

Circuit Reliability Review South El Monte

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 sce.com>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 Montebello District

Alhambra

East Los Angeles

El Monte

Los Angeles

Montebello

Monterey Park

North El Monte

Pico Rivera

Rosemead

South El Monte

South San Gabriel

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	

^{*&}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.

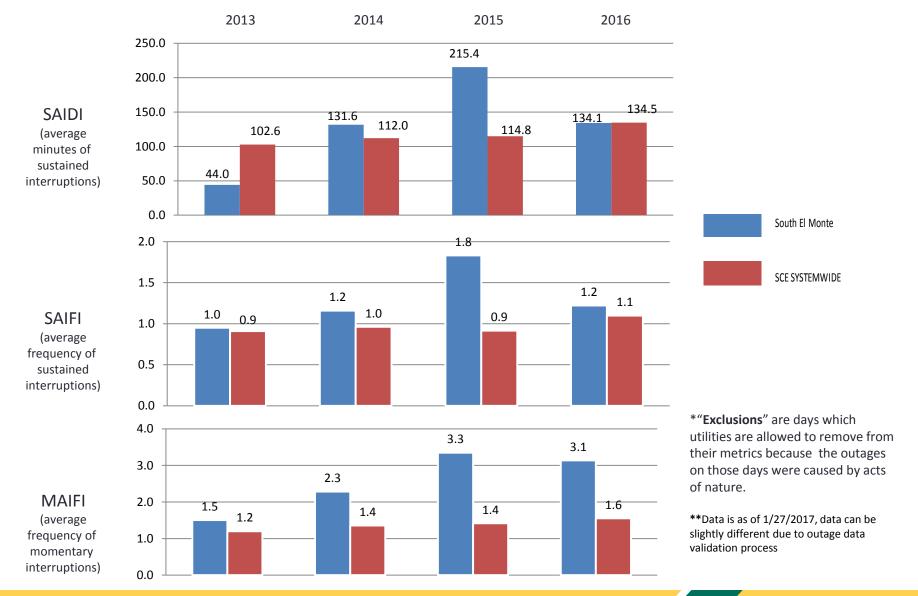
^{**}In the columns showing "Rank," lower numbers indicate poorer performance.

Overview of South El Monte There are 15 circuits that serve South El Monte

Circuit Type	Sum of Customers	Circuit Type	Sum of Customers	Circuit Type	Sum of Customers	Circuit Type	Sum of Customers
ALPACA(4.16KV)	730						
AUTOBODY(4.16KV)	469						
BROOKLINE(16KV)	1,540						
BRYCE(16KV)	2,755						
CHANGE(16KV)	1,745						
DAROCA(16KV)	1,389						
ENLOE(16KV)	1,830						
EXLINE(16KV)	2,801						
FORBID(16KV)	1,966						
ROSEGLEN(16KV)	696						
SEAMAN(4.16KV)	938						
SLACK(4.16KV)	583						
TAMORA(16KV)	558						
TROY(4.16KV)	671						
WEAVER(4.16KV)	818						

