

# Circuit Reliability Review

# **Thousand Oaks**

January 2017

# Providing Safe, Reliable, and Affordable Power

Southern California Edison is modernizing the power grid to meet the changing needs and expectations of our customers and to help California achieve its clean energy goals.

We are investing more than \$12 billion into our power grid between 2015 – 2017 with the goal of increasing power reliability through significant upgrades. These investments include:

- Updating thousands of transmission and distribution poles
- Replacing hundreds of miles of underground cables
- Replacing hundreds of underground structures such as vaults and manholes
- Upgrading critical distribution equipment; capacitor banks, switches, and circuit breakers
- Building new distribution circuits to serve electrical demands in our communities
- Inspecting and replacing overhead conductor and equipment to improve public safety

Our investments in local communities will help ensure that customers receive safe, reliable, and affordable electricity now and in the future.

# **Understanding Your Reliability Report**

As your electric utility, we want you to always have power when you need it. To get there, we constantly track and monitor electric outages across our service territory, and we measure our "system reliability" from this data.

The two metrics we rely on are common in the electric utility industry: the System Average Interruption Duration Index (SAIDI) and the System Average Interruption Frequency Index (SAIFI). Both are described in more detail on the next page.

Replacing and upgrading our infrastructure will help SCE maintain or improve SAIDI and SAIFI measurements.

This report provides historical reliability data for the circuits that serve your jurisdiction and our proposed infrastructure upgrades for the current year.

To view other reliability reports, visit <a href="sce.com">sce.com</a>>Outage Center>Maintaining Reliable Service

# Reliability Metrics

**MOMENTARY OUTAGES:** 

**OUTAGES LASTING 5 MINUTES OR LESS** 

#### MAIFI:

 The number of times the average customer is interrupted by Momentary outages each year.

### **SUSTAINED OUTAGES:**

**OUTAGES LASTING LONGER THAN 5 MINUTES** 

#### SAIFI:

 The number of times the average customer is interrupted by Sustained outages each year.

### SAIDI:

 The cumulative amount of time the average customer is interrupted by Sustained outages each year.

### **Cities in the Thousand Oaks District**

Agoura Hills

Calabasas

Casa Conejo

Hidden Hills

Los Angeles

Malibu

Moorpark

Oak Park

Simi Valley

**Thousand Oaks** 

Westlake Village

### Reliability by SCE District (No Exclusions)

		20	12			20:	13			20	14			20	15			20	16	
	District	SAIDI	District	SAIFI																
District Name	SAIDI	RANKING	SAIFI	Ranking																
ANTELOPE VALLEY	78.60	28	0.56	31	94.42	22	0.62	31	51.05	35	0.59	34	104.34	22	0.68	30	107.67	24	0.87	29
ARROWHEAD	129.58	13	1.31	7	180.59	7	1.39	8	193.25	5	1.59	5	362.61	4	3.97	1	659.46	3	2.85	5
BARSTOW	184.80	7	1.15	12	204.33	6	1.40	7	201.53	4	1.34	10	187.11	8	1.17	12	134.83	18	1.35	9
BIG CREEK	1184.25	1	4.52	1	176.51	8	3.08	1	920.25	1	1.34	11	422.77	2	3.42	2	1062.01	2	4.99	1
BISHOP	463.09	2	1.25	9	104.44	17	0.51	35	118.79	17	0.59	35	298.11	6	2.22	4	168.59	8	1.22	14
BLYTHE	225.88	6	1.53	3	483.13	1	1.38	9	707.54	2	2.42	2	427.00	1	1.52	7	396.38	5	2.71	6
CATALINA	78.46	30	0.72	29	105.94	16	2.97	2	97.02	24	4.17	1	42.56	35	2.25	3	65.01	35	3.66	3
COVINA	108.73	19	0.92	19	100.51	19	0.86	20	91.60	27	0.87	22	100.08	23	0.81	25	112.13	22	0.97	24
DOMINGUEZ HILLS	117.22	18	0.82	24	89.17	26	0.80	21	82.30	29	0.71	28	130.63	15	0.97	17	146.38	12	1.11	17
FOOTHILL	91.69	25	0.90	20	85.80	27	0.79	24	93.35	25	0.93	21	109.64	20	0.95	20	142.81	14	1.03	21
FULLERTON	68.99	33	0.42	35	90.57	25	0.79	22	82.23	30	0.72	27	76.59	29	0.67	31	92.72	30	0.76	34
HUNTINGTON BEACH	95.78	23	0.89	21	66.51	32	0.68	29	79.61	31	0.78	25	98.32	25	0.95	19	128.02	20	1.26	12
KERNVILLE	226.76	5	1.31	6	232.18	4	1.96	3	178.69	8	1.99	3	286.38	7	0.96	18	2421.32	1	3.67	2
LONG BEACH	75.83	31	0.55	33	75.11	30	0.70	28	66.33	34	0.61	32	164.46	9	0.89	23	135.16	17	0.86	31
MENIFEE	99.32	22	0.84	23	107.39	15	1.26	10	156.68	11	1.32	12	111.46	19	0.98	16	156.75	9	1.31	10
MONROVIA	108.11	20	1.13	15	99.12	20	1.02	16	133.32	14	1.16	16	96.68	26	0.88	24	116.57	21	0.84	32
MONTEBELLO	131.06	12	1.13	14	118.08	13	1.17	12	158.34	10	1.16	15	150.28	12	1.18	11	133.52	19	1.17	15
ONTARIO	93.09	24	0.87	22	77.39	29	0.79	23	97.91	23	1.00	19	94.04	27	0.74	27	105.07	27	0.93	27
PALM SPRINGS	175.92	8	1.27	8	112.80	14	0.77	25	107.04	20	0.71	29	99.54	24	0.80	26	107.58	25	1.07	19
REDLANDS	120.13	16	1.11	16	96.48	21	1.04	15	154.25	12	1.04	18	124.52	17	1.01	14	137.11	16	0.98	23
RIDGECREST	229.65	4	1.44	4	161.95	9	1.12	13	176.84	9	1.57	6	148.90	13	1.01	15	254.31	6	1.05	20
SADDLEBACK	83.01	27	0.73	27	70.69	31	0.53	34	99.07	22	0.74	26	46.03	34	0.39	35	65.99	34	0.65	35
SAN JOAQUIN	135.90	10	1.04	18	244.44	2	1.45	6	138.25	13	1.17	14	127.50	16	1.05	13	108.44	23	1.09	18
SANTA ANA	78.60	29	0.55	32	93.35	24	0.74	26	91.68	26	0.84	23	67.46	32	0.71	29	97.27	29	1.00	22
SANTA BARBARA	153.81	9	1.15	13	82.00	28	0.70	27	183.78	7	1.38	9	152.37	11	1.52	6	156.66	10	1.41	8
SANTA MONICA	101.69	21	0.79	25	122.78	12	1.00	17	110.76	19	0.99	20	75.41	30	0.62	32	91.08	31	0.95	26
SOUTH BAY	122.68	15	1.17	10	142.15	10	1.49	5	125.28	16	1.39	8	164.07	10	1.31	8	183.90	7	1.88	7
TEHACHAPI	117.96	17	1.43	5	232.67	3	1.12	14	130.70	15	1.29	13	298.96	5	1.21	9	97.29	28	1.13	16
THOUSAND OAKS	127.73	14	1.05	17	93.86	23	0.91	18	104.37	21	1.10	17	106.59	21	0.92	21	143.78	13	1.31	11
VALENCIA	62.01	35	0.46	34	51.04	34	0.53	33	79.23	32	0.61	33	72.27	31	0.61	33	105.09	26	0.97	25
VENTURA	134.81	11	1.15	11	100.52	18	1.21	11	183.79	6	1.65	4	148.85	14	1.19	10	150.41	11	1.24	13
VICTORVILLE	67.70	34	0.66	30	61.33	33	0.63	30	68.85	33	0.63	31	87.03	28	0.91	22	79.35	33	0.92	28
WHITTIER	72.60	32	0.74	26	135.04	11	0.86	19	87.60	28	0.70	30	114.52	18	0.73	28	137.34	15	0.81	33
WILDOMAR	88.54	26	0.72	28	40.51	35	0.56	32	118.49	18	0.81	24	52.70	33	0.60	34	84.01	32	0.87	30
YUCCA VALLEY	319.82	3	3.41	2	216.97	5	1.50	4	304.25	3	1.49	7	389.08	3	1.80	5	463.68	4	3.39	4
SCE SystemWide	108.13		0.89		102.61		0.91		112.00		0.96		114.83		0.92		134.48		1.10	

