

# Circuit Reliability Review Buena Park

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 Fullerton District

Anaheim

Brea

**Buena Park** 

Cypress

East La Mirada

**Fullerton** 

Hacienda Heights

La Habra

La Habra Heights

La Mirada

La Palma

Placentia

**Rowland Heights** 

Stanton

Yorba Linda

## 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	

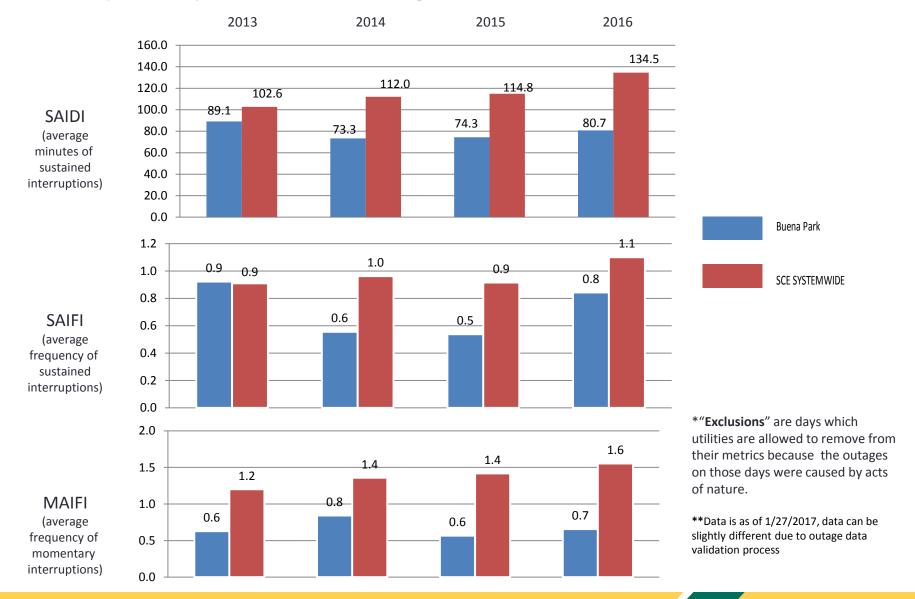
<sup>\*&</sup>quot;Exclusions" are days which utilities are allowed to remove from their metrics because the outages on those days were caused by a severe acts of nature.

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

## Overview of Buena Park There are 36 circuits that serve Buena Park

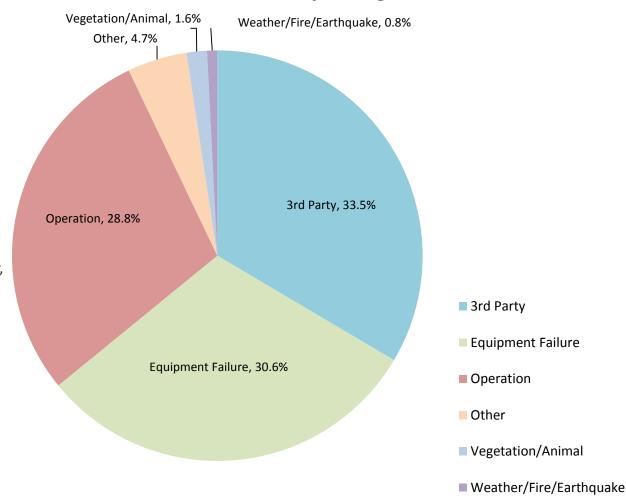
Circuit Type	Sum of Customers	Circuit Type	Sum of Customers	Circuit Type	Sum of Customers	Circuit Type	Sum of Customers
ANNETTE(12KV)	803	SLICE(12KV)	2,118				
BACWAY(12KV)	369	SOHO(12KV)	1,191				
BLUEFIELD(12KV)	143	TEE(12KV)	1,768				
BOLIVIA(12KV)	58	TOURNEY(12KV)	1,698				
CHILE(12KV)	626	TRINIDAD(12KV)	2,007				
CUBA(12KV)	126	WHITAKER(12KV)	1,026				
DART(12KV)	1,407						
DELCO(12KV)	1,578						
DIANA(12KV)	1,530						
ECUADOR(12KV)	3,329						
GARZA(12KV)	781						
GILLIS(12KV)	1,205						
GLIDDEN(12KV)	299						
GRETA(12KV)	222						
GUM(12KV)	2,995						
HAITI(12KV)	480						
IBEX(12KV)	1,206						
JAMAICA(12KV)	2,227						
KAREN(12KV)	2,355						
KELSEY(12KV)	2,133						
KNOTT(12KV)	2,303						
KRISTEN(12KV)	1,000						
LOTUS(12KV)	1,952						
MEXICO(12KV)	2,492						
MILDRED(12KV)	1,420						
PANAMA(12KV)	1,798						
POCKET(12KV)	612						
RZYSKI(12KV)	2,599						
SHADOW(12KV)	2,459						
SHANK(12KV)	1,936						
<b>Grand Total</b>	52,251						