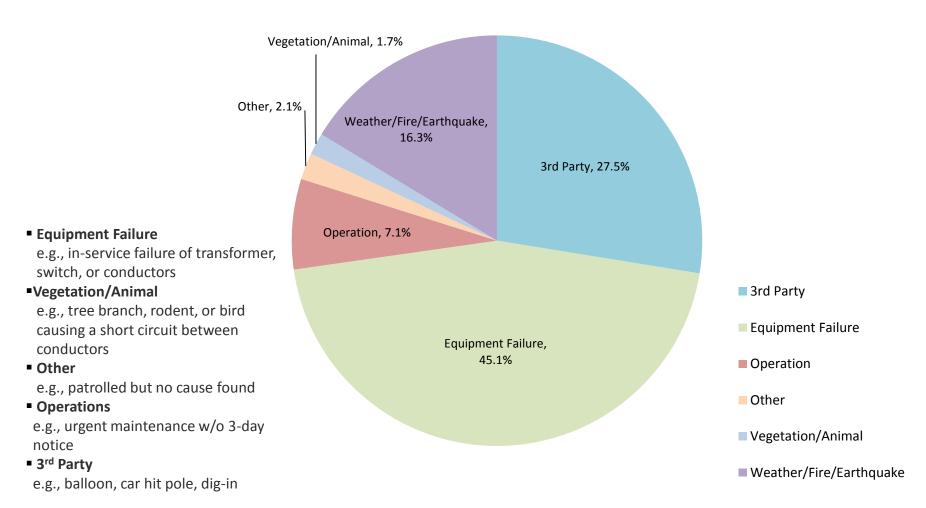
Grand Total 19,489

Reliability History of Circuits Serving South El Monte (No Exclusions)



Causes of Repair Outages in South El Monte Circuits 2016 YTD

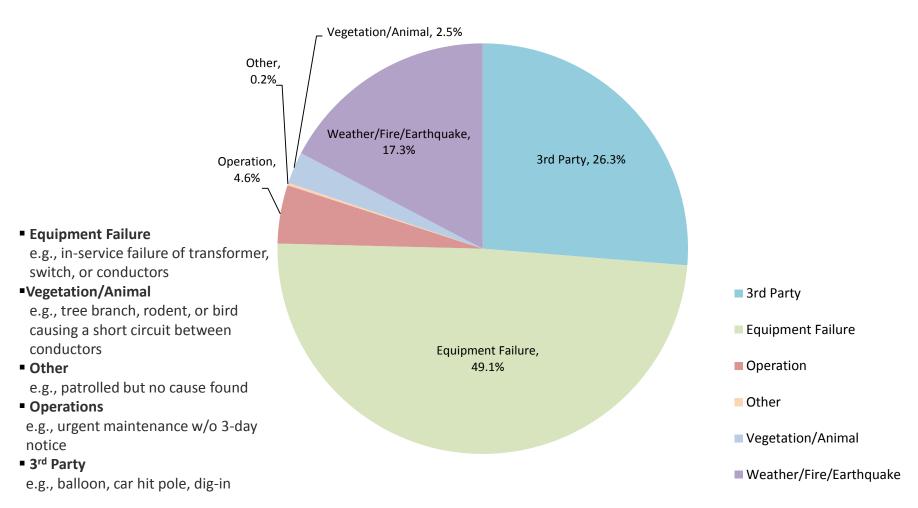
Contributions to SAIDI by Outage Cause



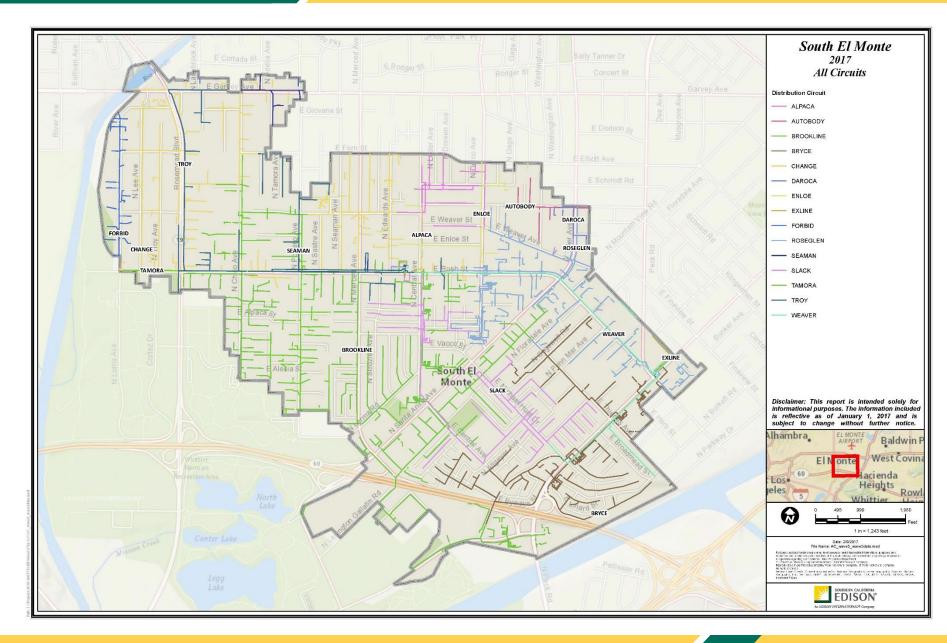
SAIDI = the cumulative amount of time the average customer is interrupted by "sustained" outages each year.

