24/2016	BTR-22	OTR	EF	1	161	NON
4/29/2016	BTR-22	UPC	UN	29	8,824	NON
5/6/2016	BTR-22	USC	EF	1	205	NON
5/22/2016	BTR-22	OTF	BA	5	718	NON
5/31/2016	BTR-22	OTF	BA	53	7,948	NON
6/10/2016	BTR-22	OFU	TV	131	9,332	NON
6/10/2016	BTR-22	OFU	TV	1	33	NON
7/23/2016	BTR-22	USV	DU	1	420	NON
7/27/2016	BTR-22	OFU	TV	1	90	NON
9/19/2016	BTR-22	UPC	UN	12	3,737	NON
10/24/2016	BTR-22	OTR	BA	53	19,280	NON
5/3/2016	BTR-23	UPT	AC	9	1,205	NON
2/20/2016	CEN-11	UEL	OE	2	139	NON
8/1/2016	CEN-11	UPC	EF	1	887	NON
9/30/2016	CEN-11	UPC	EF	2	1,211	NON
11/28/2016	CEN-13	PMF	UN	71	38,328	NON
5/18/2016	CEN-14	OFU	OE	62	3,502	NON
11/6/2016	CEN-22 ¹	SCB	BA	111	14,434	NON
2/28/2016	CEN-25	OFU	FI	4	515	NON
5/7/2016	CEN-25	USC	EF	1	268	NON
5/8/2016	CEN-25	OFU	TV	65	9,632	NON
11/6/2016	CEN-25 ¹	SCB	BA	460	59,815	NON
3/10/2016	CLY-23	OCO	TV	44	13,001	MEJ
3/13/2016	CLY-23	OCO	TV	44	38,748	MEJ
3/14/2016	CLY-23	OCO	TV	2	142	NMJ
5/18/2016	CLY-23	OTF	BA	7	609	NON
10/15/2016	CLY-23	OTF	TV	5	3,478	MEJ
6/24/2016	CLY-25	UPC	EF	150	29,755	NON
7/2/2016	CLY-25	OFU	TV	28	4,216	NON
8/29/2016	CLY-25	OTF	UN	1	137	NON
1/30/2016	CLY-26	TER	BA	2	124	NON

3/1/2016	CLY-26	USV	EF	1	229	MEN
3/6/2016	CLY-26	UEL	EF	178	21,848	NON
3/6/2016	CLY-26	USV	UN	1	163	NON
8/17/2016	CLY-26	OTF	BA	4	354	NON
8/20/2016	CLY-26	OTR	EF	1	355	NON
10/18/2016	CLY-26	UPC	OE	4	345	NON
9/22/2016	COL-22 ¹	VCB	BA	1	101	NON
12/24/2016	COL-23	UPS	EF	269	30,653	NON
9/22/2016	COL-23 ¹	VCB	BA	204	20,699	NON
9/22/2016	COL-24 ¹	VCB	BA	27	2,740	NON
4/14/2016	COL-25	PMP	AC	8	925	NON
5/28/2016	COL-25	OTR	TV	3	1,066	NON
6/9/2016	COL-25	OSV	TV	1	75	NON
9/22/2016	COL-25 ¹	VCB	BA	238	24,149	NON
4/22/2016	COL-26	USC	DU	4	495	NON
5/31/2016	COL-26	UPC	EF	35	21,832	NON
6/6/2016	COL-26	UPC	UN	62	12,679	NON
8/5/2016	COL-26	UTR	EF	16	9,347	NON
8/5/2016	COL-26	UTR	EF	15	8,530	NON
8/5/2016	COL-26	UTR	EF	14	5,862	NON
8/12/2016	COL-26	UEL	EF	226	23,449	NON
10/4/2016	COL-26	OTF	BA	4	226	NON
10/15/2016	COL-26	USV	EF	1	606	MEJ
10/23/2016	COL-26	UTR	UN	38	12,653	NON
12/3/2016	COL-26	OFU	EF	255	68,946	NON
12/9/2016	COL-26	USV	EF	1	673	NON
9/22/2016	COL-26 ¹	VCB	BA	1,832	185,883	NON
2/14/2016	EGT-11	OCO	TV	157	69,467	NON
6/4/2016	EGT-11	OTF	EF	3	268	NON
6/9/2016	EGT-11	OTF	BA	3	348	NON
6/13/2016	EGT-11	OTF	BA	5	638	NON
6/21/2016	EGT-11	USC	UN	1	186	NON
6/27/2016	EGT-11	USC	EF	1	151	NON
6/30/2016	EGT-11	UPC	UN	71	20,100	NON
10/16/2016	EGT-11	OFU	TV	8	931	NMJ
10/18/2016	EGT-11	OCO	TV	8	128	NON
11/6/2016	EGT-11	UPC	EF	75	34,284	NON
11/17/2016	EGT-11	OTR	EF	3	1,250	NON
1/5/2016	EGT-12	OCN	EF	3	509	NON
2/15/2016	EGT-12	OCO	TV	80	2,996	NON
3/1/2016	EGT-12	OCO	TV	3,448	588,746	MEJ
3/10/2016	EGT-12	OCO	TV	2,460	206,844	MEJ
3/13/2016	EGT-12	OTF	BA	2	271	MEN
3/13/2016	EGT-12	OFU	TV	6	10,904	MEJ
3/23/2016	EGT-12	UPT	EF	14	656	NON
3/23/2016	EGT-12	OFU	TV	45	40,185	NON
3/30/2016	EGT-12	USV	DU	1	157	NON
3/30/2016	EGT-12	OTR	EF	3	626	NON
4/20/2016	EGT-12	OTF	UN	1	109	NON
4/30/2016	EGT-12	OTF	EF	5	283	NON
7/4/2016	EGT-12	OTF	BA	3	246	NON
8/12/2016	EGT-12	OTF	BA	3	278	NON