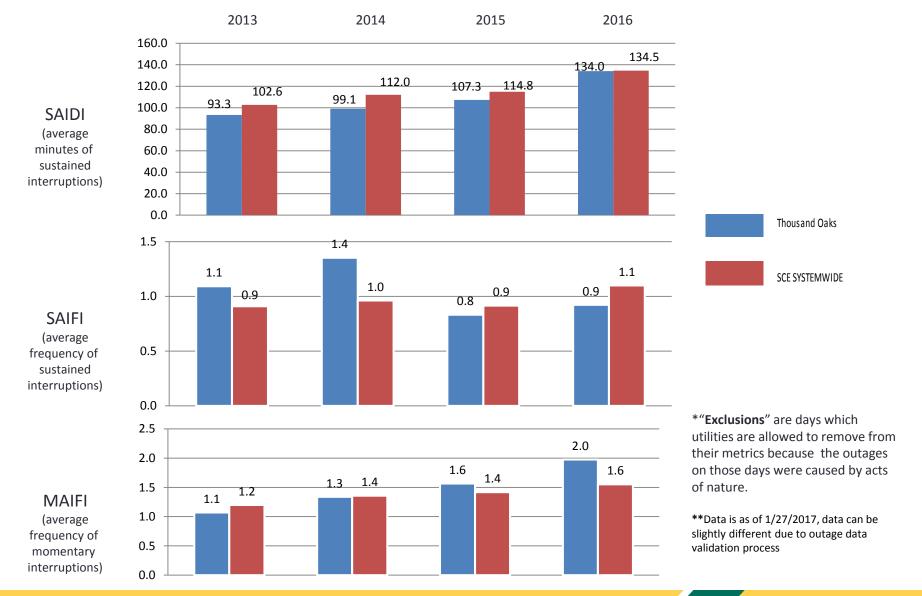
<sup>\*&</sup>quot;Exclusions" are days which utilities are allowed to remove from their metrics because the outages on those days were caused by a severe acts of nature.

<sup>\*\*</sup>In the columns showing "Rank," lower numbers indicate poorer performance.

# Overview of Thousand Oaks There are 37 circuits that serve Thousand Oaks

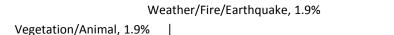
Circuit Type	Sum of Customers	Circuit Type	Sum of Customers	Circuit Type	Sum of Customers	Circuit Type	Sum of Customers
ACADEMY(16KV)	668	SHOPPING(16KV)	1,839				
AMBERCREST(16KV)	1,823	SPLENDOR(16KV)	2,283				
BELPAC(16KV)	2,778	TALLEY(16KV)	3,410				
BIRCHWOOD(16KV)	520	TOWNSGATE(16KV)	1,589				
BORCHARD(16KV)	1,322	VAQUERO(16KV)	661				
BRENNAN(16KV)	2,495	WHITECLIFF(16KV)	2,789				
BYER(16KV)	2,110	WOODHAVEN(16KV)	1,653				
CADENA(16KV)	1,185						
CONIFER(16KV)	3,219						
COVENTRY(16KV)	1,154						
CRESTHAVEN(16KV)	1,819						
DEVINE(16KV)	3,348						
EVITA(16KV)	2,569						
GOLDSMITH(16KV)	2,629						
HACIENDA(16KV)	2,775						
HAMPSHIRE(16KV)	3,095						
HILLCREST(16KV)	1,932						
HOOLIGAN(16KV)	3,709						
INTREPID(16KV)	3,083						
JOHNBOY(16KV)	1,340						
LA MANCHA(16KV)	2,193						
LA VACA(16KV)	1,229						
LANGER(16KV)	1,684						
LESSER(16KV)	418						
LUNA(16KV)	1,075						
MORGANSTEIN(16KV)							
PAMPAS(16KV)	1,517						
PATRIOT(16KV)	2,628						
PRADO(16KV)	235						
SHENANDOAH(16KV)	1,752						
<b>Grand Total</b>	72,574						

