

# Circuit Reliability Review Perris

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 Menifee District

**Box Springs Mountain** 

**East Hemet** 

Good Hope

Hemet

Homeland

Idyllwild-Pine Cove

Juniper Flats

Lakeview

March Afb

Meadowbrook

Menifee

Moreno Valley

Mountain Center

Nuevo

**Perris** 

Riverside

San Jacinto

Valle Vista

Winchester

Woodcrest

### 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.

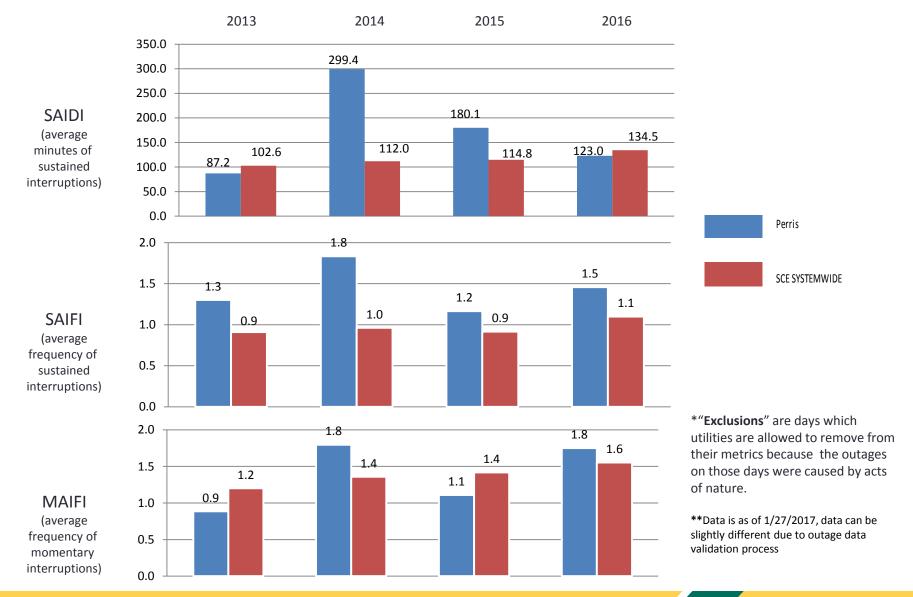
<sup>\*\*</sup>In the columns showing "Rank," lower numbers indicate poorer performance.

# **Overview of Perris**There are 25 circuits that serve Perris

Circuit Type	Sum of Customers	Circuit Type	Sum of Customers	Circuit Type	Sum of Customers	Circuit Type	Sum of Customers
AMMO(12KV)	1,654						
ARAPAHO(12KV)	1,106						
BAZOOKA(12KV)	1,064						
BLACKFOOT(12KV)	1,184						
CARBINE(12KV)	937						
CHANEY(12KV)	243						
CORPORAL(12KV)	2,464						
DEACON(12KV)	1,487						
ETHANAC(12KV)	1,498						
HAMMOCK(33KV)	5						
HARRIER(12KV)	1,973						
HELICOPTER(12KV)	2,619						
HERO(12KV)	1,450						
MAYER(33KV)	1						
NAPA(12KV)	1,090						
OAKDALE(12KV)	1,809						
OLIVER(33KV)	10						
PAWNEE(12KV)	2,634						
PERRIS(12KV)	598						
PLUMMER(12KV)	937						
RAMBO(12KV)	1,633						
SCALP(12KV)	247						
SOLDIER(12KV)	1,493						
STARGLOW(12KV)	2,172						
TRUMBLE(12KV)	573						