### Reliability History of Circuits Serving Buena Park (No Exclusions)



## Causes of Repair Outages in Buena Park 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

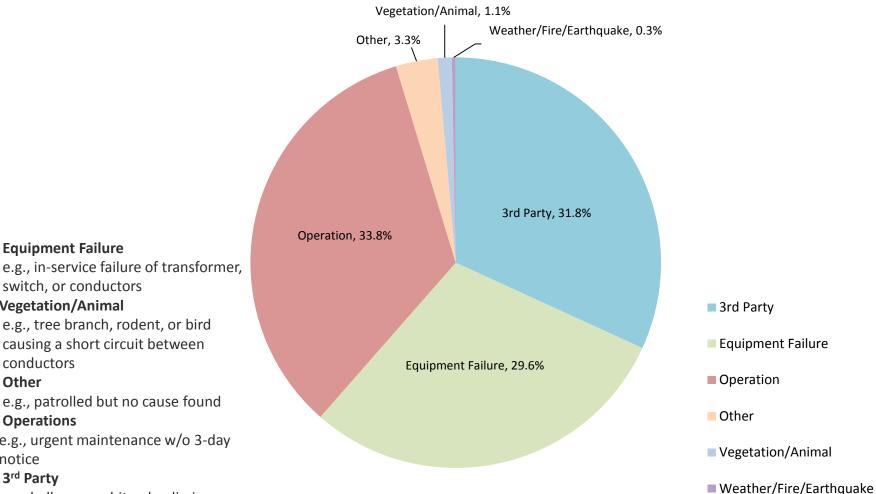
#### ■ 3<sup>rd</sup> Party

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 Buena Park Circuits 2016

**Contributions to SAIFI by Outage Cause** 



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

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

e.g., patrolled but no cause found

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

Equipment Failure

conductors

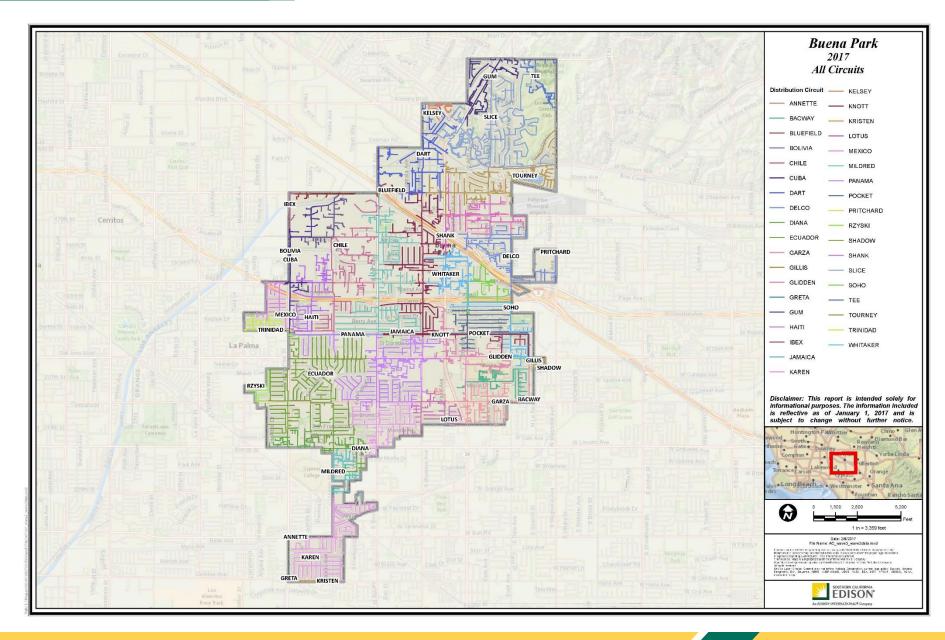
Operations

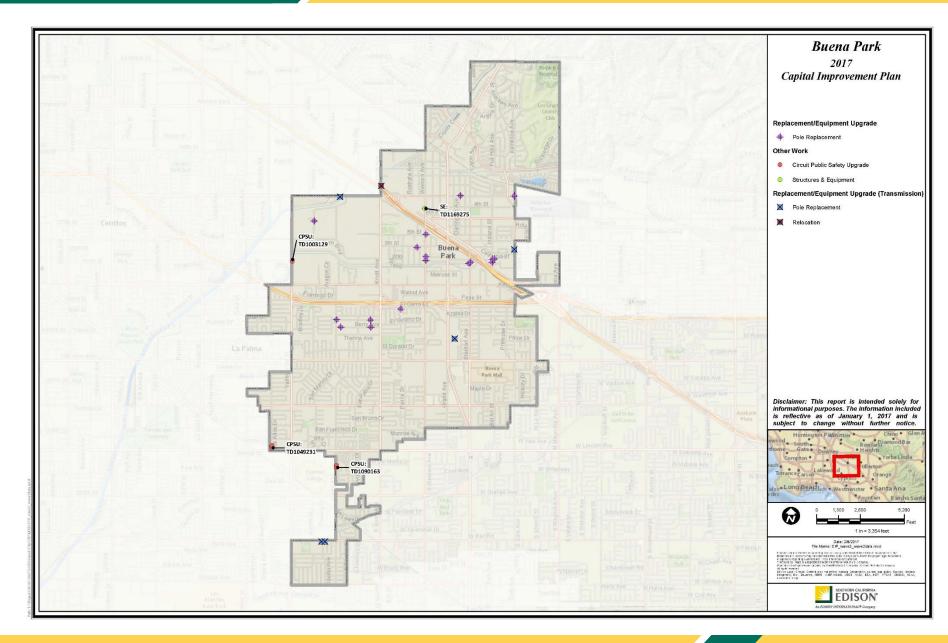
Other

notice ■ 3<sup>rd</sup> Party

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 Buena Park** 

**Updated through Year-End 2016** 

## **Average Reliability of 36 Circuits Serving Buena Park**

		2013	•		2014			2015	•	1st	Qtr 20	16	2nd	d Qtr 2	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
Buena Park	89.1	0.9	0.6	73.3	0.6	8.0	74.3	0.5	0.6	32.6	0.4	0.3	23.0	0.2	0.1	12.2	0.1	0.2	12.9	0.1	0.1	80.7	0.8	0.7
3rd Party	20%	27%	30%	38%	43%	39%	16%	37%	62%	35%	17%	27%	49%	63%	48%	33%	71%	27%	3%	9%	10%	33%	32%	26%
Equipment Failure	55%	49%	27%	33%	18%	7%	66%	50%	4%	12%	24%	21%	19%	14%	0%	52%	21%	16%	78%	76%	65%	31%	30%	25%
Operation	5%	5%	18%	14%	16%	0%	16%	10%	3%	41%	56%	12%	26%	18%	0%	15%	8%	0%	17%	3%	0%	29%	34%	5%
Other	20%	19%	19%	2%	4%	3%	0%	0%	22%	11%	3%	0%	0%	0%	0%	0%	0%	0%	3%	12%	25%	5%	3%	4%
Vegetation/Animal	0%	0%	5%	3%	8%	37%	2%	4%	10%	0%	0%	9%	6%	4%	52%	0%	0%	48%	0%	0%	0%	2%	1%	23%
Weather/Fire/Earthquake	0%	0%	0%	9%	10%	14%	0%	0%	0%	2%	1%	31%	0%	0%	0%	0%	0%	9%	0%	0%	0%	1%	0%	16%
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		ı	2014			2015		1st	Qtr 20	16	2nd	l 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
ANNETTE(12KV) - Customers: 803	209.5	2.6	1.5	11.2	0.1	0.0	87.2	1.0	2.0	129.7	2.0	0.0	0.0	0.0	0.0	98.1	0.2	1.0	0.0	0.0	0.0	227.8	2.1	1.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	43%	7%	0%