9/7/2016	EGT-12	USV	EF	1	141	NON
9/10/2016	EGT-12	OMP	UN	1	168	MEN
10/18/2016	EGT-12	UHH	EF	1	157	NON
3/13/2016	EGT-15	OCO	TV	270	113,355	MEJ
9/10/2016	EGT-15	UPC	EF	12	5,337	MEN
9/10/2016	EGT-15	UPC	EF	0	668	MEN
10/7/2016	EGT-15	UTR	EF	20	6,844	NON
1/20/2016	EGT-16	OFC	EF	4	467	NON
3/30/2016	EGT-16	UTC	EF	1	71	NON
5/19/2016	EGT-16	OTF	BA	8	1,139	NON
5/24/2016	EGT-16	OTF	BA	5	276	NON
6/30/2016	EGT-16	PMF	BA	1	103	NON
7/30/2016	EGT-16	OTF	BA	8	657	NON
8/27/2016	EGT-16	OTR	TV	11	7,403	NON
9/28/2016	EGT-16	OSV	UN	1	183	NON
11/13/2016	EGT-16	OTF	BA	18	950	NON
12/14/2016	EGT-16	OCN	EF	1	148	NON
3/10/2016	EGT-25	OCO	TV	674	55,010	MEJ
4/2/2016	EGT-25	UPC	EF	674	148,363	NON
4/16/2016	EGT-25	OTF	BA	4	380	NON
6/17/2016	EGT-25	OTF	BA	14	1,706	NON
6/29/2016	EGT-25	UPC	UN	13	1,751	NON
11/3/2016	EGT-25	OTF	BA	2	167	NON
11/21/2016	EGT-25	OCN	EF	1	116	NON
7/29/2016	EGT-26	UEL	EF	195	32,645	NON
10/28/2016	EGT-26	UPC	EF	7	2,095	NON
1/23/2016	EGT-27	OSV	TV	1	117	NON
1/24/2016	EGT-27	OSV	EF	1	62	NON
1/26/2016	EGT-27	OCO	OD	42	2,804	NON
3/13/2016	EGT-27	OCO	TV	42	2,680	MEJ
3/16/2016	EGT-27	OTF	UN	6	571	NON
3/27/2016	EGT-27	OSV	TV	1	123	NON
5/23/2016	EGT-27	UPC	DU	6	1,218	NON
7/8/2016	EGT-27	OTF	BA	3	350	NON
7/26/2016	EGT-27	OSV	FI	1	156	NON
9/25/2016	EGT-27	OSV	EF	1	60	NON
10/27/2016	EGT-27	OSV	TV	7	471	NON
10/29/2016	EGT-27	OTF	UN	7	773	NON
11/13/2016	EGT-27	OTF	BA	6	281	NON
2/3/2016	EGT-28	OTF	BA	1	38	NON
2/12/2016	EGT-28	USE	EF	5	1,196	NON
3/1/2016	EGT-28	OFU	TV	31	4,537	MEJ
3/8/2016	EGT-28	USC	EF	1	96	NON
3/12/2016	EGT-28	USV	EF	1	529	NMJ
3/24/2016	EGT-28	USV	EF	1	124	NON
3/24/2016	EGT-28	USV	UN	1	164	NON
3/30/2016	EGT-28	USV	EF	1	142	NON
4/6/2016	EGT-28	OFU	BA	31	3,300	NON
4/27/2016	EGT-28	OFC	BA	46	4,077	NON
5/29/2016	EGT-28	UPC	EF	34	4,362	NON
6/14/2016	EGT-28	UPC	EF	2	442	NON
6/15/2016	EGT-28	OTF	BA	2	116	NON
6/22/2016	EGT-28	UTC	BA	2	163	NON

6/30/2016	EGT-28	USV	EF	1	77	NON
7/5/2016	EGT-28	OTF	BA	10	1,310	NON
8/20/2016	EGT-28	UPC	EF	59	9,695	NON
9/1/2016	EGT-28	OTF	UN	2	167	NON
9/1/2016	EGT-28	OTF	UN	3	89	NON
9/6/2016	EGT-28	UTC	BA	2	219	NON
10/1/2016	EGT-28	OTF	BA	6	268	NON
10/12/2016	EGT-28	UPC	EF	95	10,824	NON
10/14/2016	EGT-28	UTC	TV	49	8,730	MEJ
11/23/2016	EGT-28	USP	EF	1,725	345,518	NON
11/29/2016	EGT-28	UTR	EF	7	598	NON
1/12/2016	EVE-23	USV	EF	1	182	NON
1/13/2016	EVE-23	UHH	EF	7	645	NON
3/1/2016	EVE-23	OCO	TV	267	162,750	MEJ
3/7/2016	EVE-23	USV	EF	5	764	NON
5/2/2016	EVE-23	OJU	OD	18	4,258	NON
5/27/2016	EVE-23	OFU	EF	184	18,851	NON
5/27/2016	EVE-23	OFU	EF	82	1,133	NON
6/9/2016	EVE-23	UEL	EF	17	5,392	NON
6/24/2016	EVE-23	OPO	CP	199	60,277	NON
7/6/2016	EVE-23	PTF	FI	4	223	NON
7/8/2016	EVE-23	OTR	BA	1	200	NON
7/8/2016	EVE-23	OAR	EF	2,199	117,082	NON
7/26/2016	EVE-23	UPC	EF	13	3,811	NON
8/17/2016	EVE-23	UFJ	EF	28	3,200	NON
8/25/2016	EVE-23	UPT	EF	5	1,374	NON
8/30/2016	EVE-23	OFU	BA	17	1,507	NON
11/17/2016	EVE-23	UPC	EF	37	12,687	NON
2/10/2016	FAC-12	UHH	EF	3	366	NON
3/28/2016	FAC-12	UPC	DU	179	22,426	NON
4/9/2016	FAC-12	USC	EF	2	836	NON
4/24/2016	FAC-12	USV	UN	1	369	NON
4/26/2016	FAC-12	UFJ	EF	71	10,019	NON
4/26/2016	FAC-12	UTR	UN	71	7,134	NON
5/13/2016	FAC-12	USC	DU	1	100	NON
7/5/2016	FAC-12	UPC	EF	9	3,560	NON
7/8/2016	FAC-12	OTF	BA	10	1,219	NON
7/24/2016	FAC-12	OTF	BA	224	15,348	NON
8/6/2016	FAC-12	UPC	EF	9	4,872	NON
9/11/2016	FAC-12	OTF	BA	2	122	NON
9/17/2016	FAC-12	UPC	UN	42	33,573	NON
10/31/2016	FAC-12	USV	EF	1	108	NON
3/13/2016	FAC-13	OCO	TV	81	219,106	MEJ
8/27/2016	FAC-13	OCO	TV	1	36	NON
9/6/2016	FAC-14	PMF	BA	17	1,084	NON
9/12/2016	FAC-14	PMF	BA	18	1,537	NON
1/11/2016	FAC-23	OJU	EF	54	4,863	NON
4/6/2016	FAC-23	OTF	TV	1	5	NON
12/25/2016	FAC-23	PTF	EF	2	166	NON
9/22/2016	FAC-23 ^{1,2}	VCB	BA	65	6,595	NON
1/30/2016	FAC-24	UPT	CP	30	7,355	NON
3/31/2016	FAC-24	UFJ	EF	31	6,352	NON
1/28/2016	FAC-25	UPC	AC	30	5,078	NON