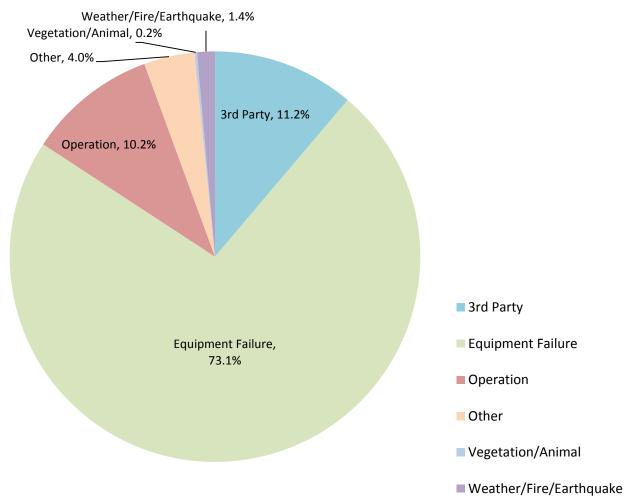
**Grand Total** 30,881

# Reliability History of Circuits Serving Perris (No Exclusions)



### Causes of Repair Outages in Perris 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

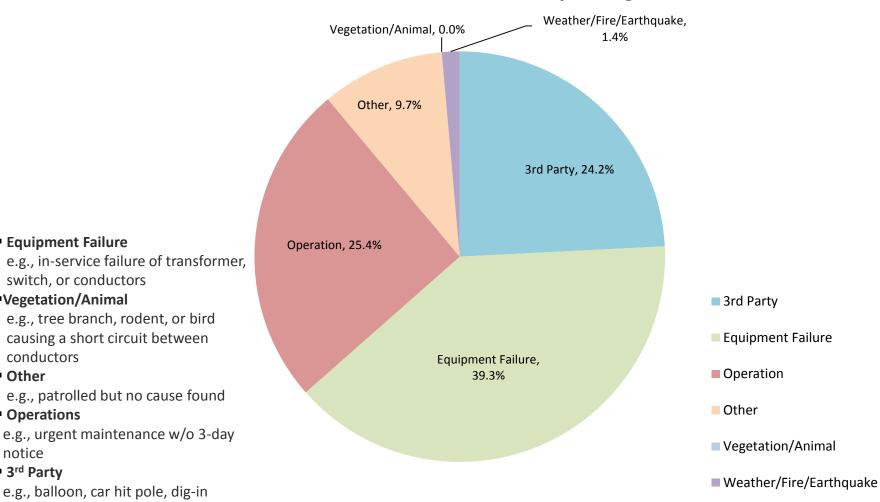
#### ■ 3<sup>rd</sup> Party

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 Perris Circuits 2016 YTD

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



■ 3<sup>rd</sup> Party e.g., balloon, car hit pole, dig-in

causing a short circuit between

Equipment Failure

conductors

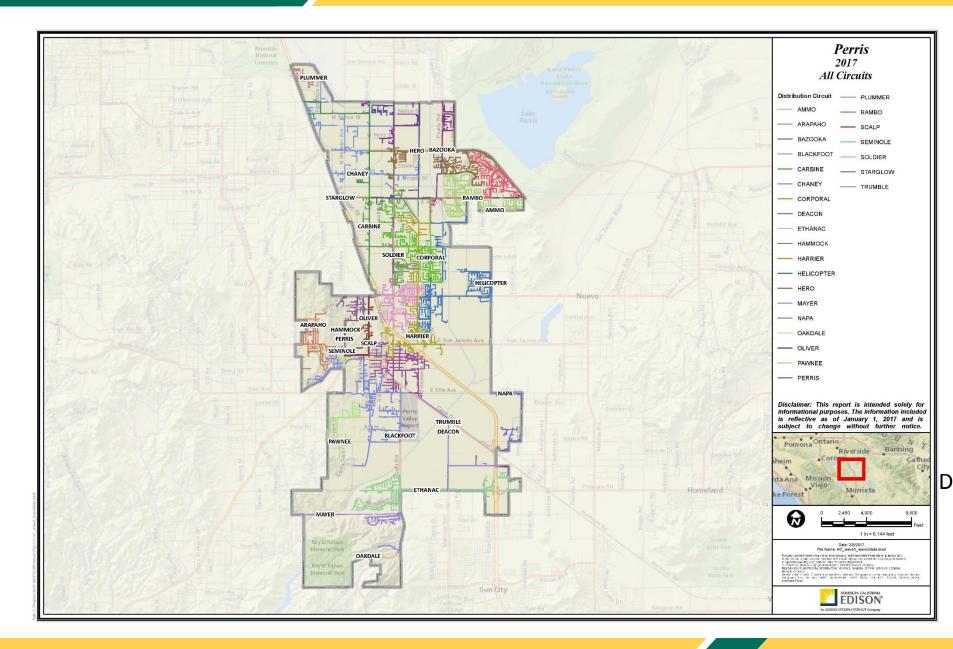
Operations

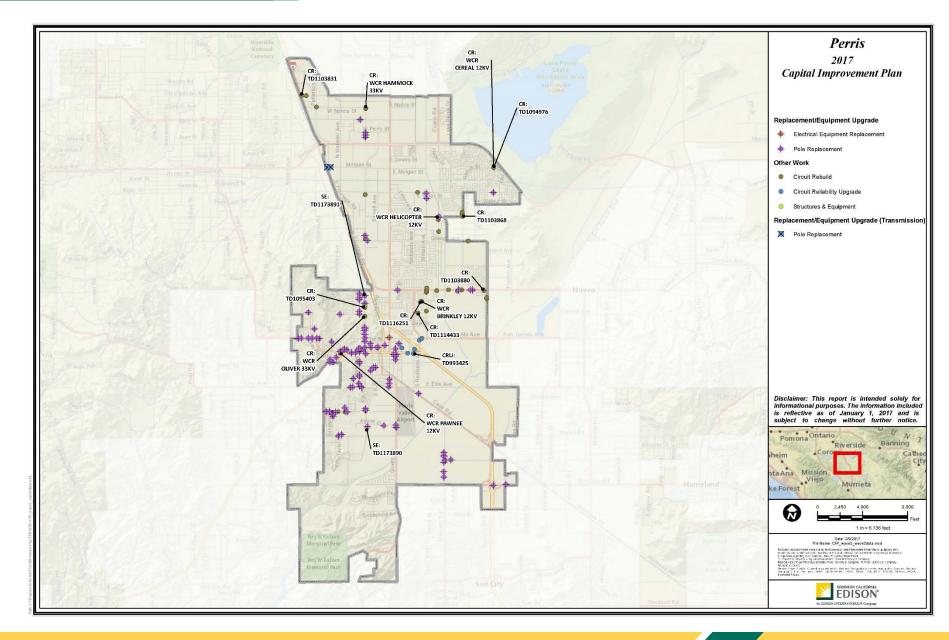
Other

notice

switch, or conductors ■Vegetation/Animal

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





# **Back-up Slides**

**Reliability Histories of Circuits Serving Perris** 

**Updated through Year-End 2016** 

### **Average Reliability of 25 Circuits Serving Perris**

		2013			2014			2015		1st	<b>Qtr 20</b>	16	2nd	l 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	MAIFI