Equipment Failure	59%	61%	33%	26%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	74%	90%	0%	0%	0%	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	57%	93%	0%
Other	41%	39%	67%	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%	100%	100%	50%	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%	100%	0%	0%	0%	0%	0%	100%
BACWAY(12KV) - Customers: 369	64.2	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	97.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	97.9	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	61%	73%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%
Operation	39%	27%	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%
BLUEFIELD(12KV) - Customers: 143	326.9	2.0	0.0	601.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	585.1	1.0	0.0	0.0	0.0	0.0	585.1	1.0	1.0
3rd Party	74%	50%	0%	97%	80%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	96%
Equipment Failure	26%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	98%	98%	100%	0%	0%	0%	98%	98%	4%
Operation	0%	0%	0%	3%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	2%	0%	0%	0%	0%	2%	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%	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%
BOLIVIA(12KV) - Customers: 58	18.4	0.0	0.0	65.9	0.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	140.1	1.0	0.4	0.0	0.0	0.0	140.1	1.0	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%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	97%	98%	100%	0%	0%	0%	97%	98%	100%
Operation	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	2%	0%	0%	0%	0%	3%	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%	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	2nd	l Qtr 20	16	3rd	<b>Qtr 20</b> 2	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
CHILE(12KV) - Customers: 626	12.1	0.0	0.0	13.7	0.0	1.0	6.4	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	28.7	1.0	1.0	28.7	1.0	2.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%	100%	100%	100%	100%	100%
Equipment Failure	71%	42%	0%	55%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	29%	58%	0%	45%	50%	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%	100%	100%	100%	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%
CUBA(12KV) - Customers: 126	0.0	0.0	0.0	7.8	0.0	2.0	72.4	1.0	1.0	113.3	1.1	1.0	10.3	0.1	0.0	0.7	0.0	0.0	90.1	1.0	1.0	214.3	2.2	2.0
3rd Party	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	5%	5%	0%
Equipment Failure	0%	0%	0%	100%	100%	0%	0%	0%	100%	88%	95%	100%	0%	0%	0%	0%	0%	0%	100%	100%	100%	89%	90%	100%
Operation	0%	0%	0%	0%	0%	0%	0%	0%	0%	12%	5%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	6%	5%	0%
Other	0%	0%	0%	0%	0%	50%	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%	50%	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%
DART(12KV) - Customers: 1,407	18.7	0.2	0.0	76.2	1.0	1.0	94.3	1.0	0.0	0.0	0.0	1.0	7.7	0.1	0.0	18.3	0.1	1.0	79.5	1.0	0.0	105.5	1.1	2.0
3rd Party	0%	0%	0%	98%	97%	100%	0%	0%	0%	0%	0%	0%	51%	95%	0%	0%	0%	0%	0%	0%	0%	4%	4%	0%
Equipment Failure	54%	49%	0%	1%	0%	0%	100%	99%	0%	0%	0%	0%	49%	5%	0%	100%	100%	100%	99%	98%	0%	95%	93%	50%
Operation	16%	2%	0%	1%	3%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%	1%	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%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%
Weather/Fire/Earthquake	31%	49%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DELCO(12KV) - Customers: 1,578	73.5	2.0	1.0	21.0	0.2	1.0	221.8	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	0.0
3rd Party	47%	50%	0%	52%	91%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	53%	50%	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%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	100%	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%	48%	9%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