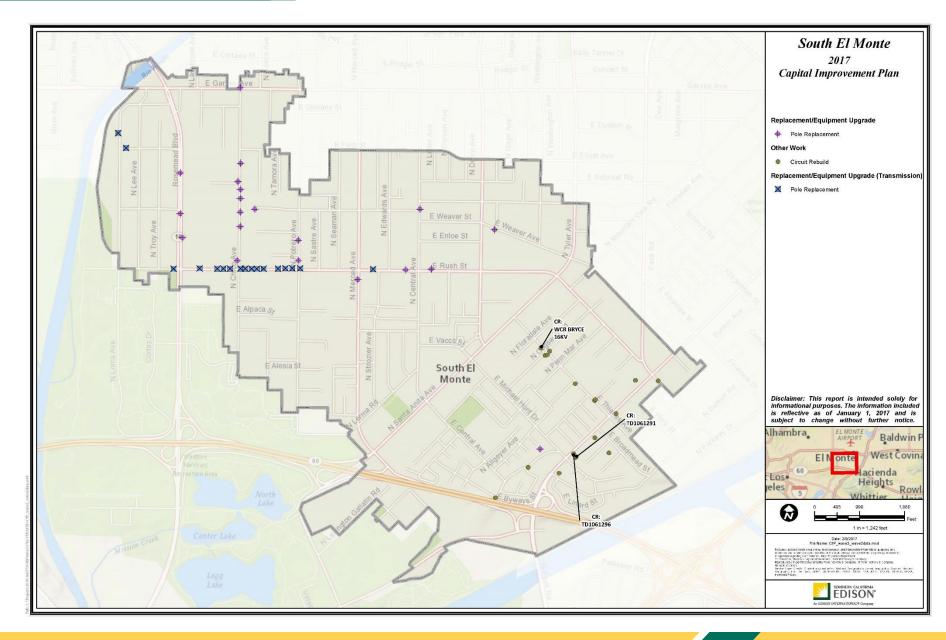
Causes of Repair Outages in South El Monte Circuits 2016 YTD