Perris	87.2	1.3	0.9	299.4	1.8	1.8	180.1	1.2	1.1	9.2	0.3	1.0	69.9	0.6	0.3	17.2	0.3	0.3	26.6	0.2	0.1	123.0	1.5	1.8
3rd Party	40%	26%	26%	25%	42%	38%	5%	14%	8%	8%	18%	78%	7%	34%	22%	6%	12%	29%	27%	21%	38%	11%	24%	56%
Equipment Failure	37%	25%	30%	5%	9%	6%	16%	26%	10%	37%	32%	10%	90%	48%	45%	51%	12%	2%	55%	59%	33%	73%	39%	16%
Operation	20%	47%	2%	1%	5%	4%	3%	6%	16%	54%	50%	8%	2%	15%	0%	28%	43%	24%	6%	2%	0%	10%	25%	9%
Other	2%	2%	34%	60%	29%	39%	71%	34%	64%	0%	0%	5%	1%	2%	33%	4%	27%	39%	12%	18%	29%	4%	10%	17%
Vegetation/Animal	0%	0%	0%	0%	0%	12%	1%	13%	0%	0%	0%	0%	0%	0%	0%	2%	0%	6%	0%	0%	0%	0%	0%	1%
Weather/Fire/Earthquake	1%	0%	9%	10%	15%	2%	5%	8%	1%	0%	0%	0%	0%	0%	0%	10%	6%	0%	0%	0%	0%	1%	1%	0%
	·	•	•	•	•	•	·	,	•	·	•	•	·	•	•	•	•	•	·	·	•	•		
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