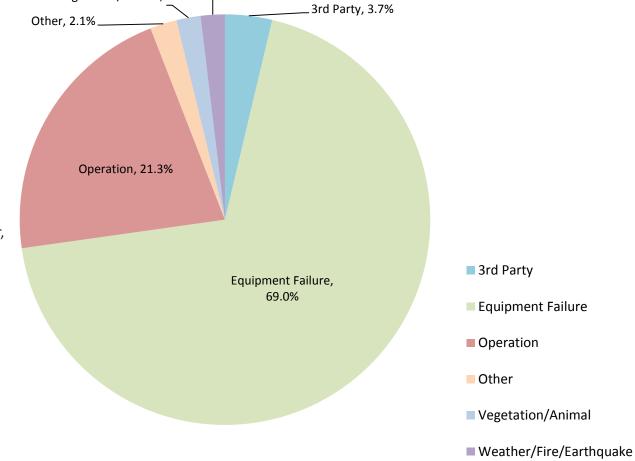
# Reliability History of Circuits Serving Thousand Oaks (No Exclusions)



# Causes of Repair Outages in Thousand Oaks Circuits 2016 YTD

### **Contributions to SAIDI by Outage Cause**





Equipment Failure

e.g., in-service failure of transformer, switch, or conductors

■Vegetation/Animal

e.g., tree branch, rodent, or bird causing a short circuit between conductors

Other

e.g., patrolled but no cause found

Operations

e.g., urgent maintenance w/o 3-day notice

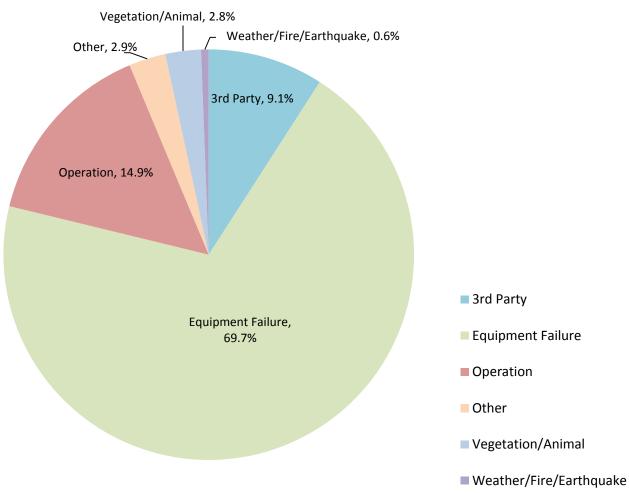
■ 3<sup>rd</sup> Party

e.g., balloon, car hit pole, dig-in

**SAIDI** = the cumulative amount of time the average customer is interrupted by "sustained" outages each year.

# Causes of Repair Outages in Thousand Oaks Circuits 2016 YTD

### **Contributions to SAIFI by Outage Cause**



Equipment Failure

e.g., in-service failure of transformer, switch, or conductors

■Vegetation/Animal

e.g., tree branch, rodent, or bird causing a short circuit between conductors

Other

e.g., patrolled but no cause found

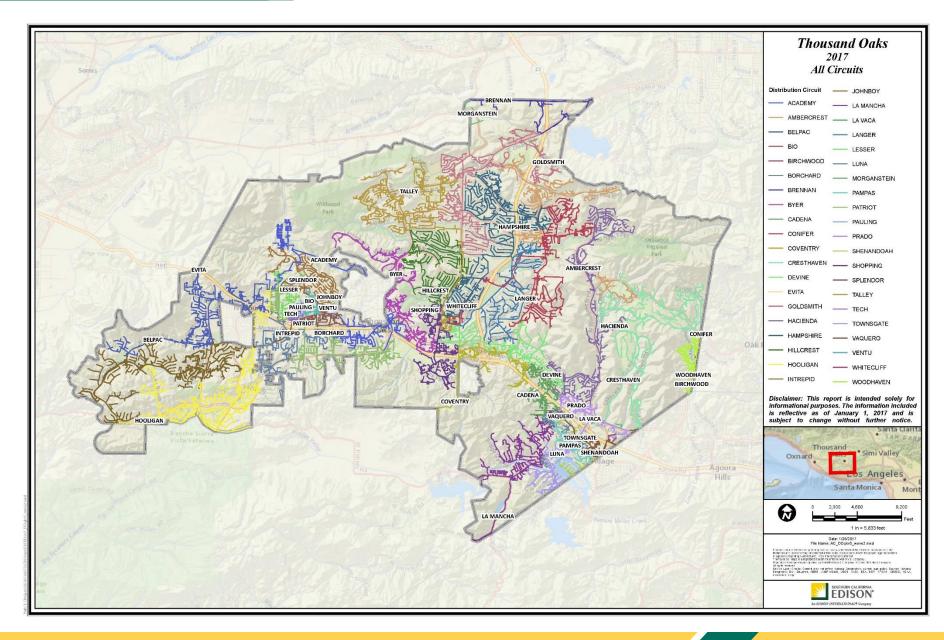
Operations

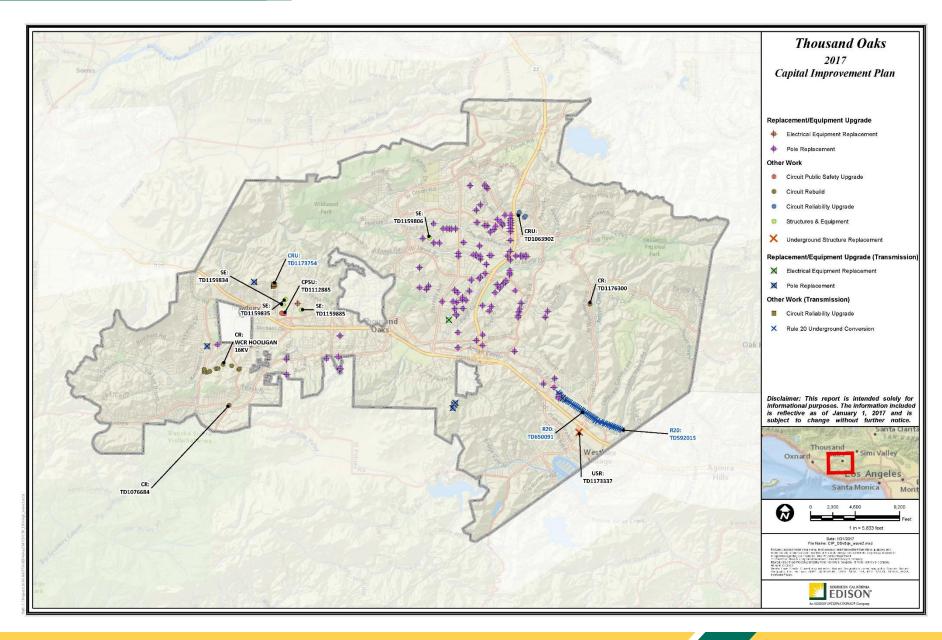
e.g., urgent maintenance w/o 3-day notice

■ 3<sup>rd</sup> Party

e.g., balloon, car hit pole, dig-in

**SAIFI** = the number of times the average customer is interrupted by "sustained" outages each year.





# **Back-up Slides**

**Reliability Histories of Circuits Serving Thousand Oaks** 

**Updated through Year-End 2016** 

### **Average Reliability of 37 Circuits Serving Thousand Oaks**

		2013			2014			2015		1st	Qtr 20	16	2nc	Qtr 2	016	3ra	Qtr 2	016	4th	Qtr 20	016		2016	
	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIF
Thousand Oaks	93.3	1.1	1.1	99.1	1.4	1.3	107.3	0.8	1.6	28.4	0.2	0.3	22.0	0.2	0.6	61.2	0.3	0.5	22.5	0.2	0.5	134.0	0.9	2.0
3rd Party	2%	1%	15%	3%	7%	7%	1%	2%	3%	0%	0%	3%	21%	34%	2%	0%	1%	0%	0%	0%	0%	4%	9%	1%
Equipment Failure	53%	49%	53%	70%	67%	26%	88%	88%	31%	87%	83%	31%	61%	46%	24%	64%	70%	26%	69%	85%	7%	69%	70%	21%
Operation	9%	16%	8%	11%	10%	3%	8%	6%	5%	4%	9%	0%	11%	10%	7%	36%	29%	6%	13%	5%	56%	21%	15%	19%
Other	8%	13%	9%	8%	10%	16%	1%	2%	22%	0%	0%	24%	6%	8%	7%	0%	0%	0%	7%	3%	11%	2%	3%	9%
Vegetation/Animal	0%	0%	2%	0%	0%	42%	0%	0%	38%	8%	7%	43%	1%	1%	53%	0%	0%	69%	1%	6%	26%	2%	3%	48%
Weather/Fire/Earthquake	28%	21%	14%	8%	6%	6%	1%	2%	0%	1%	1%	0%	0%	0%	7%	0%	0%	0%	11%	2%	0%	2%	1%	2%
SCE Systemwide	102.6	0.9	1.2	112.0	1.0	1.4	114.8	0.9	1.4	40.5	0.3	0.4	34.8	0.3	0.4	29.4	0.2	0.3	29.8	0.3	0.4	134.5	1.1	1.6

#### Notes:

No outages are excluded from the metrics.

#### **Outage Causes:**

Other: e.g., patrolled but no cause could be found