Contributions to SAIFI by Outage Cause



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





Back-up Slides

Reliability Histories of Circuits Serving South El Monte

Updated through Year-End 2016

Average Reliability of 15 Circuits Serving South El Monte

		2013			2014			2015		1st	Qtr 20	16	2nc	d Qtr 2	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
South El Monte	44.0	1.0	1.5	131.6	1.2	2.3	215.4	1.8	3.3	15.2	0.1	0.4	52.4	0.6	1.5	26.4	0.1	0.3	40.1	0.4	0.9	134.1	1.2	3.1
3rd Party	7%	10%	26%	7%	7%	24%	21%	15%	19%	35%	66%	38%	18%	20%	9%	83%	83%	50%	0%	0%	13%	28%	26%	18%
Equipment Failure	53%	33%	10%	49%	46%	23%	35%	55%	20%	2%	0%	8%	73%	75%	40%	10%	5%	0%	48%	42%	53%	45%	49%	36%
Operation	28%	38%	0%	25%	20%	6%	29%	15%	2%	23%	7%	18%	7%	5%	0%	7%	12%	0%	1%	0%	0%	7%	5%	2%
Other	7%	3%	21%	6%	9%	31%	6%	8%	33%	16%	1%	17%	1%	0%	43%	0%	0%	50%	0%	0%	20%	2%	0%	34%
Vegetation/Animal	3%	16%	38%	5%	12%	13%	0%	0%	15%	14%	20%	18%	0%	0%	5%	0%	0%	0%	0%	0%	10%	2%	2%	8%
Weather/Fire/Earthquake	2%	0%	5%	8%	7%	3%	8%	7%	11%	10%	5%	0%	0%	0%	2%	0%	0%	0%	51%	57%	4%	16%	17%	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	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 I	MAIFI	SAIDI S	SAIFI	MAIFI	SAIDI	SAIFI I	MAIFI
ALPACA(4.16KV) - Customers: 730	6.0	1.0	1.0	0.0	0.0	2.0	203.3	1.1	1.0	0.0	0.0	2.0	0.0	0.0	4.0	54.8	2.0	0.0	0.0	0.0	0.0	54.8	2.0	6.0
3rd Party	0%	0%	0%	0%	0%	0%	95%	92%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	100%	100%	0%
Equipment Failure	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	0%	0%	0%	0%	0%	0%	0%	0%	17%
Operation	100%	100%	0%	0%	0%	0%	5%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%	75%	0%	0%	0%	0%	0%	0%	0%	0%	83%
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%
AUTOBODY(4.16KV) - Customers: 469	0.0	0.0	0.0	87.8	1.2	0.0	52.4	1.2	2.0	57.4	1.0	0.0	82.9	1.0	0.0	1.8	0.1	0.0	0.0	0.0	0.0	142.1	2.1	0.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	40%	47%	0%
Equipment Failure	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	58%	48%	0%
Operation	0%	0%	0%	100%	100%	0%	4%	13%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	1%	5%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	50%	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%	96%	87%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BROOKLINE(16KV) - Customers: 1,540	284.5	3.9	3.1	224.5	2.6	5.9	663.5	5.8	7.5	4.4	0.0	1.0	24.5	0.1	0.9	0.0	0.0	0.0	1.2	0.0	0.0	30.1	0.1	1.9
3rd Party	11%	13%	16%	4%	1%	17%	43%	17%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	44%	17%	0%	2%	0%	0%
Equipment Failure	82%	86%	53%	47%	60%	17%	31%	57%	47%	69%	33%	0%	61%	11%	100%	0%	0%	0%	0%	0%	0%	59%	11%	47%
Operation	1%	0%	0%	1%	0%	0%	0%	0%	0%	19%	50%	0%	18%	87%	0%	0%	0%	0%	0%	0%	0%	17%	83%	0%
Other	1%	0%	0%	0%	0%	16%	15%	17%	39%	0%	0%	0%	22%	3%	0%	0%	0%	0%	0%	0%	0%	18%	3%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	34%	0%	0%	0%	12%	17%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	53%
Weather/Fire/Earthquake	5%	0%	32%	48%	39%	17%	10%	9%	13%	0%	0%	0%	0%	0%	0%	0%	0%	0%	56%	83%	0%	2%	2%	0%
BRYCE(16KV) - Customers: 2,755	0.4	0.0	1.0	337.2	2.7	1.3	807.5	6.9	3.5	0.0	0.0	0.0	178.6	2.1	2.0	61.3	0.1	2.0	111.7	1.2	1.0	351.6	3.3	5.0
3rd Party	0%	0%	0%	0%	0%	77%	9%	15%	6%	0%	0%	0%	37%	39%	50%	91%	33%	50%	0%	0%	0%	35%	25%	40%
Equipment Failure	0%	0%	0%	68%	37%	0%	42%	71%	61%	0%	0%	0%	60%	59%	50%	0%	0%	0%	0%	0%	100%	31%	36%	40%
Operation	100%	100%	0%	1%	1%	0%	48%	15%	0%	0%	0%	0%	3%	3%	0%	9%	67%	0%	2%	0%	0%	3%	3%	0%
Other	0%	0%	0%	16%	26%	23%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	20%
Vegetation/Animal	0%	0%	100%	15%	36%	0%	0%	0%	28%	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%	98%	100%	0%	31%	35%	0%