3<sup>rd</sup> 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	d 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
AMMO(12KV) - Customers: 1,654	1.5	0.0	0.0	0.7	0.0	0.0	26.3	0.1	1.0	0.7	0.1	1.9		0.0	0.0	1.4	0.0	0.0	3.6	0.0	0.0	5.8	0.1	1.9
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%	65%	100%
Equipment Failure	0%	0%	0%	0%	0%	0%	64%	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	100%	100%	0%	100%	100%	0%	25%	32%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	100%	100%	0%	87%	35%	0%
Other	0%	0%	0%	0%	0%	0%	11%	38%	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	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
ARAPAHO(12KV) - Customers: 1,106	133.1	4.0	1.0	818.6	3.0	3.0	1200.6	3.1	3.0	4.6	0.0	0.0	315.4	2.0	0.0	12.5	0.0	0.0	0.0	0.0	0.0	332.5	2.1	0.0
3rd Party	58%	25%	0%	9%	33%	67%	0%	0%	0%	100%	100%	0%	4%	51%	0%	0%	0%	0%	0%	0%	0%	5%	51%	0%
Equipment Failure	3%	0%	0%	9%	33%	0%	12%	35%	0%	0%	0%	0%	96%	49%	0%	39%	37%	0%	0%	0%	0%	93%	49%	0%
Operation	39%	75%	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%	100%	82%	34%	0%	88%	65%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	33%	0%	0%	0%	0%	0%	0%	0%	0%	0%	61%	63%	0%	0%	0%	0%	2%	1%	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%
BAZOOKA(12KV) - Customers: 1,064	62.1	2.0	4.9	524.8	4.2	12.0	10.2	1.1	1.1	0.0	0.0	1.0	0.0	0.0	1.0	1.5	0.0	0.1	0.0	0.0	0.0	1.5	0.0	2.1
3rd Party	0%	0%	20%	18%	29%	1%	69%	93%	0%	0%	0%	100%	0%	0%	0%	100%	100%	100%	0%	0%	0%	100%	100%	52%
Equipment Failure	100%	100%	80%	0%	0%	0%	12%	3%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	0%	0%	0%	18%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	82%	71%	99%	0%	0%	92%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	48%
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%
BLACKFOOT(12KV) - Customers: 1,184	146.9	4.0	1.0	871.0	4.0	5.1	25.8	1.0	1.0	0.0	0.0	0.0	383.0	3.0	1.0	12.7	1.0	1.0	0.0	0.0	1.0	395.6	4.0	3.0
3rd Party	52%	25%	0%	8%	25%	58%	0%	0%	0%	0%	0%	0%	2%	33%	0%	0%	0%	0%	0%	0%	100%	2%	25%	33%
Equipment Failure	0%	0%	0%	5%	25%	2%	36%	3%	0%	0%	0%	0%	98%	67%	0%	0%	0%	0%	0%	0%	0%	95%	50%	0%
Operation	33%	74%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	33%
Other	0%	0%	100%	86%	50%	20%	64%	97%	100%	0%	0%	0%	0%	0%	100%	100%	100%	0%	0%	0%	0%	3%	25%	33%
Vegetation/Animal	0%	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	14%	1%	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	d 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
CARBINE(12KV) - Customers: 937	45.8	1.1	2.0	28.8	1.0	2.0	17.2	0.1	1.0	0.0	0.0	2.0	42.5	0.2	1.0		1.0	1.0	50.7	1.0	0.0		2.2	4.0
3rd Party	28%	7%	50%	55%	2%	67%	9%	5%	0%	0%	0%	100%	0%	0%	100%	100%	100%	0%	100%	100%	0%	62%	90%	75%
Equipment Failure	72%	93%	50%	0%	0%	33%	72%	88%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	38%	10%	0%
Operation	0%	0%	0%	45%	98%	0%	2%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	17%	4%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	25%