Operations: e.g., urgent maintenance w/o 3-day notice to customers

3rd Party: e.g., balloons, car hit pole, dig-in

Vegetation/Animal: e.g., tree branch, rodent, or bird causing short circuit across conductors

SAIDI (minutes) = the cumulative amount of time the average customer is interrupted by "sustained" (longer than 5 minutes) outages.

SAIFI (interruptions) = the number of times the average customer is interrupted by "sustained" outages.

MAIFI (interruptions) = the number of times the average customer is interrupted by "momentary" (lasting 5 minutes or less) outages.

		2013			2014			2015		1st	Qtr 20	16	2nd	Qtr 20	016	3rd	Qtr 20	16	4th	Qtr 20	016		2016	
	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI
ACADEMY(16KV) - Customers: 668	31.3	0.7	0.0	277.0	4.0	0.4	7.1	0.0	3.0	2.2	0.0	1.0	0.0	0.0	0.0	181.7	0.5	0.0	40.2	0.2	1.0	224.2	0.7	2.0
3rd Party	55%	16%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	17%	7%	0%	98%	99%	100%	64%	46%	49%	100%	100%	0%	0%	0%	0%	54%	50%	100%	0%	0%	0%	45%	37%	1%
Operation	12%	66%	0%	2%	1%	0%	36%	54%	0%	0%	0%	0%	0%	0%	0%	46%	50%	0%	0%	0%	100%	37%	36%	49%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	18%	26%	0%
Vegetation/Animal	16%	11%	0%	0%	0%	0%	0%	0%	51%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	49%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AMBERCREST(16KV) - Customers: 1,823	48.2	0.8	2.5	154.3	1.8	0.5	10.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd Party	0%	0%	40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	78%	89%	60%	100%	100%	73%	89%	94%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	22%	11%	0%	0%	0%	27%	11%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BELPAC(16KV) - Customers: 2,778	67.5	0.8	0.3	14.5	0.1	1.0	0.0	0.0	3.0	112.6	0.9	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	112.6	0.9	3.1
3rd Party	0%	0%	0%	62%	46%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	98%	93%	100%	30%	23%	0%	0%	0%	67%	100%	100%	52%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	35%
Operation	2%	7%	0%	8%	31%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	32%
Other	0%	0%	0%	0%	0%	100%	0%	0%	33%	0%	0%	48%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	32%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BIRCHWOOD(16KV) - Customers: 520	0.0	0.0	1.0	86.8	1.7	1.4	991.4	3.4	1.3	0.0	0.0	0.0	191.3	1.3	2.8	1.2	0.0	0.0	0.0	0.0	0.0	192.5	1.3	2.8
3rd Party	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	0%	97%	88%	100%	98%	96%	100%	0%	0%	0%	95%	79%	100%	0%	0%	0%	0%	0%	0%	95%	79%	100%
Operation	0%	0%	0%	3%	12%	0%	2%	4%	0%	0%	0%	0%	5%	21%	0%	100%	100%	0%	0%	0%	0%	5%	21%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