		2013			2014			2015		151	Qtr 20	16	2nd	Qtr 20	16	3rd	<b>Qtr 20</b> .	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
DIANA(12KV) - Customers: 1,530	0.0	0.0	0.0	110.8	2.4	0.0	68.1	2.0	0.5	64.6	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.3	0.6	1.0	143.9	1.6	1.0
3rd Party	0%	0%	0%	57%	59%	0%	13%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	0%	0%	0%	0%	74%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	0%	0%	0%	13%	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	86%	16%	0%	92%	67%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	14%	84%	100%	8%	33%	100%
Vegetation/Animal	0%	0%	0%	43%	41%	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%
ECUADOR(12KV) - Customers: 3,329	98.3	1.5	0.5	70.8	0.3	2.8	24.2	0.0	0.0	15.3	1.1	0.0	4.3	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	20.0	1.1	0.0
3rd Party	91%	97%	100%	66%	27%	65%	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%	96%	83%	0%	100%	100%	0%	48%	20%	0%	0%	0%	0%	0%	0%	0%	87%	98%	0%
Operation	7%	1%	0%	33%	73%	0%	4%	17%	0%	0%	0%	0%	52%	80%	0%	100%	100%	0%	0%	0%	0%	13%	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	2%	2%	0%	0%	0%	35%	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%
GARZA(12KV) - Customers: 781	29.6	0.8	0.0	0.0	0.0	0.0	59.1	0.5	0.0	12.7	0.0	1.0	59.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.2	0.4	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%	0%	0%	0%	37%	13%	0%	100%	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%
Operation	0%	0%	0%	0%	0%	0%	63%	87%	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%
GILLIS(12KV) - Customers: 1,205	39.3	0.9	0.0	170.3	1.3	1.0	115.7	0.2	1.8	202.7	1.0	0.7	18.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	220.9	1.0	0.7
3rd Party	0%	0%	0%	85%	94%	0%	0%	0%	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	92%	97%	100%
Equipment Failure	100%	100%	0%	8%	3%	0%	100%	100%	43%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	8%	3%	0%
Operation	0%	0%	0%	0%	0%	1%	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%	57%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	6%	2%	99%	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	Qtr 20	016	3rd	<b>Qtr 20</b> .	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 I	MAIFI	SAIDI	SAIFI	MAIFI
GLIDDEN(12KV) - Customers: 299	39.0	1.0	0.0	54.1	0.4	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
3rd Party	0%	0%	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Equipment Failure	100%	100%	0%	0%	0%	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%	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%
GRETA(12KV) - Customers: 222	0.0	0.0	0.0	46.6	1.0	0.0	9.0	1.0	0.0	64.8	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.8	1.0	0.0
3rd Party	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	0%	0%	0%	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%	100%	100%	0%	0%	0%	0%	0%	0%	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%	100%	100%	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%
GUM(12KV) - Customers: 2,995	28.8	0.0	1.0	200.0	1.6	1.7	0.4	0.0	1.0	2.1	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	2.1	0.0	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%	50%