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%
CHANEY(12KV) - Customers: 243	209.6	1.2	3.0	533.6	4.2	6.0	33.7	0.5	2.5	0.0	0.0	2.0	139.0	1.7	0.0	23.6	0.3	0.0	13.5	0.1	0.0	176.1	2.2	2.0
3rd Party	0%	0%	67%	46%	52%	67%	3%	5%	53%	0%	0%	100%	27%	8%	0%	0%	0%	0%	100%	100%	0%	29%	12%	100%
Equipment Failure	100%	100%	0%	54%	48%	0%	97%	95%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	0%	0%	33%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	13%	15%	0%
Other	0%	0%	33%	0%	0%	0%	0%	0%	40%	0%	0%	0%	73%	92%	0%	0%	0%	0%	0%	0%	0%	57%	73%	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%
CORPORAL(12KV) - Customers: 2,464	3.0	0.0	0.0	282.8	2.2	0.0	0.0	0.0	0.0	37.1	1.0	3.0	22.5	0.1	1.4	0.0	0.0	0.0	0.0	0.0	0.0	59.6	1.1	4.4
3rd Party	0%	0%	0%	98%	98%	0%	0%	0%	0%	0%	0%	67%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	46%
Equipment Failure	6%	2%	0%	0%	0%	0%	0%	0%	0%	100%	100%	33%	100%	100%	100%	0%	0%	0%	0%	0%	0%	100%	100%	54%
Operation	94%	98%	0%	2%	2%	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%
DEACON(12KV) - Customers: 1,487	235.0	2.3	1.6	5.5	0.3	0.9	196.4	3.9	0.8	0.0	0.0	0.0	93.9	1.6	1.6	25.3	2.0	0.1	67.3	0.8	0.0	186.5	4.3	1.7
3rd Party	26%	24%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	51%	0%	0%	0%	0%	0%	0%	0%	0%	49%
Equipment Failure	74%	76%	48%	0%	0%	0%	65%	46%	90%	0%	0%	0%	100%	100%	49%	31%	1%	0%	0%	0%	0%	54%	37%	46%
Operation	0%	0%	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	48%	51%	0%	0%	0%	0%	6%	23%	0%
Other	0%	0%	52%	0%	0%	0%	27%	28%	10%	0%	0%	0%	0%	0%	0%	22%	47%	100%	100%	100%	0%	39%	40%	5%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	8%	26%	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 SAIDI SAIFI MAIFI			2014			2015		1st	Qtr 20	16	2nd	d Qtr 20	016	3rd	Qtr 20	016	4th	Qtr 20.	16		2016	
	SAIDI	SAIFI I	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI I	MAIFI	SAIDI	SAIFI	MAIF
CARBINE(12KV) - Customers: 937	45.8	1.1	2.0	28.8	1.0	2.0	17.2	0.1	1.0	0.0	0.0	2.0	42.5	0.2	1.0		1.0	1.0		1.0		112.8	2.2	4.0
3rd Party	28%	7%	50%	55%	2%	67%	9%	5%	0%	0%	0%	100%	0%	0%	100%		100%	0%		100%	0%	62%	90%	75%
Equipment Failure	72%	93%	50%	0%	0%	33%	72%	88%	0%	0%	0%	0%		100%	0%	0%	0%	0%	0%	0%	0%	38%	10%	0%
Operation	0%	0%	0%	45%	98%	0%	2%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	17%	4%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	25%
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%
CHANEY(12KV) - Customers: 243	209.6	1.2	3.0	533.6	4.2	6.0	33.7	0.5	2.5	0.0	0.0	2.0	139.0	1.7	0.0	23.6	0.3	0.0	13.5	0.1	0.0	176.1	2.2	2.0
3rd Party	0%	0%	67%	46%	52%	67%	3%	5%	53%	0%	0%	100%	27%	8%	0%	0%	0%	0%	100%	100%	0%	29%	12%	100%
Equipment Failure	100%	100%	0%	54%	48%	0%	97%	95%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	0%	0%	33%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	13%	15%	0%
Other	0%	0%	33%	0%	0%	0%	0%	0%	40%	0%	0%	0%	73%	92%	0%	0%	0%	0%	0%	0%	0%	57%	73%	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%