3/20/2016	FAC-25	OTR	EF	1	279	NON
5/6/2016	FAC-25	UPT	AC	1	173	NON
8/26/2016	FAC-25	UPC	EF	93	8,764	NON
8/26/2016	FAC-25	UPC	EF	47	14,605	NON
10/14/2016	FAC-25	OCO	TV	148	34,044	MEJ
10/14/2016	FAC-25	OCO	TV	263	114,751	MEJ
10/14/2016	FAC-25	OCO	OE	263	63,307	MEJ
10/20/2016	FAC-25	OPO	AC	73	6,872	NON
10/20/2016	FAC-25	OPO	OD	174	97,605	NON
11/8/2016	FAC-25	OTF	BA	73	8,035	NON
11/30/2016	FAC-25	UPC	EF	55	5,857	NON
7/15/2016	GOO-13	USV	EF	1	201	NON
4/30/2016	GOO-21	OTF	BA	2	82	NON
7/31/2016	GOO-21	UTC	BA	13	1,009	NON
8/30/2016	GOO-21	OFU	TV	7	657	NON
11/29/2016	GOO-21	OCO	UN	55	858	NON
12/20/2016	GOO-21	OCO	AC	59	13,659	NON
3/16/2016	HAZ-12	UTR	EF	76	28,383	NON
7/23/2016	HAZ-12	OTR	BA	2	992	NON
8/26/2016	HAZ-12	UPC	OD	2	1,310	NON
10/19/2016	HAZ-12	OFU	TV	3	521	NON
11/28/2016	HAZ-12	OCO	UN	3,717	342,213	NON
11/28/2016	HAZ-12	OTR	TV	4	1,070	NON
12/20/2016	HAZ-12	UTR	EF	12	4,213	NON
1/18/2016	HAZ-13	USV	EF	1	223	NON
3/13/2016	HAZ-13	OCO	TV	1,202	761,438	MEJ
3/13/2016	HAZ-13	OCO	TV	1,202	760,796	MEJ
3/14/2016	HAZ-13	UPC	EF	3	5,008	NMJ
7/12/2016	HAZ-13	OFU	UN	24	1,941	NON
9/23/2016	HAZ-13	PTF	TV	8	1,419	NON
10/10/2016	HAZ-13	UHH	EF	1	389	NON
10/22/2016	HAZ-13	OFU	BA	7	613	NON
11/12/2016	HAZ-13	OJU	UN	3	1,123	NON
3/9/2016	HOU-23	OTF	BA	3	145	NON
3/10/2016	HOU-23	OCO	TV	1,347	205,733	MEJ
3/30/2016	HOU-23	UFJ	EF	54	11,233	NON
6/5/2016	HOU-23	UPT	EF	1	242	NON
7/25/2016	HOU-23	OTF	BA	4	534	NON
10/14/2016	HOU-23	OFU	UN	8	9,395	MEJ
3/13/2016	HOU-25	OCO	TV	1	1,680	MEJ
3/14/2016	HOU-25	OCO	TV	13	12,849	NMJ
4/20/2016	HOU-25	OCO	TV	4	1,564	NON
5/4/2016	HOU-25	UPC	DU	1	38	NON
6/5/2016	HOU-25	UTC	BA	7	593	NON
7/8/2016	HOU-25	OPO	EF	3	452	NON
7/8/2016	HOU-25	OFC	EF	26	1,425	NON
7/27/2016	HOU-25	OFU	BA	3	458	NON
9/4/2016	HOU-25	OFU	BA	4	621	NON
10/4/2016	HOU-25	OFU	BA	5	579	NON
10/5/2016	HOU-25	OTF	BA	4	480	NON
10/8/2016	HOU-25	UPT	EF	3	693	NON
10/8/2016	HOU-25	OCO	TV	480	52,440	NON
10/9/2016	HOU-25	OCO	EF	499	32,894	NON