Equipment Failure	0%	0%	0%	32%	39%	25%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%
Operation	100%	100%	100%	18%	6%	1%	100%	100%	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%	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%	100%	0%	0%	0%	0%	0%	50%
Weather/Fire/Earthquake	0%	0%	0%	50%	55%	74%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
HAITI(12KV) - Customers: 480	0.0	0.0	0.0	0.0	0.0	1.0	82.5	1.0	0.0	258.6	2.0	8.0	304.2	2.9	0.0	0.0	0.0	0.0	107.4	1.0	0.0	670.2	5.9	0.8
3rd Party	0%	0%	0%	0%	0%	0%	100%	100%	0%	68%	49%	0%	76%	35%	0%	0%	0%	0%	0%	0%	0%	61%	34%	0%
Equipment Failure	0%	0%	0%	0%	0%	0%	0%	0%	0%	32%	51%	100%	24%	65%	0%	0%	0%	0%	100%	100%	0%	39%	66%	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%	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		ı	2014			2015		1st	<b>Qtr 20</b> 2	16	2nd	d Qtr 20	016	3rd	<b>Qtr 20</b> :	16	4th	Qtr 20	16		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
IBEX(12KV) - Customers: 1,206	39.1	1.0	2.9	146.8	0.4	0.0	298.2	1.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	44.4	1.0	0.0	7.2	0.1	0.0	51.7	1.0	0.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	86%	93%	0%
Equipment Failure	97%	99%	67%	92%	66%	0%	76%	19%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	14%	7%	0%
Operation	3%	1%	0%	8%	34%	0%	24%	81%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	33%	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%
JAMAICA(12KV) - Customers: 2,227	17.1	0.1	0.0	31.6	0.5	1.5	46.8	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	9.8	0.1	0.0	47.3	0.5	1.5	57.0	0.6	1.5
3rd Party	0%	0%	0%	0%	0%	0%	2%	1%	100%	0%	0%	0%	0%	0%	0%	39%	73%	0%	0%	0%	0%	7%	8%	0%
Equipment Failure	0%	0%	0%	2%	1%	0%	97%	99%	0%	0%	0%	0%	0%	0%	0%	35%	8%	0%	100%	100%	100%	89%	90%	100%
Operation	100%	100%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	26%	19%	0%	0%	0%	0%	4%	2%	0%
Other	0%	0%	0%	98%	99%	32%	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%	68%	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%
KAREN(12KV) - Customers: 2,355	104.3	1.1	1.0	53.4	0.1	1.0	32.3	1.1	0.0	91.4	1.3	0.0	5.7	0.9	0.0	2.6	0.0	0.0	23.0	0.1	0.0	122.6	2.3	0.0
3rd Party	15%	11%	0%	2%	12%	100%	43%	95%	0%	5%	5%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	8%	44%	0%
Equipment Failure	0%	0%	0%	11%	36%	0%	51%	3%	0%	8%	3%	0%	0%	0%	0%	0%	0%	0%	99%	96%	0%	24%	4%	0%
Operation	2%	0%	100%	87%	52%	0%	3%	1%	0%	88%	93%	0%	0%	0%	0%	100%	100%	0%	1%	4%	0%	68%	52%	0%
Other	82%	89%	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%	4%	1%	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%
KELSEY(12KV) - Customers: 2,133	107.4	2.0	0.0	84.5	0.9	0.0	24.0	0.1	0.0	0.0	0.0	0.0	145.8	1.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	145.8	1.0	0.4
3rd Party	23%	51%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	100%	100%	100%
Equipment Failure	77%	49%	0%	100%	100%	0%	29%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	0%	0%	0%	71%	96%	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%