		2013			2014			2015		1st	<b>Qtr 20</b>	16	2nd	d Qtr 20	16	3rd	Qtr 20	16	4th	Qtr 20	016		2016	
	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI I	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI
BORCHARD(16KV) - Customers: 1,322	0.3	0.0	0.3	254.3	2.5	0.0	46.0	0.5	1.3	46.2	0.1	1.1	0.0	0.0	0.0	36.2	0.2	1.4	0.0	0.0	1.1	82.4	0.3	3.7
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	50%	100%	98%	0%	74%	52%	0%	100%	100%	0%	0%	0%	0%	0%	0%	70%	0%	0%	13%	56%	21%	31%
Operation	100%	100%	0%	0%	2%	0%	26%	48%	0%	0%	0%	0%	0%	0%	0%	100%	100%	9%	0%	0%	87%	44%	79%	30%
Other	0%	0%	50%	0%	0%	0%	0%	0%	11%	0%	0%	13%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	89%	0%	0%	87%	0%	0%	0%	0%	0%	21%	0%	0%	0%	0%	0%	35%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRENNAN(16KV) - Customers: 2,495	0.0	0.0	3.0	75.6	1.0	0.0	27.6	0.1	0.0	0.6	0.0	0.0	23.0	0.1	0.0	19.6	0.2	0.0	93.5	0.8	0.0	136.7	1.2	0.1
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	33%	0%	0%	0%	58%	44%	0%	0%	0%	0%	74%	80%	0%	100%	100%	0%	100%	100%	100%	95%	95%	55%
Operation	0%	0%	33%	0%	0%	0%	42%	56%	0%	100%	100%	100%	26%	20%	0%	0%	0%	0%	0%	0%	0%	5%	5%	45%
Other	0%	0%	33%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BYER(16KV) - Customers: 2,110	24.2	0.1	0.0	41.9	1.1	0.1	172.0	1.0	0.2	0.0	0.0	0.0	63.9	1.0	1.1	0.0	0.0	2.0	14.5	0.0	0.0	78.5	1.0	3.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	79%	55%	0%	95%	97%	100%	100%	100%	100%	0%	0%	0%	92%	97%	5%	0%	0%	0%	100%	100%	0%	94%	97%	2%
Operation	21%	45%	100%	5%	3%	0%	0%	0%	0%	0%	0%	0%	8%	3%	0%	0%	0%	0%	0%	0%	0%	6%	3%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	95%	0%	0%	100%	0%	0%	0%	0%	0%	98%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CADENA(16KV) - Customers: 1,185	80.8	1.7	5.5	10.9	0.1	2.0	52.4	1.0	0.0	1.5	0.1	0.0	113.9	1.0	0.0	0.0	0.0	0.0	71.1	0.7	0.3	186.5	1.8	0.3
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	98%	99%	82%	1%	2%	0%	100%	100%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	100%	100%	100%	99%	97%	100%
Operation	2%	0%	0%	99%	98%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	3%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	18%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

		2013			2014			2015		1st	Qtr 20	16	2nc	l Qtr 20	016	3rd	Qtr 20	016	4th	Qtr 20	016		2016	
	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI
CONIFER(16KV) - Customers: 3,219	67.0	0.7	1.3	143.0	1.4	0.9	16.7	0.1	0.0	0.0	0.0	0.0	23.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.6	0.3	0.0
3rd Party	0%	0%	74%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	97%	90%	26%	86%	82%	100%	95%	70%	0%	0%	0%	0%	73%	33%	0%	0%	0%	0%	0%	0%	0%	73%	33%	0%
Operation	3%	10%	0%	14%	18%	0%	5%	30%	0%	0%	0%	0%	27%	67%	100%	0%	0%	0%	0%	0%	0%	27%	67%	100%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
COVENTRY(16KV) - Customers: 1,154	275.5	3.8	1.2	130.2	4.1	3.4	96.9	2.6	5.6	315.3	0.7	1.7	120.8	1.7	2.7	74.5	0.5	0.0	69.3	2.0	0.5	579.8	5.0	4.9
3rd Party	9%	15%	0%	0%	0%	0%	28%	19%	18%	0%	0%	27%	58%	40%	27%	0%	3%	0%	0%	0%	0%	12%	14%	24%
Equipment Failure	51%	43%	54%	89%	76%	25%	14%	38%	0%	98%	94%	73%	3%	2%	0%	99%	96%	0%	96%	98%	0%	78%	63%	26%
Operation	2%	1%	0%	1%	0%	29%	12%	3%	0%	2%	6%	0%	0%	0%	0%	1%	1%	0%	4%	2%	0%	2%	2%	0%
Other	4%	27%	46%	10%	24%	16%	31%	21%	10%	0%	0%	0%	39%	58%	36%	0%	0%	0%	0%	0%	100%	8%	21%	30%
Vegetation/Animal	0%	0%	0%	0%	0%	29%	0%	0%	63%	0%	0%	0%	0%	0%	37%	0%	0%	0%	0%	0%	0%	0%	0%	20%
Weather/Fire/Earthquake	34%	15%	0%	0%	0%	0%	15%	18%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CRESTHAVEN(16KV) - Customers: 1,819	25.5	0.1	1.0	145.6	2.0	0.7	112.5	0.7	1.4	87.8	1.0	0.3	0.0	0.0	0.0	57.2	1.0	0.3	0.0	0.0	0.0	145.0	2.0	0.6
3rd Party	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	0%	0%	100%	100%	100%	0%	0%	0%	100%	100%	100%
Operation	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DEVINE(16KV) - Customers: 3,348	153.8	1.3	2.4	39.1	0.6	0.4	98.2	0.8	0.4	0.0	0.0	0.0	1.6	0.0	1.0	0.0	0.0	2.0	3.0	0.0	0.0	4.5	0.0	3.0
3rd Party	0%	0%	0%	97%	99%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	100%	100%	100%	1%	0%	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	65%	26%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	0%	0%	100%	0%	0%	0%	35%	74%	100%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