10/30/2016	HOU-25	UPC	EF	7	1,218	NON
11/14/2016	HOU-25	UTC	BA	1	13	NON
1/16/2016	KWH-22	USV	EF	1	361	NON
3/13/2016	KWH-22	OCO	TV	747	902,675	MEJ
3/25/2016	KWH-22	USV	UN	1	113	NON
4/14/2016	KWH-22	USC	EF	1	172	NON
7/12/2016	KWH-22	USC	EF	1	352	NON
10/14/2016	KWH-22	OTF	UN	11	2,838	MEJ
11/14/2016	KWH-22	OCN	EF	1	238	NON
1/12/2016	KWH-23	OSV	CE	1	71	NON
2/19/2016	KWH-23	OTF	TV	1	66	NON
2/28/2016	KWH-23	OCN	EF	1	270	NON
3/13/2016	KWH-23	OCO	TV	2	2,051	MEJ
3/17/2016	KWH-23	USV	DU	1	347	NON
5/15/2016	KWH-23	OTR	BA	193	15,585	NON
5/27/2016	KWH-23	OTF	BA	1	118	NON
6/21/2016	KWH-23	USC	EF	1	366	NON
7/13/2016	KWH-23	USV	EF	1	779	NON
7/18/2016	KWH-23	OTF	TV	9	714	NON
8/10/2016	KWH-23	OFU	BA	23	1,462	NON
8/10/2016	KWH-23	USV	EF	1	116	NON
9/1/2016	KWH-23	UPC	EF	6	2,772	NON
9/1/2016	KWH-23	UPC	EF	6	2,208	NON
9/8/2016	KWH-23	UPC	EF	6	3,664	NON
11/24/2016	KWH-23	USC	EF	1	189	NON
11/24/2016	KWH-23	USV	EF	1	1,096	NON
11/26/2016	KWH-23	OTF	TV	5	272	NON
12/19/2016	KWH-23	OCO	EF	193	80,748	NON
1/9/2016	KWH-25	OTR	EF	6	149	NON
1/11/2016	KWH-25	OCO	UN	1,818	531,594	NON
2/16/2016	KWH-25	USV	UN	1	179	NON
3/1/2016	KWH-25	OCO	TV	11	3,962	MEJ
3/4/2016	KWH-25	OTR	BA	4	881	NON
5/10/2016	KWH-25	USC	UN	1	89	NON
6/17/2016	KWH-25	UPC	UN	6	1,819	NON
6/20/2016	KWH-25	OTR	TV	1	93	NON
7/3/2016	KWH-25	UTC	BA	14	1,223	NON
7/8/2016	KWH-25	OFU	CP	128	34,327	NON
8/16/2016	KWH-25	UFJ	EF	65	14,749	NON
9/12/2016	KWH-25	USV	EF	1	178	NON
10/26/2016	KWH-25	USV	FI	1	701	NON
10/31/2016	KWH-25	OFU	TV	19	1,892	NON
11/18/2016	KWH-25	OCO	TV	10	1,889	NON
12/14/2016	KWH-25	USC	OD	7	5,486	NON
12/19/2016	KWH-25	OCO	UN	5	1,910	NON
12/23/2016	KWH-25	USV	EF	1	419	NON
11/1/2016	KWH-26	PMF	BA	1	131	NON
2/16/2016	LHL-22	OFU	EF	822	47,498	NON
3/13/2016	LHL-22	OCO	TV	6	8,462	MEJ
9/25/2016	LHL-22	OTR	BA	52	13,151	NON
10/17/2016	LHL-22	OFU	TV	6	627	NON
11/10/2016	LHL-22	OSV	UN	1	186	NON
2/15/2016	LHL-23	UTR	UN	9	5,097	NON

2/17/2016	LHL-23	USE	EF	1	264	NON
3/10/2016	LHL-23	OCO	TV	76	6,260	MEJ
7/4/2016	LHL-23	OCN	FI	14	937	NON
4/1/2016	LHL-25	UPC	EF	5	417	NON
4/1/2016	LHL-25	UPC	EF	2	168	NON
4/1/2016	LHL-25	UPC	EF	74	11,815	NON
4/19/2016	LHL-25	OSV	TV	1	115	NON
5/26/2016	LHL-25	UPC	EF	71	15,585	NON
6/19/2016	LHL-25	UPC	EF	28	7,299	NON
6/19/2016	LHL-25	UPC	EF	23	3,425	NON
7/27/2016	LHL-25	OTF	BA	103	10,836	NON
7/27/2016	LHL-25	OTF	BA	8	603	NON
7/30/2016	LHL-25	OTF	BA	7	698	NON
8/30/2016	LHL-25	UPC	UN	48	20,200	NON
8/31/2016	LHL-25	UTR	EF	19	3,402	NON
9/19/2016	LHL-25	OTF	UN	3	219	NON
11/2/2016	LHL-25	UTR	EF	1	389	NON
11/2/2016	LHL-25	UTR	EF	2	458	NON
11/12/2016	LHL-25	OFU	TV	1	21	NON
11/20/2016	LHL-25	USE	UN	1	398	NON
11/20/2016	LHL-25	USE	EF	17	1,249	NON
12/3/2016	LHL-25	OTF	BA	4	437	NON
12/8/2016	LHL-25	OSV	OD	1	180	NON
12/17/2016	LHL-25	OTF	BA	8	921	NON
12/19/2016	LHL-25	OCO	EF	8	857	NON
12/19/2016	LHL-25	OCO	EF	193	12,075	NON
12/20/2016	LHL-25	OCO	EF	8	317	NON
12/27/2016	LHL-25	UTC	EF	142	5,065	NON
2/4/2016	LHL-26	OTF	EF	14	1,603	NON
3/2/2016	LHL-26	OSV	UN	1	138	NMJ
3/26/2016	LHL-26	OTF	FI	4	242	NON
8/15/2016	LHL-26	OJU	BA	552	57,575	NON
9/28/2016	LHL-26	OSV	UN	1	124	NON
11/24/2016	LHL-26	USV	EF	1	161	NON
12/1/2016	LHL-26	UPT	EF	4	452	NON
3/2/2016	LOC-22	OCO	TV	4	1,542	NMJ
9/5/2016	LOC-22	UPC	EF	15	1,779	NON
3/10/2016	LOC-23	UTC	TV	142	9,062	MEJ
3/10/2016	LOC-23	UTC	TV	98	1,060	MEJ
3/10/2016	LOC-23	UTF	TV	165	8,003	MEJ
3/10/2016	LOC-23	UTC	TV	158	6,968	MEJ
4/25/2016	LOC-23	UPS	OE	3	26	NON
4/25/2016	LOC-23	UPS	OE	1	2	NON
2/8/2016	LOC-33	OFU	UN	7	477	NON
12/28/2016	LOC-35	UPC	EF	23	1,457	NON
1/30/2016	MED-35	UPC	BA	6	391	NON
2/8/2016	MED-35	USV	EF	1	164	NON
2/9/2016	MED-35	USV	EF	1	283	NON
3/13/2016	MED-35	OCO	TV	16	15,053	MEJ
7/15/2016	MED-35	OFU	TV	2	276	NON
12/25/2016	MED-35	OPO	AC	1	145	NON
12/26/2016	MED-35	OPO	AC	1	672	NON
1/7/2016	MED-36	USV	DU	8	1,101	NON