CORPORAL(12KV) - Customers: 2,464	3.0	0.0	0.0	282.8	2.2	0.0	0.0	0.0	0.0	37.1	1.0	3.0	22.5	0.1	1.4	0.0	0.0	0.0	0.0	0.0	0.0	59.6	1.1	4.4
3rd Party	0%	0%	0%	98%	98%	0%	0%	0%	0%	0%	0%	67%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	46%
Equipment Failure	6%	2%	0%	0%	0%	0%	0%	0%	0%	100%	100%	33%	100%	100%	100%	0%	0%	0%	0%	0%	0%	100%	100%	54%
Operation	94%	98%	0%	2%	2%	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%
DEACON(12KV) - Customers: 1,487	235.0	2.3	1.6	5.5	0.3	0.9	196.4	3.9	0.8	0.0	0.0	0.0	93.9	1.6	1.6	25.3	2.0	0.1	67.3	0.8	0.0	186.5	4.3	1.7
3rd Party	26%	24%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	51%	0%	0%	0%	0%	0%	0%	0%	0%	49%
Equipment Failure	74%	76%	48%	0%	0%	0%	65%	46%	90%	0%	0%	0%	100%	100%	49%	31%	1%	0%	0%	0%	0%	54%	37%	46%
Operation	0%	0%	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	48%	51%	0%	0%	0%	0%	6%	23%	0%
Other	0%	0%	52%	0%	0%	0%	27%	28%	10%	0%	0%	0%	0%	0%	0%	22%	47%	100%	100%	100%	0%	39%	40%	5%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	8%	26%	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	d Qtr 20	16	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
ETHANAC(12KV) - Customers: 1,498	10.4	0.0	1.0	470.9	2.5	0.9	70.4	2.1	1.0	0.0	0.0	0.0	28.8	0.1	0.0	4.6	0.0	0.0	7.5	0.0	0.0	41.0	0.1	0.0
3rd Party	0%	0.0	0%	3%	37%	100%	78%	52%	0%	0.0	0.0	0.0	0%	0.1	0.0	0%	0.0	0.0		100%	0.0	18%	6%	0.0
Equipment Failure	100%	100%	0%	2%	2%	0%	0%	0%	0%	0%	0%	0%	98%	86%	0%	100%	•,-	0%	0%	0%	0%	80%		0%
Operation	0%	0%	0%	6%	23%	0%	3%	1%	0%	0%	0%	0%	2%	14%	0%	0%	0%	0%	0%	0%	0%	1%		0%
Other	0%	0%	100%	89%	38%	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%	20%	47%	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%
HAMMOCK(33KV) - Customers: 5	141.0	2.0	4.0	334.0	5.0	6.0	377.3	5.6	5.9	0.0	0.0	1.8	7.1	0.9	1.8	0.0	0.0	0.2	248.7	2.4	0.0	255.8	3.3	3.8
3rd Party	100%	100%	25%	68%	50%	75%	31%	55%	24%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	3%	27%	0%
Equipment Failure	0%	0%	25%	0%	0%	0%	0%	0%	5%	0%	0%	100%	0%	0%	0%	0%	0%	0%	55%	45%	0%	53%	33%	47%
Operation	0%	0%	0%	0%	0%	8%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	3%	9%	0%	3%	7%	24%
Other	0%	0%	50%	30%	40%	0%	62%	20%	43%	0%	0%	0%	0%	0%	50%	0%	0%	100%	0%	0%	0%	0%	0%	29%
Vegetation/Animal	0%	0%	0%	2%	10%	17%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	6%	25%	19%	0%	0%	0%	0%	0%	0%	0%	0%	0%	42%	45%	0%	41%	33%	0%
HARRIER(12KV) - Customers: 1,973	119.9	1.4	0.0	0.5	0.0	1.0	14.3	1.0	1.0	6.5	0.6	1.4	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0	9.9	0.7	1.4
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	100%	100%	0%	100%	100%	100%
Equipment Failure	0%	0%	0%	0%	0%	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	100%	100%	0%	100%	100%	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%	100%	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%
HELICOPTER(12KV) - Customers: 2,619	0.0	0.0	1.0	386.1	4.0	1.0	0.0	0.0	1.0	0.0	0.0	2.0	1.2	0.0	0.0	17.9	0.1	0.0	3.8	0.0	0.0	23.0	0.1	2.0