		2013			2014			2015		1st	Qtr 20	16	2nd	d Qtr 20	016	3rd	l 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	MAIF
CHANGE(16KV) - Customers: 1,745	117.2	1.1	0.0	1.0	0.0	0.0	104.7	1.6	2.6	1.0	0.0	0.0	1.7	0.0	3.9	0.0	0.0	0.0	0.0	0.0	1.0	2.7	0.0	4.9
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	100%	100%	0%	0%	0%	0%	6%	0%	0%	0%	0%	0%	0%	0%	25%	0%	0%	0%	0%	0%	0%	0%	0%	20%
Operation	0%	0%	0%	100%	100%	0%	36%	60%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	36%	46%	0%
Other	0%	0%	0%	0%	0%	0%	55%	38%	62%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	40%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	2%	1%	38%	0%	0%	0%	100%	100%	25%	0%	0%	0%	0%	0%	100%	64%	54%	41%
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%
DAROCA(16KV) - Customers: 1,389	0.0	0.0	1.0	135.1	1.1	0.0	141.4	1.0	2.9	76.6	1.1	0.0	102.0	1.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	178.8	2.1	0.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	72%	90%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	31%	47%	0%
Equipment Failure	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	57%	47%	0%
Operation	0%	0%	0%	75%	95%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	34%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	100%	0%	0%	0%	0%	0%	35%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	25%	5%	0%	100%	100%	31%	28%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	12%	5%	0%
ENLOE(16KV) - Customers: 1,830	10.3	0.1	1.9	59.9	0.1	1.0	7.9	0.1	1.0	20.9	0.1	0.0	122.8	1.8	1.0	15.8	0.1	0.0	4.1	0.0	0.0	163.6	1.9	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%	13%	0%	0%	2%	100%	64%	68%	0%	0%	0%	0%	100%	100%	100%	84%	88%	0%	100%	100%	0%	86%	96%	100%
Operation	8%	11%	0%	100%	98%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	16%	12%	0%	0%	0%	0%	14%	4%	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	21%	76%	100%	0%	0%	0%	36%	32%	100%	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%
EXLINE(16KV) - Customers: 2,801	27.2	0.6	1.0	36.3	0.8	3.4	0.0	0.0	4.6	9.4	0.0	1.5	0.0	0.0	0.0	5.4	0.0	0.0	1.1	0.0	2.1	15.9	0.0	3.6
3rd Party	15%	5%	100%	0%	0%	0%	0%	0%	43%	0%	0%	63%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	26%
Equipment Failure	1%	0%	0%	80%	77%	41%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	100%	100%	50%	41%	45%	29%
Operation	84%	95%	0%	20%	23%	30%	0%	0%	0%	100%	100%	37%	0%	0%	0%	0%	0%	0%	0%	0%	0%	59%	55%	16%
Other	0%	0%	0%	0%	0%	29%	0%	0%	22%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	29%
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%	35%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