		2013			2014			2015		1st	Qtr 20:	16	2nd	Qtr 20	016	3rd	Qtr 20	16	4th	Qtr 20	016		2016	
	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI I	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI
EVITA(16KV) - Customers: 2,569	152.1	3.1	0.0	394.6	3.6	2.3	322.1	2.2	1.3	50.2	1.1	0.0	24.9	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	75.1	1.1	1.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	98%	99%	100%	75%	66%	57%	92%	96%	100%	100%	100%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%
Operation	2%	1%	0%	17%	5%	0%	8%	4%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Other	0%	0%	0%	8%	29%	43%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GOLDSMITH(16KV) - Customers: 2,629	104.8	1.7	3.1	40.1	1.0	0.9	7.3	0.0	0.0	88.1	0.3	0.0	0.0	0.0	1.0	2.1	0.0	2.0	4.3	0.0	1.0	94.5	0.4	4.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	80%	41%	35%	100%	100%	100%	90%	93%	0%	93%	84%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	92%	83%	0%
Operation	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	2%	3%	0%
Other	19%	59%	33%	0%	0%	0%	10%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%
Weather/Fire/Earthquake	0%	0%	32%	0%	0%	0%	0%	0%	0%	7%	16%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	6%	14%	0%
HACIENDA(16KV) - Customers: 2,775	9.5	0.0	0.0	42.0	1.5	2.0	52.4	0.7	0.0	0.0	0.0	0.0	34.0	0.3	0.0	336.2	1.2	0.4	0.0	0.0	0.0	370.1	1.5	0.4
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	100%	100%	0%	0%	0%	0%	32%	83%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	68%	96%	0%	68%	17%	0%	0%	0%	0%	83%	77%	0%	100%	100%	100%	0%	0%	0%	98%	96%	100%
Other	0%	0%	0%	32%	4%	0%	0%	0%	0%	0%	0%	0%	17%	23%	0%	0%	0%	0%	0%	0%	0%	2%	4%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
HAMPSHIRE(16KV) - Customers: 3,095	125.2	0.9	0.3	185.8	2.5	1.8	66.4	0.2	3.0	0.0	0.0	0.0	3.0	0.1	2.0	16.9	0.1	0.0	56.4	0.1	0.0	76.4	0.2	2.0
3rd Party	0%	0%	0%	8%	31%	0%	4%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	99%	98%	100%	12%	7%	1%	92%	63%	0%	0%	0%	0%	92%	65%	0%	99%	88%	0%	0%	0%	0%	26%	50%	0%
Operation	1%	2%	0%	0%	0%	0%	4%	29%	0%	0%	0%	0%	8%	35%	0%	1%	12%	0%	0%	0%	0%	1%	13%	0%
Other	0%	0%	0%	3%	2%	0%	0%	0%	35%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	55%	0%	0%	65%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	50%
Weather/Fire/Earthquake	0%	0%	0%	76%	60%	44%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	100%	100%	0%	74%	37%	50%

		2013			2014			2015		1st	Qtr 20	16	2nd	d Qtr 20	016	3rd	Qtr 20	016	4th	n Qtr 20	016		2016	
	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI
HILLCREST(16KV) - Customers: 1,932	342.5	5.0	3.0	101.3	1.0	3.1	119.3	0.9	2.1	334.9	0.8	1.2	10.0	0.0	1.0	3.9	0.0	2.0	51.5	1.0	1.0	400.3	1.9	5.2
3rd Party	0%	0%	33%	0%	0%	0%	11%	14%	48%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	0%	0%	0%	0%	71%	61%	52%	75%	41%	56%	0%	0%	0%	19%	6%	0%	100%	100%	0%	76%	71%	13%
Operation	29%	49%	0%	34%	47%	18%	3%	4%	0%	0%	0%	0%	10%	15%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	8%	3%	2%	14%	7%	0%	4%	4%	0%	0%	0%	0%	90%	85%	0%	81%	94%	0%	0%	0%	0%	3%	4%	0%
Vegetation/Animal	0%	0%	0%	1%	0%	32%	12%	16%	0%	25%	59%	44%	0%	0%	100%	0%	0%	100%	0%	0%	100%	21%	25%	87%
Weather/Fire/Earthquake	62%	49%	65%	51%	46%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
HOOLIGAN(16KV) - Customers: 3,709	470.9	4.4	0.4	107.9	3.0	1.2	164.3	1.4	1.1	17.0	0.1	0.0	8.8	0.1	0.0	52.5	0.3	0.0	11.2	0.0	1.0	89.5	0.5	1.0
3rd Party	0%	0%	0%	0%	0%	80%	0%	0%	0%	0%	0%	0%	0%	0%	0%	6%	10%	0%	0%	0%	0%	4%	5%	0%
Equipment Failure	1%	0%	3%	97%	99%	20%	88%	96%	0%	0%	0%	0%	0%	0%	0%	43%	22%	0%	100%	100%	0%	38%	21%	0%
Operation	6%	23%	0%	3%	1%	0%	12%	4%	0%	100%	100%	0%	100%	100%	0%	50%	68%	100%	0%	0%	100%	58%	73%	100%
Other	6%	20%	97%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	87%	56%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
INTREPID(16KV) - Customers: 3,083	3.8	0.6	0.2	54.9	0.5	0.2	20.2	0.1	2.0	0.0	0.0	1.0	20.3	1.0	0.0	11.0	0.1	0.0	0.0	0.0	1.0	31.3	1.1	2.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	93%	99%	0%	0%	0%	0%	0%	0%	0%	60%	90%	0%
Equipment Failure	0%	0%	0%	96%	94%	100%	80%	63%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	4%	6%	0%	20%	37%	0%	0%	0%	0%	7%	1%	0%	100%	100%	0%	0%	0%	100%	40%	10%	50%
Other	0%	0%	0%	0%	0%	0%	0%	0%	46%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	53%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%
Weather/Fire/Earthquake	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
JOHNBOY(16KV) - Customers: 1,340	0.0	0.0	0.0	0.8	0.0	0.0	9.7	0.1	1.0	2.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	356.9	2.7	1.3	359.5	2.8	1.3
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	47%	80%	7%	46%	77%	7%
Operation	0%	0%	0%	100%	100%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	38%	12%	77%	39%	16%	77%
Other	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	15%	8%	16%	15%	8%	16%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