3rd Party	0%	0%	100%	21%	25%	100%	73%	50%	100%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%
Equipment Failure	0%	0%	0%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	1%	0%	4%	14%	0%	2%	2%	0%
Operation	0%	0%	0%	0%	0%	0%	27%	50%	0%	0%	0%	50%	100%	100%	0%	98%	99%	0%	96%	86%	0%	98%		50%
Other	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%	77%	74%	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	016	3ra	Qtr 20	016	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
HERO(12KV) - Customers: 1,450	72.2	0.6	0.0	93.1	1.0	0.0	4.5	0.0	0.1	0.3	0.0	3.0	3.1	0.0	0.0	30.0	0.1	0.0	0.0	0.0	0.0	33.4	0.2	3.0
3rd Party	0%	0%	0%	99%	99%	0%	0%	0%	0%	0%	0%	67%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	67%
Equipment Failure	94%	67%	0%	0%	0%	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	90%	73%	0%
Operation	6%	33%	0%	1%	1%	0%	0%	0%	0%	100%	100%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	10%	27%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	33%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	33%
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%
MAYER(33KV) - Customers: 1	0.0	0.0	0.0	145.0	3.0	0.0	395.0	1.0	4.0	0.0	0.0	2.0	0.0	0.0	0.0	169.0	2.0	1.0	0.0	0.0	1.0	169.0	2.0	4.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	25%	0%	0%	0%	0%	0%	0%	82%	50%	100%	0%	0%	0%	82%	50%	25%
Equipment Failure	0%	0%	0%	43%	33%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	18%	50%	0%	0%	0%	0%	18%	50%	25%
Other	0%	0%	0%	57%	67%	0%	100%	100%	50%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	50%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	25%	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%
NAPA(12KV) - Customers: 1,090	76.0	0.2	1.0	12.3	0.1	0.1	18.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	1.0	59.6	1.0	1.0	29.7	0.2	0.8	89.3	1.3	2.8
3rd Party	92%	49%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	1%	0%	0%	0%	0%	1%	1%	0%
Equipment Failure	2%	1%	0%	100%	100%	100%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	0%	0%	0%	17%	5%	0%	0%	0%	0%	0%	0%	0%	98%	99%	100%	97%	33%	0%	98%	86%	36%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	3%	67%	100%	1%	13%	64%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	81%	95%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	6%	50%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
OAKDALE(12KV) - Customers: 1,809	251.5	2.2	0.0	192.6	1.4	2.6	163.6	1.6	2.2	44.6	1.1	0.0	48.6	0.4	0.0	0.4	0.0	0.0	79.8	1.0	0.6	173.4	2.6	0.6
3rd Party	45%	47%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	95%	98%	0%	0%	0%	0%	0%	0%	0%	27%	17%	0%
Equipment Failure	47%	49%	0%	12%	8%	61%	49%	67%	0%	0%	0%	0%	5%	2%	0%	100%	100%	0%	100%	100%	100%	48%	39%	100%
Operation	0%	0%	0%	4%	24%	2%	8%	8%	69%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	26%	44%	0%
Other	9%	4%	0%	36%	33%	11%	40%	6%	19%	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%	48%	35%	25%	3%	19%	12%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