		2013			2014			2015		1st	Qtr 20	16	2na	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 I	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIF
FORBID(16KV) - Customers: 1,966	25.9	1.1	1.0	155.9	1.5	3.3	49.3	0.0	3.6	24.1	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0	115.4	1.2	2.3	147.7	1.3	2.3
3rd Party	0%	0%	0%	42%	24%	67%	92%	69%	27%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	33%	0%	0%	33%
Equipment Failure	3%	0%	0%	58%	75%	0%	4%	18%	28%	0%	0%	0%	100%	100%	0%	0%	0%	0%	99%	100%	67%	83%	98%	67%
Operation	73%	5%	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%	28%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	16%	2%	0%
Vegetation/Animal	24%	95%	100%	0%	0%	33%	4%	13%	17%	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%
ROSEGLEN(16KV) - Customers: 696	10.5	0.0	1.9	82.2	0.1	0.0	267.0	1.6	3.0	0.7	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	1.0
3rd Party	0%	0%	0%	0%	0%	0%	21%	21%	67%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	100%	100%	50%	0%	0%	0%	78%	79%	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%
Operation	0%	0%	0%	100%	100%	0%	1%	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%	50%	0%	0%	0%	0%	0%	33%	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%
SEAMAN(4.16KV) - Customers: 938	49.6	2.9	5.9	219.6	1.0	2.0	5.8	0.0	4.0	0.0	0.0	0.0	0.0	0.0	4.2	17.7	0.1	0.0	0.0	0.0	0.0	17.7	0.1	4.2
3rd Party	12%	34%	50%	0%	0%	0%	0%	0%	25%	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%	25%	0%	0%	0%	0%	0%	0%	0%	0%	25%
Operation	88%	66%	0%	100%	100%	0%	0%	0%	25%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	100%	100%	0%
Other	0%	0%	50%	0%	0%	100%	0%	0%	50%	0%	0%	0%	0%	0%	75%	0%	0%	0%	0%	0%	0%	0%	0%	75%
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%
SLACK(4.16KV) - Customers: 583	112.7	3.1	1.0	238.6	2.3	10.0	30.3	0.0	2.0	0.0	0.0	0.0	0.0	0.0	3.0	17.9	0.0	0.0	3.9	0.0	0.0	21.8	0.0	3.0
3rd Party	0%	0%	0%	6%	44%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	16%	33%	0%	94%	56%	60%	100%	100%	0%	0%	0%	0%	0%	0%	33%	100%	100%	0%	0%	0%	0%	82%	54%	33%
Operation	8%	35%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	18%	46%	0%
Other	76%	33%	100%	0%	0%	30%	0%	0%	100%	0%	0%	0%	0%	0%	67%	0%	0%	0%	0%	0%	0%	0%	0%	67%
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	016	3rd	l Qtr 201	6	4th	Qtr 20	16		2016	
	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI N	/AIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI
TAMORA(16KV) - Customers: 558	0.0	0.0	0.0	28.5	1.0	1.0	63.1	0.5	2.0	74.8	1.0	0.0	0.8	0.0	1.0	412.7	1.0	0.0	0.3	0.0	0.0	488.6	2.0	1.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	84%	50%	0%
Equipment Failure	0%	0%	0%	61%	2%	0%	20%	3%	0%	0%	0%	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Operation	0%	0%	0%	39%	98%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	100%	80%	97%	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%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	15%	50%	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%
TROY(4.16KV) - Customers: 671	6.0	1.0	3.0	0.0	0.0	2.0	41.4	1.0	2.0	0.0	0.0	1.0	2.0	0.0	4.0	0.0	0.0	0.0	335.2	1.7	3.6	337.3	1.7	8.5
3rd Party	0%	0%	66%	0%	0%	0%	0%	0%	50%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	28%	0%	0%	23%
Equipment Failure	0%	0%	0%	0%	0%	0%	5%	1%	0%	0%	0%	0%	0%	0%	25%	0%	0%	0%	61%	41%	15%	61%	41%	18%
Operation	100%	100%	0%	0%	0%	0%	95%	99%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%	0%
Other	0%	0%	34%	0%	0%	100%	0%	0%	50%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	28%	0%	0%	35%
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%	100%	100%	25%	0%	0%	0%	38%	59%	28%	38%	59%	23%
WEAVER(4.16KV) - Customers: 818	81.5	1.2	1.0	0.0	0.0	2.0	7.7	0.0	4.0	0.0	0.0	0.0	64.3	0.3	3.0	0.0	0.0	0.0	0.0	0.0	0.0	64.3	0.3	3.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	10%	1%	0%	0%	0%	0%	97%	32%	0%	0%	0%	0%	0%	0%	33%	0%	0%	0%	0%	0%	0%	0%	0%	33%
Operation	90%	99%	0%	0%	0%	0%	3%	68%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%
Other	0%	0%	100%	0%	0%	100%	0%	0%	50%	0%	0%	0%	0%	0%	67%	0%	0%	0%	0%	0%	0%	0%	0%	67%
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%