		2013			2014			2015		1st	Qtr 20	16	2nd	l Qtr 20	016	3rd	Qtr 20	016	4th	Qtr 20	016		2016	
	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI
LA MANCHA(16KV) - Customers: 2,193	7.3	0.2	0.0	17.1	0.2	2.3	16.8	0.2	0.7	0.0	0.0	0.0	12.9	0.1	0.0	41.4	0.3	0.1	1.2	0.0	0.2	55.5	0.4	0.3
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	0%	42%	12%	0%	9%	1%	25%	0%	0%	0%	100%	100%	0%	100%	100%	100%	0%	0%	0%	98%	97%	42%
Operation	100%	100%	100%	38%	84%	0%	1%	0%	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	2%	3%	58%
Other	0%	0%	0%	19%	5%	6%	91%	98%	49%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	94%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
LA VACA(16KV) - Customers: 1,229	29.9	1.1	0.0	218.7	2.5	2.0	498.4	3.9	0.3	0.0	0.0	0.0	12.9	0.1	0.0	31.9	0.2	0.0	17.6	0.1	0.0	62.3	0.4	0.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	0%	100%	100%	0%	93%	96%	100%	0%	0%	0%	100%	100%	0%	0%	0%	0%	100%	100%	0%	49%	46%	0%
Operation	31%	10%	0%	0%	0%	0%	7%	4%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	51%	54%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	69%	90%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
LANGER(16KV) - Customers: 1,684	9.0	0.1	0.9	10.8	1.0	1.5	182.1	1.0	5.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	1.0
3rd Party	0%	0%	0%	98%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	0%	0%	0%	0%	95%	97%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	12%	9%	100%	2%	0%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	100%	100%	0%
Other	0%	0%	0%	0%	0%	28%	5%	3%	40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	88%	91%	0%	0%	0%	65%	0%	0%	60%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
LESSER(16KV) - Customers: 418	52.2	1.0	2.8	10.1	0.2	0.8	162.0	2.0	2.0	0.0	0.0	1.2	0.0	0.0	0.0	80.6	0.8	0.2	1.1	0.0	1.0	81.7	0.8	2.4
3rd Party	0%	0%	0%	0%	0%	0%	24%	51%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	100%	100%	100%	100%	100%	100%	0%	0%	50%	0%	0%	18%	0%	0%	0%	100%	100%	100%	0%	0%	0%	99%	97%	18%
Operation	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	1%	3%	41%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	82%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	41%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	76%	49%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

		2013			2014			2015		1st	Qtr 20	016	2nd	l Qtr 201	16	3rd	Qtr 20	16	4th	Qtr 20	016		2016	
	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI N	<b>IAIFI</b>	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI
LUNA(16KV) - Customers: 1,075	0.0	0.0	0.0	151.7	1.1	2.3	86.8	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	0%	90%	89%	15%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	10%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	85%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
MORGANSTEIN(16KV) - Customers: 2,046	232.3	2.4	3.1	148.5	2.1	4.1	20.4	0.1	4.7	9.4	0.1	1.0	108.7	1.1	0.0	4.6	0.0	0.0	0.2	0.0	0.0	122.9	1.2	1.0
3rd Party	0%	0%	0%	0%	0%	25%	0%	0%	0%	0%	0%	0%	91%	96%	0%	0%	0%	0%	0%	0%	0%	81%	85%	0%
Equipment Failure	29%	28%	67%	11%	11%	4%	68%	39%	0%	45%	13%	0%	6%	3%	0%	93%	93%	0%	55%	60%	0%	12%	7%	0%
Operation	0%	0%	33%	19%	8%	0%	30%	60%	0%	55%	87%	0%	0%	0%	0%	7%	7%	0%	0%	0%	0%	5%	7%	0%
Other	63%	70%	0%	70%	80%	71%	0%	0%	12%	0%	0%	100%	2%	1%	0%	0%	0%	0%	45%	40%	0%	2%	1%	100%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	2%	0%	88%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	8%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PAMPAS(16KV) - Customers: 1,517	46.6	0.6	2.2	309.9	2.5	2.3	173.8	1.8	2.9	0.0	0.0	0.0	0.0	0.0	0.0	38.4	0.1	0.0	124.4	0.7	0.3	162.8	0.9	0.3
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	100%	100%	100%	95%	89%	13%	100%	100%	100%	0%	0%	0%	0%	0%	0%	97%	58%	0%	100%	100%	100%	99%	93%	100%
Operation	0%	0%	0%	5%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	42%	0%	0%	0%	0%	1%	7%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	87%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PATRIOT(16KV) - Customers: 2,628	156.0	1.2	2.1	118.9	2.3	1.0	153.6	2.3	2.0	6.6	0.1	1.0	0.6	0.0	0.0	604.0	1.5	0.6	22.4	0.2	1.0	633.7	1.8	2.6
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	100%	100%	100%	80%	99%	0%	97%	97%	0%	86%	66%	0%	100%	100%	0%	99%	99%	57%	79%	56%	0%	98%	93%	13%
Operation	0%	0%	0%	20%	1%	0%	1%	2%	0%	14%	34%	0%	0%	0%	0%	1%	1%	43%	5%	40%	100%	1%	6%	48%
Other	0%	0%	0%	0%	0%	100%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	16%	4%	0%	1%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	49%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	39%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