		2013			2014			2015		1st	Qtr 20	16	2nd	d Qtr 20	16	3rd	<b>Qtr 20</b> .	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
KNOTT(12KV) - Customers: 2,303	40.1	1.0	0.0	2.4	0.0	1.0	7.4	0.0	0.0	67.5	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.5	1.0	1.0
3rd Party	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	97%	100%	0%	83%	25%	0%	34%	13%	0%	21%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	21%	1%	0%
Operation	3%	0%	0%	17%	75%	0%	66%	87%	0%	72%	96%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	72%	96%	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%	7%	2%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	2%	100%
KRISTEN(12KV) - Customers: 1,000	6.0	0.0	0.0	44.7	1.0	0.0	492.9	1.5	1.0	35.9	0.5	0.0	0.4	0.0	0.0	4.9	0.0	0.0	0.0	0.0	0.0	41.2	0.6	0.0
3rd Party	0%	0%	0%	0%	0%	0%	2%	68%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	100%	100%	0%	0%	0%	0%	98%	32%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	12%	2%	0%
Operation	0%	0%	0%	2%	2%	0%	0%	0%	0%	100%	100%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	88%	98%	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%	98%	98%	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%
LOTUS(12KV) - Customers: 1,952	101.2	0.2	0.0	70.5	1.1	0.8	270.1	1.5	3.2	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
3rd Party	0%	0%	0%	88%	94%	100%	77%	28%	68%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	0%	0%	0%	0%	20%	70%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Operation	0%	0%	0%	12%	6%	0%	4%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	100%	100%	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%	32%	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%
MEXICO(12KV) - Customers: 2,492	2.2	0.0	1.0	57.0	0.1	1.0	21.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	1.0	0.0	0.0	0.0	0.3	0.0	1.0
3rd Party	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	100%
Equipment Failure	100%	100%	0%	99%	91%	0%	43%	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	1%	9%	0%	57%	75%	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%	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%	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	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
MILDRED(12KV) - Customers: 1,420	99.1	1.6	0.0	3.8	0.0	0.0	102.6	1.1	0.9	65.4	1.0	0.0	6.8	0.1	0.0	0.0	0.0	1.0	3.5	0.0	0.0	75.6	1.1	1.0
3rd Party	0%	0%	0%	0%	0%	0%	8%	76%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	9%	3%	0%	0%	0%	0%	85%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	3%	35%	0%	100%	100%	0%	2%	4%	0%	100%	100%	0%	100%	100%	0%	0%	0%	0%	100%	100%	0%	100%	100%	0%
Other	87%	62%	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%	6%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	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%
PANAMA(12KV) - Customers: 1,798	72.5	1.1	5.0	55.0	1.0	2.0	4.5	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0
3rd Party	77%	95%	60%	94%	99%	50%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	5%	2%	40%	6%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	100%	100%	0%
Operation	18%	4%	0%	0%	0%	0%	23%	46%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	77%	54%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	50%	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%
POCKET(12KV) - Customers: 612	38.7	1.0	0.0	11.4	0.1	1.0	0.0	0.0	0.0	298.9	1.0	1.0	35.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	334.7	1.1	1.0
3rd Party	0%	0%	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	11%	11%	0%
Equipment Failure	100%	100%	0%	0%	0%	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%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	89%	89%	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%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
RZYSKI(12KV) - Customers: 2,599	63.6	1.0	0.0	132.5	1.2	1.0	16.4	0.0	1.0	0.0	0.0	0.0	5.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.2	0.0