2/28/2016	MED-36	OCO	TV	671	48,705	NON
5/11/2016	MED-36	UPC	EF	43	8,801	NON
5/18/2016	MED-36	OTF	BA	1	54	NON
5/18/2016	MED-36	OTF	BA	207	13,189	NON
6/30/2016	MED-36	OSV	TV	1	132	NON
9/6/2016	MED-36	OCO	AC	675	116,566	NON
10/9/2016	MLK-12	OFC	EF	3	268	NON
10/23/2016	MLK-12	UTR	EF	57	5,677	NON
11/30/2016	MLK-12	UTR	EF	22	3,994	NON
11/30/2016	MLK-12	UTR	EF	41	4,785	NON
11/30/2016	MLK-12	UTR	EF	12	3,209	NON
7/30/2016	MLK-13	UPC	EF	198	32,249	NON
8/29/2016	MLK-13	PMF	FI	1	128	NON
11/1/2016	MLK-13	UPC	EF	57	18,454	NON
11/30/2016	MLK-13	UGF	EF	56	15,228	NON
11/30/2016	MLK-13	UTR	EF	5	1,242	NON
2/21/2016	MLK-15	UPC	EF	74	9,783	NON
7/16/2016	MLK-15	UPT	EF	258	44,460	NON
7/16/2016	MLK-15	OCN	UN	1	129	NON
7/19/2016	MLK-15	OTF	EF	3	230	NON
8/29/2016	MLK-15	OFU	EF	13	3,435	NON
9/18/2016	MLK-15	UPC	EF	43	12,326	NON
9/23/2016	MLK-15	OCO	TV	16	1,560	NON
10/11/2016	MLK-15	UFJ	EF	81	15,552	NON
10/11/2016	MLK-15	UFJ	EF	116	874	NON
10/14/2016	MLK-15	OCO	TV	32	623	MEJ
12/23/2016	MLK-15	OFC	EF	2	335	NON
3/17/2016	MLK-16	UTR	EF	156	16,261	NON
5/1/2016	MLK-16	UEL	EF	75	17,799	NON
7/24/2016	MLK-16	UPC	EF	111	22,630	NON
9/2/2016	MLK-16	USV	EF	1	147	NON
9/14/2016	MLK-16	USV	UN	1	177	NON
9/29/2016	MLK-16	UHH	EF	5	874	NON
12/2/2016	MLK-16	UTR	EF	9	4,003	NON
6/9/2016	NOB-12	UPC	DU	16	2,302	NON
6/16/2016	NOB-13	UPC	EF	5	80	NON
5/17/2016	NOB-23	ACE	OE	1	68	NON
8/4/2016	NOB-23	UTC	BA	24	2,310	NON
9/22/2016	NOB-23	UTC	BA	18	1,101	NON
11/9/2016	NOB-23	OPO	EF	18	4,032	NON
7/7/2016	NOB-24	OTF	BA	5	211	NON
7/12/2016	NOB-24	OTF	BA	3	145	NON
9/30/2016	NOB-24	OSV	AC	1	288	NON
10/18/2016	NOB-24	OJU	UN	1	153	NON
11/28/2016	NOB-24	OTF	EF	5	330	NON
12/6/2016	NOB-24	OCE	CE	1	76	NON
3/1/2016	NRU-23	OCO	TV	4	1,632	MEJ
3/27/2016	NRU-23	USV	EF	1	176	NON
4/24/2016	NRU-23	UPC	UN	27	11,056	NON
5/9/2016	NRU-23	UPC	UN	58	7,619	NON
6/10/2016	NRU-23	OFU	UN	3	641	NON
7/1/2016	NRU-23	UPC	EF	117	15,218	NON
7/5/2016	NRU-23	OTF	BA	2	239	NON

7/20/2016	NRU-23	UPC	UN	27	13,122	NON
8/10/2016	NRU-23	USC	DU	1	66	NON
8/24/2016	NRU-23	USC	FI	1	315	NON
9/2/2016	NRU-23	UPC	EF	8	45	NON
9/2/2016	NRU-23	UPC	UN	67	51,617	NON
9/2/2016	NRU-23	UPC	EF	0	482	NON
10/10/2016	NRU-23	UTC	BA	4	262	NON
10/11/2016	NRU-23	UTC	UN	4	330	NON
11/3/2016	NRU-23	OSV	AC	2	451	NON
2/19/2016	NRU-25	USV	EF	1	603	NON
5/20/2016	NRU-25	USV	EF	1	267	NON
9/22/2016	NRU-25	UPC	EF	81	13,279	NON
11/14/2016	NRU-25	USV	EF	1	601	NON
3/23/2016	NRU-26	OJU	EF	1	207	NON
10/16/2016	NRU-26	OFU	UN	1	151	NMJ
11/12/2016	NRU-26	OFU	FI	1	302	NON
3/13/2016	NRU-27	OCO	TV	24	35,746	MEJ
3/28/2016	NRU-27	OMP	CE	1	128	NON
5/2/2016	NRU-27	UFJ	EF	193	58,375	NON
5/8/2016	NRU-27	UFJ	EF	183	25,211	NON
5/8/2016	NRU-27	UFJ	EF	2	364	NON
5/9/2016	NRU-27	OTR	BA	13	1,742	NON
5/9/2016	NRU-27	OPO	EF	22	3,253	NON
10/7/2016	NRU-27	OFU	TV	9	864	NON
10/7/2016	NRU-27	OFU	TV	28	2,213	NON
11/22/2016	NRU-27	OTR	EF	7	1,176	NON
3/13/2016	OVE-12	OCO	TV	1,568	152,631	MEJ
3/13/2016	OVE-12	OCO	TV	585	21,674	MEJ
4/13/2016	OVE-12	UPT	AC	8	4,409	NON
6/21/2016	OVE-12	USC	EF	1	166	NON
7/7/2016	OVE-12	USV	UN	1	340	NON
8/26/2016	OVE-12	UPT	EF	7	1,895	NON
12/15/2016	OVE-12	UPT	CP	5	666	NON
1/30/2016	OVE-12 ¹	UTC	BA	546	39,972	NON
3/7/2016	OVE-15	OFU	UN	16	1,762	NON
3/10/2016	OVE-15	OFC	EF	4	1,621	MEJ
3/13/2016	OVE-15	OCO	TV	661	18,288	MEJ
3/23/2016	OVE-15	UTR	DU	13	1,767	NON
4/24/2016	OVE-15	OAR	LI	1	111	NON
5/2/2016	OVE-15	OFU	TV	4	733	NON
5/8/2016	OVE-15	OTF	TV	1	112	NON
5/25/2016	OVE-15	OFU	TV	6	233	NON
6/18/2016	OVE-15	OPO	CP	843	122,279	NON
7/13/2016	OVE-15	OTR	BA	3	994	NON
11/6/2016	OVE-15	UPC	EF	1	526	NON
1/30/2016	OVE-15 ¹	UTC	BA	665	48,683	NON
1/3/2016	PHA-13	OTR	UN	3	920	NON
1/29/2016	PHA-13	OTF	EF	7	422	NON
2/1/2016	PHA-13	UPT	CP	3	306	NON
2/19/2016	PHA-13	OCO	EF	5	283	NON
3/13/2016	PHA-13	OTF	TV	2	2,642	MEJ
3/13/2016	PHA-13	OCO	TV	145	78,235	MEJ
4/3/2016	PHA-13	OFC	EF	9	4,177	NON