		2013			2014			2015		1st	Qtr 20	16	2nc	l Qtr 20	016	3rd	Qtr 20	16	4th	Qtr 20	16		2016	
	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI
PRADO(16KV) - Customers: 235	185.7	0.9	1.4	51.0	0.1	3.8	72.2	1.3	1.6	0.0	0.0	0.0	37.7	0.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	37.7	0.2	1.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	72%	87%	31%	100%	100%	47%	100%	100%	100%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%
Operation	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	53%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	28%	13%	69%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
SHENANDOAH(16KV) - Customers: 1,752	56.3	0.9	0.0	3.4	0.0	2.0	121.0	1.2	0.3	0.1	0.0	0.0	23.7	0.1	0.0	61.1	1.2	0.1	0.0	0.0	0.0	84.9	1.2	0.1
3rd Party	52%	7%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	1%	1%	0%	100%	100%	0%	98%	99%	100%	0%	0%	0%	100%	100%	100%	91%	95%	100%	0%	0%	0%	93%	95%	100%
Operation	48%	92%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	9%	5%	0%	0%	0%	0%	7%	5%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
SHOPPING(16KV) - Customers: 1,839	73.7	0.6	0.9	8.1	0.2	1.0	211.4	1.2	2.0	8.6	0.1	0.0	19.0	0.1	1.0	13.2	0.1	0.0	11.1	0.1	0.0	52.0	0.3	1.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	100%	100%	100%	93%	99%	0%	100%	100%	0%	100%	100%	0%	98%	97%	3%	100%	100%	0%	100%	100%	0%	99%	99%	3%
Operation	0%	0%	0%	7%	1%	0%	0%	0%	0%	0%	0%	0%	2%	3%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	97%	0%	0%	0%	0%	0%	0%	0%	0%	97%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
SPLENDOR(16KV) - Customers: 2,283	30.6	0.1	0.0	94.3	1.0	0.0	182.5	1.7	5.1	10.9	0.1	0.1	29.1	0.4	3.5	85.4	1.4	0.6	5.4	0.4	2.0	130.9	2.2	6.1
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	1%	1%	0%	0%	0%	2%	1%	0%
Equipment Failure	100%	100%	0%	100%	100%	0%	51%	69%	22%	99%	99%	100%	100%	100%	72%	97%	98%	99%	0%	0%	0%	94%	81%	52%
Operation	0%	0%	0%	0%	0%	0%	49%	31%	55%	1%	1%	0%	0%	0%	0%	0%	1%	0%	0%	0%	50%	0%	1%	16%
Other	0%	0%	0%	0%	0%	0%	0%	0%	23%	0%	0%	0%	0%	0%	28%	0%	0%	0%	0%	0%	0%	0%	0%	16%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	50%	4%	17%	16%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

		2013			2014			2015		1st	Qtr 201	16	2nd	l Qtr 20	16	3rd	Qtr 20	016	4th	Qtr 20	016		2016	
	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI :	SAIFI I	MAIFI	SAIDI	SAIFI I	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI
TALLEY(16KV) - Customers: 3,410	120.7	1.4	1.0	21.9	0.3	1.0	1.3	0.0	2.0	0.0	0.0	0.0	1.9	0.0	2.0	64.3	0.4	1.2	2.9	0.0	3.0	69.0	0.4	6.2
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	76%	83%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	5%	50%	100%	100%	100%	0%	0%	0%	93%	95%	36%
Operation	24%	17%	0%	100%	100%	3%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	74%	33%	33%	3%	1%	16%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	33%	0%	0%	16%
Vegetation/Animal	0%	0%	0%	0%	0%	97%	0%	0%	100%	0%	0%	0%	93%	95%	50%	0%	0%	0%	26%	67%	33%	4%	4%	32%
Weather/Fire/Earthquake	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
TOWNSGATE(16KV) - Customers: 1,589	33.7	0.1	0.0	213.2	2.3	7.0	29.0	0.2	0.0	0.0	0.0	0.0	149.6	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	149.6	1.2	0.0
3rd Party	0%	0%	0%	0%	0%	0%	47%	45%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	0%	92%	95%	72%	24%	10%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%
Operation	100%	100%	100%	8%	5%	0%	29%	45%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	28%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
VAQUERO(16KV) - Customers: 661	0.0	0.0	0.0	0.0	0.0	2.8	154.6	3.4	0.6	0.0	0.0	0.0	0.0	0.0	0.0	143.8	0.8	1.2	61.5	1.6	2.6	205.3	2.4	3.9
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	0%	0%	0%	29%	100%	100%	100%	0%	0%	0%	0%	0%	0%	99%	92%	100%	100%	100%	100%	100%	98%	100%
Operation	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	8%	0%	0%	0%	0%	0%	2%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	71%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
WHITECLIFF(16KV) - Customers: 2,789	8.7	0.1	0.0	30.9	0.2	0.0	322.8	1.4	3.0	0.0	0.0	0.0	0.7	0.0	1.1	122.4	0.3	2.1	0.2	0.0	0.0	123.3	0.3	3.1
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	0%	39%	42%	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	1%	1%	0%	100%	100%	0%	1%	1%	0%
Operation	100%	100%	0%	61%	58%	0%	0%	0%	0%	0%	0%	0%	100%	100%	5%	99%	99%	3%	0%	0%	0%	99%	99%	4%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	95%	0%	0%	97%	0%	0%	0%	0%	0%	96%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

	2013			2014			2015			1st Qtr 2016			2nd Qtr 2016			3rd Qtr 2016			4th Qtr 2016			2016		
	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI
WOODHAVEN(16KV) - Customers: 1,653	43.2	0.3	1.1	0.0	0.0	0.0	2.2	0.0	0.0	9.1	0.1	0.0	0.0	0.0	0.0	7.7	0.0	0.0	0.0	0.0	0.0	16.8	0.1	0.0
3rd Party	32%	45%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	38%	25%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	54%	60%	0%
Operation	30%	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	46%	40%	0%
Other	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%