3rd Party	0%	0%	0%	8%	4%	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	100%	100%	0%	74%	13%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	18%	83%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	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%	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		ı	2014			2015		1st	Qtr 20	16	2nd	l Qtr 20	016	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	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI
SHADOW(12KV) - Customers: 2,459	97.5	1.1	0.0	16.7	0.2	0.0	5.7	0.0	1.0	133.5	1.7	1.6	17.1	0.1	0.0	13.2	0.1	0.0	0.0	0.0	0.0	163.9	1.9	1.6
3rd Party	2%	2%	0%	0%	0%	0%	0%	0%	100%	81%	49%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	66%	44%	0%
Equipment Failure	98%	98%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	68%	43%	0%	0%	0%	0%	5%	1%	0%
Operation	0%	0%	0%	3%	3%	0%	100%	100%	0%	12%	49%	51%	0%	0%	0%	32%	57%	0%	0%	0%	0%	12%	45%	51%
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%	0%	0%	0%	0%	0%	0%	0%	10%	8%	0%
Weather/Fire/Earthquake	0%	0%	0%	97%	97%	0%	0%	0%	0%	7%	2%	49%	0%	0%	0%	0%	0%	0%	0%	0%	0%	6%	2%	49%
SHANK(12KV) - Customers: 1,936	0.0	0.0	1.0	4.1	0.0	1.0	236.2	2.3	1.1	0.0	0.0	0.0	28.6	0.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	28.6	0.1	1.0
3rd Party	0%	0%	0%	0%	0%	100%	3%	46%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	0%	0%	0%	0%	63%	48%	0%	0%	0%	0%	47%	27%	0%	0%	0%	0%	0%	0%	0%	47%	27%	0%
Operation	0%	0%	0%	0%	0%	0%	34%	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%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	53%	73%	100%	0%	0%	0%	0%	0%	0%	53%	73%	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%
SLICE(12KV) - Customers: 2,118	123.0	0.1	0.0	344.8	1.2	0.0	57.7	0.4	0.0	5.3	0.0	0.0	145.9	1.1	0.0	67.9	0.1	0.0	13.9	0.1	0.0	233.0	1.3	0.0
3rd Party	1%	16%	0%	77%	88%	0%	17%	20%	0%	0%	0%	0%	40%	90%	0%	0%	0%	0%	0%	0%	0%	25%	74%	0%
Equipment Failure	99%	84%	0%	12%	4%	0%	82%	78%	100%	100%	100%	0%	13%	5%	0%	52%	64%	0%	100%	100%	0%	32%	18%	0%
Operation	0%	0%	0%	8%	6%	0%	1%	2%	0%	0%	0%	0%	47%	5%	0%	48%	36%	0%	0%	0%	0%	43%	8%	0%
Other	0%	0%	0%	2%	2%	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%
SOHO(12KV) - Customers: 1,191	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	147.6	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	147.6	1.2	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%	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%	0%	100%	100%	0%	0%	0%	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%	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		15	t Qtr 20.	16	2nd	l Qtr 20	16	3rd (	Qtr 201	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
TEE(12KV) - Customers: 1,768	615.3	1.6	0.8	186.9	0.6	0.0	172.7	0.2	0.0	0.0	0.0	0.0	3.0	0.0	0.0	60.5	0.1	0.0	0.1	0.0	0.0	63.5	0.1	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	100%	100%	100%	85%	69%	0%	26%	42%	0%	0%	0%	0%	64%	14%	0%	100%	100%	0%	0%	0%	0%	98%	74%	0%
Operation	0%	0%	0%	15%	31%	0%	74%	58%	0%	0%	0%	0%	36%	86%	0%	0%	0%	0%	100%	100%	0%	2%	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%	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%
TOURNEY(12KV) - Customers: 1,698	293.9	2.0	0.0	0.0	0.0	0.0	9.2	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.3	1.0	0.4	91.0	1.0	0.4
3rd Party	84%	93%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	16%	7%	0%	0%	0%	0%	100%	100%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	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%
TRINIDAD(12KV) - Customers: 2,007	93.5	0.2	0.0	13.6	0.2	1.9	75.2	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%	0%	2%	26%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	94%	77%	0%	97%	69%	49%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	6%	23%	0%	1%	5%	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%	51%	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%
WHITAKER(12KV) - Customers: 1,026	39.0	1.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	20.4	0.9	0.0	0.6	0.0	0.0	66.2	1.0	0.0	0.2	0.0	0.0	87.4	2.0	0.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	76%	52%	0%
Equipment Failure	100%	100%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	23%	46%	0%
Operation	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	100%	100%	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%	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%