6/15/2016	PHA-13	OAR	BA	1	308	NON
9/27/2016	PHA-13	OCN	UN	17	7,505	NON
10/11/2016	PHA-13	OTF	BA	3	248	NON
10/28/2016	PHA-13	OCO	TV	11	436	NON
11/12/2016	PHA-13	OSV	TV	5	226	NON
11/15/2016	PHA-13	OCO	TV	3	294	NON
11/15/2016	PHA-13	OCO	TV	9	1,706	NON
12/22/2016	PHA-13	USC	EF	1	216	NON
12/31/2016	PHA-13	OTF	BA	6	767	NON
4/30/2016	PHA-15	OTR	UN	6	2,000	NON
10/8/2016	PHA-15	OFC	EF	38	5,862	NON
1/11/2016	PHA-16	OFU	FI	20	1,364	NON
1/25/2016	PHA-16	SWD	EF	2,063	165,727	NON
3/13/2016	PHA-16	OCO	TV	1,369	622,142	MEJ
3/13/2016	PHA-16	OCO	UN	57	47,774	MEJ
5/19/2016	PHA-16	OTR	LI	8	3,568	NON
6/6/2016	PHA-16	OTF	BA	2	127	NON
6/19/2016	PHA-16	OCN	EF	1	665	NON
6/27/2016	PHA-16	UPC	EF	8	3,837	NON
7/2/2016	PHA-16	OSV	EF	1	120	NON
7/7/2016	PHA-16	UGV	EF	99	14,725	NON
8/5/2016	PHA-16	OFU	BA	21	2,282	NON
9/8/2016	PHA-16	OSV	UN	1	73	NON
9/8/2016	PHA-16	UPC	EF	95	7,145	NON
10/8/2016	PHA-16	OTR	EF	6	2,589	NON
10/14/2016	PHA-16	OFU	TV	35	8,066	MEJ
10/30/2016	PHA-16	OSV	EF	7	771	NON
12/8/2016	PHA-16	OSV	OD	1	312	NON
12/15/2016	PHA-16	OMP	FI	1	47	NON
2/19/2016	PHA-17	OCO	TV	1	69	NON
3/11/2016	PHA-17	OFU	TV	39	4,848	NMJ
3/13/2016	PHA-17	OCO	TV	36	46,702	MEJ
3/13/2016	PHA-17	OCO	TV	121	155,598	MEJ
3/18/2016	PHA-17	USV	EF	4	502	NON
5/3/2016	PHA-17	OTF	UN	16	1,049	NON
6/6/2016	PHA-17	OFC	EF	9	852	NON
8/31/2016	PHA-17	OFU	EF	80	9,640	NON
11/6/2016	PHA-17	OPO	EF	699	86,771	NON
1/6/2016	ROS-17	USV	EF	1	5	NON
1/11/2016	ROS-17	OCN	UN	1	224	NON
3/14/2016	ROS-17	PMF	UN	64	56,237	NMJ
3/14/2016	ROS-17	PMF	EF	1	461	NMJ
3/29/2016	ROS-17	PMF	UN	49	9,186	NON
4/19/2016	ROS-17	UPT	EF	16	2,400	NON
4/19/2016	ROS-17	UPT	EF	0	40	NON
5/18/2016	ROS-17	USV	EF	1	580	NON
7/1/2016	ROS-17	UPC	EF	80	21,471	NON
7/9/2016	ROS-17	UJU	EF	104	17,170	NON
7/17/2016	ROS-17	PMF	BA	49	5,121	NON
11/2/2016	ROS-17	UPC	EF	4	2,131	NON
11/2/2016	ROS-17	UPC	EF	46	3,364	NON
12/29/2016	ROS-17	OCO	AC	107	20,616	NON
3/2/2016	SBE-22	OTF	EF	5	551	NMJ

3/13/2016	SBE-22	OCO	TV	1	1,688	MEJ
5/27/2016	SBE-22	OFU	BA	3	365	NON
10/7/2016	SBE-22	OCO	TV	412	54,164	NON
10/9/2016	SBE-22	OSV	TV	6	1,171	NON
3/13/2016	SBE-23	UTC	TV	169	83,621	MEJ
3/14/2016	SBE-23	UTC	TV	82	379	NMJ
3/14/2016	SBE-23	OCO	TV	3	559	NMJ
3/14/2016	SBE-23	OCO	TV	9	637	NMJ
3/14/2016	SBE-23	OCO	EF	232	20,050	NMJ
5/24/2016	SBE-23	OTF	BA	6	353	NON
6/3/2016	SBE-23	OTF	TV	3	329	NON
6/3/2016	SBE-23	OTF	TV	1	74	NON
6/12/2016	SBE-23	OTF	EF	8	302	NON
6/19/2016	SBE-23	USV	UN	1	176	NON
11/11/2016	SBE-23	USV	EF	1	55	NON
11/22/2016	SBE-23	USV	DU	6	411	NON
3/13/2016	SBE-25	OCO	TV	20	27,631	MEJ
4/4/2016	SBE-25	OSV	TV	1	158	NON
6/29/2016	SBE-25	OCO	UN	2	247	NON
7/13/2016	SBE-25	OSV	AC	1	174	NON
7/28/2016	SBE-25	OSV	TV	8	789	NON
8/20/2016	SBE-25	UPC	EF	52	9,184	NON
11/12/2016	SBE-25	OFU	UN	2	386	NON
2/15/2016	SBE-26	OTF	EF	6	416	NON
2/18/2016	SBE-26	OSV	EF	1	365	NON
3/10/2016	SBE-26	OCO	TV	70	5,983	MEJ
3/15/2016	SBE-26	OSV	UN	1	115	NMJ
3/21/2016	SBE-26	PTF	TV	21	1,205	NON
4/20/2016	SBE-26	USV	EF	1	206	NON
6/9/2016	SBE-26	OTF	BA	4	692	NON
6/14/2016	SBE-26	OCN	FI	1	49	NON
7/10/2016	SBE-26	OTF	BA	2	247	NON
8/4/2016	SBE-26	OTF	BA	6	742	NON
8/22/2016	SBE-26	OSV	TV	1	212	NON
8/23/2016	SBE-26	OTF	BA	2	97	NON
10/15/2016	SBE-26	OTF	TV	7	3,095	MEJ
2/8/2016	SOM-13	USV	UN	1	141	NON
3/13/2016	SOM-13	OCO	TV	1,173	477,294	MEJ
9/22/2016	SOM-13	UPC	EF	4,187	532,796	NON
1/19/2016	SOM-15	UHH	EF	1	561	NON
2/1/2016	SOM-15	USV	DU	1	487	NON
2/11/2016	SOM-15	USV	UN	1	188	NON
3/13/2016	SOM-15	OCO	TV	1,795	734,814	MEJ
4/14/2016	SOM-15	OJU	BA	1	275	NON
7/6/2016	SOM-15	UPT	EF	54	7,215	NON
7/6/2016	SOM-15	UPT	EF	25	7,575	NON
7/24/2016	SOM-15	UPC	EF	8	1,021	NON
7/24/2016	SOM-15	UPC	EF	80	13,381	NON
7/30/2016	SOM-15	UPT	UN	86	34,133	NON
7/30/2016	SOM-15	UGF	AC	124	2,806	NON
10/17/2016	SOM-15	USV	UN	1	254	NMJ
11/1/2016	SOM-15	USV	FI	1	176	NON
11/16/2016	SOM-15	USV	DU	1	871	NON