		2013 SAIDI SAIFI MAIFI			2014			2015		1st	<b>Qtr 20</b>	16	2nd	d Qtr 20	16	3rd	Qtr 20	016	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	MAIF
OLIVER(33KV) - Customers: 10	35.7	0.7	1.4	183.3	3.1	8.1	862.7	3.0	6.5	3.4	0.1	0.0	116.2	1.7	0.6	84.0	1.0	1.0	0.0	0.0	0.3	203.6	2.8	1.9
3rd Party	100%	100%	0%	65%	64%	25%	20%	9%	0%	0%	0%	0%	7%	59%	0%	0%	0%	0%	0%	0%	0%	4%	36%	0%
Equipment Failure	0%	0%	50%	35%	36%	4%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	0%	0%	0%	1%	9%	0%	100%	100%	0%	62%	6%	0%	0%	0%	0%	0%	0%	0%	37%	7%	0%
Other	0%	0%	50%	0%	0%	44%	21%	73%	71%	0%	0%	0%	31%	35%	50%	0%	0%	0%	0%	0%	100%	17%	21%	32%
Vegetation/Animal	0%	0%	0%	0%	0%	28%	19%	5%	10%	0%	0%	0%	0%	0%	50%	0%	0%	100%	0%	0%	0%	0%	0%	68%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	39%	5%	8%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	41%	36%	0%
PAWNEE(12KV) - Customers: 2,634	212.2	4.5	1.4	880.8	4.0	3.9	987.1	2.2	3.9	0.0	0.0	0.0	325.8	3.0	0.0	6.8	0.1	2.0	104.8	1.0	0.0	437.4	4.1	2.0
3rd Party	36%	22%	0%	13%	38%	66%	0%	1%	0%	0%	0%	0%	3%	33%	0%	67%	93%	50%	0%	0%	0%	3%	26%	50%
Equipment Failure	40%	13%	21%	1%	9%	0%	6%	3%	0%	0%	0%	0%	95%	34%	0%	33%	7%	0%	100%	100%	0%	95%	50%	0%
Operation	23%	65%	0%	0%	0%	0%	0%	0%	27%	0%	0%	0%	2%	33%	0%	0%	0%	0%	0%	0%	0%	2%	25%	0%
Other	0%	0%	70%	86%	53%	9%	94%	95%	73%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	50%
Vegetation/Animal	0%	0%	0%	0%	0%	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	1%	0%	9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PERRIS(12KV) - Customers: 598	151.8	1.1	2.9	882.2	4.0	7.9	239.7	2.1	4.0	36.0	1.0	1.0	8.6	1.0	0.0	83.9	1.0	1.0	254.3	1.0	0.0	382.8	4.0	2.0
3rd Party	50%	89%	0%	21%	50%	25%	6%	3%	0%	0%	0%	0%	93%	100%	0%	0%	0%	0%	100%	100%	0%	69%	50%	0%
Equipment Failure	45%	10%	66%	14%	25%	0%	0%	0%	0%	3%	1%	100%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	49%
Operation	4%	1%	0%	0%	0%	0%	0%	0%	0%	97%	99%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	9%	25%	0%
Other	0%	0%	34%	65%	25%	50%	94%	97%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	1%	0%	0%	0%	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	51%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	22%	25%	0%
PLUMMER(12KV) - Customers: 937	11.3	0.0	1.0	30.6	1.0	0.3	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	0.6	0.0	0.0	0.0	0.0	4.7	0.6	0.0
3rd Party	79%	93%	0%	100%	100%	100%	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%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	100%	100%	0%
Other	0%	0%	0%	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	21%	7%	100%	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	d Qtr 20	16	3rd	<b>Qtr 20</b>	16	4th	<b>Qtr 20</b> .	16		2016	
	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI I	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI I	MAIFI	SAIDI	SAIFI	MAIFI
RAMBO(12KV) - Customers: 1,633	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	2.0	7.2	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	7.8	0.1	2.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Equipment Failure	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	92%	40%	0%
Operation	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	8%	60%	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%
SCALP(12KV) - Customers: 247	126.2	4.0	1.0	733.8	2.0	3.0	17.1	1.0	1.0	0.0	0.0	0.0	219.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	219.1	2.0	0.0
3rd Party	61%	25%	0%	10%	50%	67%	0%	0%	0%	0%	0%	0%	4%	50%	0%	0%	0%	0%	0%	0%	0%	4%	50%	0%
Equipment Failure	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	96%	50%	0%	0%	0%	0%	0%	0%	0%	96%	50%	0%
Operation	39%	75%	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%	100%	90%	50%	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	33%	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%
SOLDIER(12KV) - Customers: 1,493	150.2	0.6	0.0	38.7	0.2	0.0	87.7	1.1	0.0	46.9	1.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	20.1	0.1	0.0	67.0	1.1	1.0
3rd Party	100%	100%	0%	0%	0%	0%	0%	0%	0%	6%	2%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	2%	100%
Equipment Failure	0%	0%	0%	97%	96%	0%	29%	6%	0%	19%	4%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	43%	9%	0%
Operation	0%	0%	0%	3%	4%	100%	71%	94%	0%	74%	94%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	52%	89%	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%
STARGLOW(12KV) - Customers: 2,172	34.4	0.8	1.2	261.1	1.5	1.0	209.0	2.0	0.6	0.0	0.0	0.0	1.2	0.1	0.0	89.3	0.4	0.1	0.0	0.0	0.0	90.5	0.5	0.1
3rd Party	45%	60%	74%	64%	66%	0%	33%	50%	0%	0%	0%	0%	56%	11%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%
Equipment Failure	2%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	0%	0%	0%	98%	82%	100%
Operation	15%	2%	0%	0%	0%	0%	0%	0%	16%	0%	0%	0%	44%	89%	0%	0%	0%	0%	0%	0%	0%	1%	16%	0%
Other	38%	39%	26%	36%	34%	100%	5%	0%	84%	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%	60%	49%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

		2013			2014			2015		<b>1</b> s	t Qtr 20	16	2nd	l Qtr 20	16	3ra	<mark>  Qtr 201</mark>	6	4th	Qtr 20	16		2016	
	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI I	VIAIFI	SAIDI	SAIFI N	/AIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI
TRUMBLE(12KV) - Customers: 573	0.7	0.0	1.0	0.0	0.0	0.0	136.9	2.4	0.0	0.0	0.0	0.0	15.1	0.1	0.0	12.0	1.0	0.0	0.0	0.0	0.0	27.1	1.1	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%	0%	0%	0%	90%	59%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	100%	100%	0%	0%	0%	0%	100%	100%	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%	10%	41%	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%