3/13/2016	SOM-16	OCO	TV	1,336	558,916	MEJ
3/28/2016	SOM-16	OCN	EF	1	81	NON
4/14/2016	SOM-16	OJU	BA	95	28,765	NON
4/21/2016	SOM-16	USV	EF	1	225	NON
5/15/2016	SOM-16	OPO	AC	52	4,424	NON
5/16/2016	SOM-16	OFU	BA	128	14,313	NON
5/30/2016	SOM-16	OFU	BA	82	12,892	NON
6/13/2016	SOM-16	OTF	BA	5	219	NON
7/10/2016	SOM-16	OTF	BA	2	90	NON
7/17/2016	SOM-16	OCN	EF	1	171	NON
7/26/2016	SOM-16	USV	FI	1	584	NON
8/22/2016	SOM-16	OMP	UN	1	137	NON
9/17/2016	SOM-16	SCB	TV	2,523	218,787	NON
9/17/2016	SOM-16	SCB	TV	2,523	298,680	NON
10/6/2016	SOM-16	UPC	UN	20	12,770	NON
10/10/2016	SOM-16	USC	UN	1	198	NON
10/17/2016	SOM-16	USV	EF	1	512	NON
10/18/2016	SOM-16	UTR	EF	6	2,498	NON
11/14/2016	SOM-16	USC	UN	1	297	NON
11/27/2016	SOM-16	OCO	TV	2,611	305,009	NON
2/1/2016	SOM-17	OTF	UN	3	193	NON
2/19/2016	SOM-17	USC	UN	1	348	NON
3/7/2016	SOM-17	USV	EF	9	1,849	NON
3/13/2016	SOM-17	OCO	TV	4,346	1,776,216	MEJ
3/13/2016	SOM-17	OCO	TV	1	298	MEJ
3/27/2016	SOM-17	UPT	BA	151	939	NON
3/27/2016	SOM-17	UPT	BA	257	28,084	NON
7/8/2016	SOM-17	OCO	TV	3,058	178,841	NON
7/10/2016	SOM-17	UTC	BA	37	2,821	NON
7/25/2016	SOM-17	UPC	EF	3,052	365,529	NON
7/27/2016	SOM-17	OTF	BA	1	134	NON
8/15/2016	SOM-17	USV	EF	1	154	NON
8/29/2016	SOM-17	USC	EF	1	387	NON
9/17/2016	SOM-17	SCB	TV	86	10,112	NON
10/9/2016	SOM-17	OCO	EF	275	71,019	NON
12/12/2016	SOM-17	OSV	TV	1	61	NON

Totals	81,498	16,486,548
Totals excluding substation & transmission outages	4,149	403,070

- 1 Animal in substation took transformer bank out of service
- 2 FAC-23 was tied to COL-24 when COL went out of service this date

MEJ Not included in SAIDI or SAIFI calculations
MEN Not included in SAIDI calculation, included in SAIFI calculation
NMJ Included in SAIDI calculation, not included in SAIFI calculation

2016 RELIABILITY REPORT CODES LEGEND

DISTRIBUTION SUBSTATION CODES	OUTAGE CAUSE CODES
ARD ARDMORE (REDMOND)	AC ACCIDENT
BTR BRIDLE TRAILS	BA BIRD OR ANIMAL
CEN CENTER	CE CUSTOMER EQUIPMENT
CLY CLYDE HILL	CP CAR POLE
COL COLLEGE	DU DIG UP UNDERGROUND
EGT EASTGATE	EF EQUIPMENT FAILURE
EVE EVERGREEN (REDMOND)	EO ELECTRICAL OVERLOAD
FAC FACTORIA	EQ EARTHQUAKE
GOO GOODES CORNER (ISSAQUAH)	FI FAULTY INSTALLATION
HAZ HAZELWOOD (NEWCASTLE)	LI LIGHTNING
HOU HOUGHTON (KIRKLAND)	OD OUTSIDE DISTURBANCE
KWH KENILWORTH (REDMOND)	OE OPERATING ERROR
LHL LAKE HILLS	PO PARTIAL OUTAGE
LOC LOCHLEVEN	TF TREE - OFF RIGHT OF WAY
MED MEDINA (MEDINA)	TO TREE - ON RIGHT OF WAY
MLK MIDLAKES	TV TREE - RIGHT OF WAY UNKNOWN
NOB NORTH BELLEVUE	UII USER - IMPROPER INSTALLATION
NRU NORTHRUP	UN UNKNOWN CAUSE
OVE OVERLAKE (MEDINA)	VA VANDALISM
PHA PHANTOM LAKE	
ROS ROSE HILL (REDMOND)	
SBE SOUTH BELLEVUE	
SOM SOMERSET	
	EVENT CODES
	MEJ IEEE MAJOR EVENT DAY & MAJOR STORM
	MEN IEEE MAJOR EVENT DAY - NON STORM
	NMJ NON IEEE MAJOR EVENT DAY - MAJOR STORM
	NON NON IEEE MAJOR EVENT DAY - NON STORM
EQUIPMENT CODES	
ACE ALL CUSTOMER EQUIPMENT	OTR OVERHEAD TRANSFORMER
ARR SURGE ARRESTER	OTS OVERHEAD TRAFFIC CONTROL SIGNAL
CC CAPACITOR CAN	OUP OVERHEAD TO UNDERGROUND
CDH CONDUCTOR DOWN & HOT	OUS HOT OUS OVERHEAD TO
CFD CAPACITOR BANK FUSED DISCONNECT	PED DISCONNECT PEDESTAL
CHG CHARGER	PFT PADMOUNT FAST TRANSFORMER (EDUT130)
CON CONNECTIONS	PMF PADMOUNT SWITCH FUSE
CTX TRANSFORMER INSTRUMENT (CURRENT)	PMJ PADMOUNT J-BOX
DNO DID NOT OPERATE	PMP PADMOUNT METER POINT (EDUM100)
ELT ELBOW - TRANSFORMER	PST PADMOUNT STEP TRNSFORMER (EDUT120)
ERC RECLOSER CONTROLLER	PTF PADMOUNT TRANSFORMER FUSE
FCC FUSE - CAPACITOR CAN	PTX PADMOUNT TRANSFORMER INSTRUMENT
FHV FUSE - HIGH VOLTAGE (POWER)	RLE RELAY - ELECTROMECHANICAL
FLV FUSE - LOW VOLTAGE (CONTROL)	RLM RELAY - MICROPROCESSOR
GAR GUY ANCHOR ROD	RLS RELAY - SOLID STATE
GCB GAS CIRCUIT BREAKER (POWER)	SCB POWER CIRCUIT BREAKER
INS INSULATOR	SPT STATION POWER TRANSFORMER
LTC LOAD TAP CHANGER	SRG STATION REGULATOR
MAN MANUAL OPERATION	SWC SWITCH - CAPACITOR BANK
MOT MOTOR OPERATOR	SWD SWITCH - DISTRIBUTION DISCONNECT
MTR METER	SWT SWITCH - TRANSMISSION
OAL OVERHEAD AREA LIGHT	TER TERMINATION (POWER CABLE)
OAN OVERHEAD ANCHOR	UCU UNDERGROUND COMMUNICATION CABLE
OAR OVERHEAD ARRESTER	UDC UNDERGROUND DUST CAP
OAT OVERHEAD AUTO TRANSFORMER (EDOT110)	UEL UNDERGROUND ELBOW
OCA OVERHEAD CAPACITOR (EDOC100)	UFE UNDERGROUND FUSED ELBOW
OCB CIRCUIT BREAKER (POWER) - OIL	UFI UNDERGROUND FAULT INDICATOR
OCE CUSTOMER EQUIPMENT	UFJ UNDERGROUND J-BOX
OCN OVERHEAD SECONDARY CONNECTOR	UFO UNDERGROUND FIBER OPTICS
OCO OVERHEAD CONDUCTOR	UFS UNDERGROUND FIRE SIGNAL
OCR OVERHEAD CROSSARM	UGF UNDERGROUND SUBMERSIBLE FUSE
OFC OVERHEAD CUT-OUT	UGV UNDERGROUND VAULT
OFI OVERHEAD FAULT INDICATOR	UHH UNDERGROUND HANDHOLE - SECONDARY
OFL OVERHEAD FLOOD LIGHT	UHM UNDERGROUND HAMMERHEADS
OFS OVERHEAD FIRE SIGNAL	UIC UNDERGROUND INDOOR STRESS CONE
OFU OVERHEAD LINE FUSE / FUSE LINK	UJU UNDERGROUND PRIMARY JUMPER
OGD OVERHEAD DOWN GUY	UMP UNDERGROUND SUBMERSIBLE METER POINT
OGS OVERHEAD SPAN GUY	UNK UNDERGROUND UNKNOWN
OHR OVERHEAD RECLOSER (EDOR100)	UOT UNDERGROUND OUTDOOR TERMINATION
OHS OVERHEAD SECTIONALIZER (EDOX100)	UPC UNDERGROUND PRIMARY CABLE
OIN OVERHEAD INSULATOR	UPH UNDERGROUND PADMOUNT PHASE SHIFTER
OJU OVERHEAD JUMPER WIRE	UPS UNDERGROUND PADMOUNT SWITCH (EDUS100)
OMP OVERHEAD METER POINT (EDOM100)	UPT UNDERGROUND PADMOUNT TRANSFORMER
ONI OVERHEAD NEUTRAL ISOLATOR	USC UNDERGROUND SECONDARY CABLE
OPB OVERHEAD POLE BRACE (EDOP110)	USE UNDERGROUND SECONDARY CONNECT
OPI OVERHEAD INSULATOR PIN	USP UNDERGROUND PRIMARY SPLICE
OPO OVERHEAD POLE (EDOP100)	USS UNDERGROUND SCHOOL SIGNAL
OPS OVERHEAD POLE STUB (EDOP120)	USV UNDERGROUND SERVICE
ORE OVERHEAD REGULATOR (EDOG100)	UTC UNDERGROUND TERMINAL FUSE
OSL OVERHEAD STREET LIGHT (EDOL100)	UTF UNDERGROUND SUBMERSIBLE TRANSFORMER FUSE
OSP OVERHEAD SPLICE PRIMARY	UTR UNDERGROUND SUBMERSIBLE TRANSFORMER
OSS OVERHEAD SCHOOL SIGNAL	UTS UNDERGROUND TRAFFIC CONTROL SIGNAL
OST OVERHEAD STEP TRANSFORMER (EDOT110)	UUS UNDERGROUND SUBMERSIBLE
OSV OVERHEAD SERVICE	VCB VACUUM CIRCUIT BREAKER (POWER)
OSW OVERHEAD SWITCH (EDOS100)	XFR TRANSFORMER - UNKNOWN TYPE
OTF OVERHEAD TRANSFORMER FUSE	XRT NEUTRAL REACTOR
OTH OVERHEAD OTHER	XSS TRANSFORMER - STATION SERVICE