



Circuit Reliability Review

Montclair

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](https://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 Ontario District

Anaheim

Chino

Chino Hills

Corona

Eastvale

El Cerrito

Home Gardens

Mira Loma

Montclair

Norco

Ontario

Pedley

Riverside

San Antonio Heights

Upland

Reliability by SCE District (No Exclusions)

District Name	2012				2013				2014				2015				2016			
	District SAIDI	SAIDI RANKING	District SAIFI	SAIFI Ranking	District SAIDI	SAIDI RANKING	District SAIFI	SAIFI Ranking	District SAIDI	SAIDI RANKING	District SAIFI	SAIFI Ranking	District SAIDI	SAIDI RANKING	District SAIFI	SAIFI Ranking	District SAIDI	SAIDI RANKING	District SAIFI	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	

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.

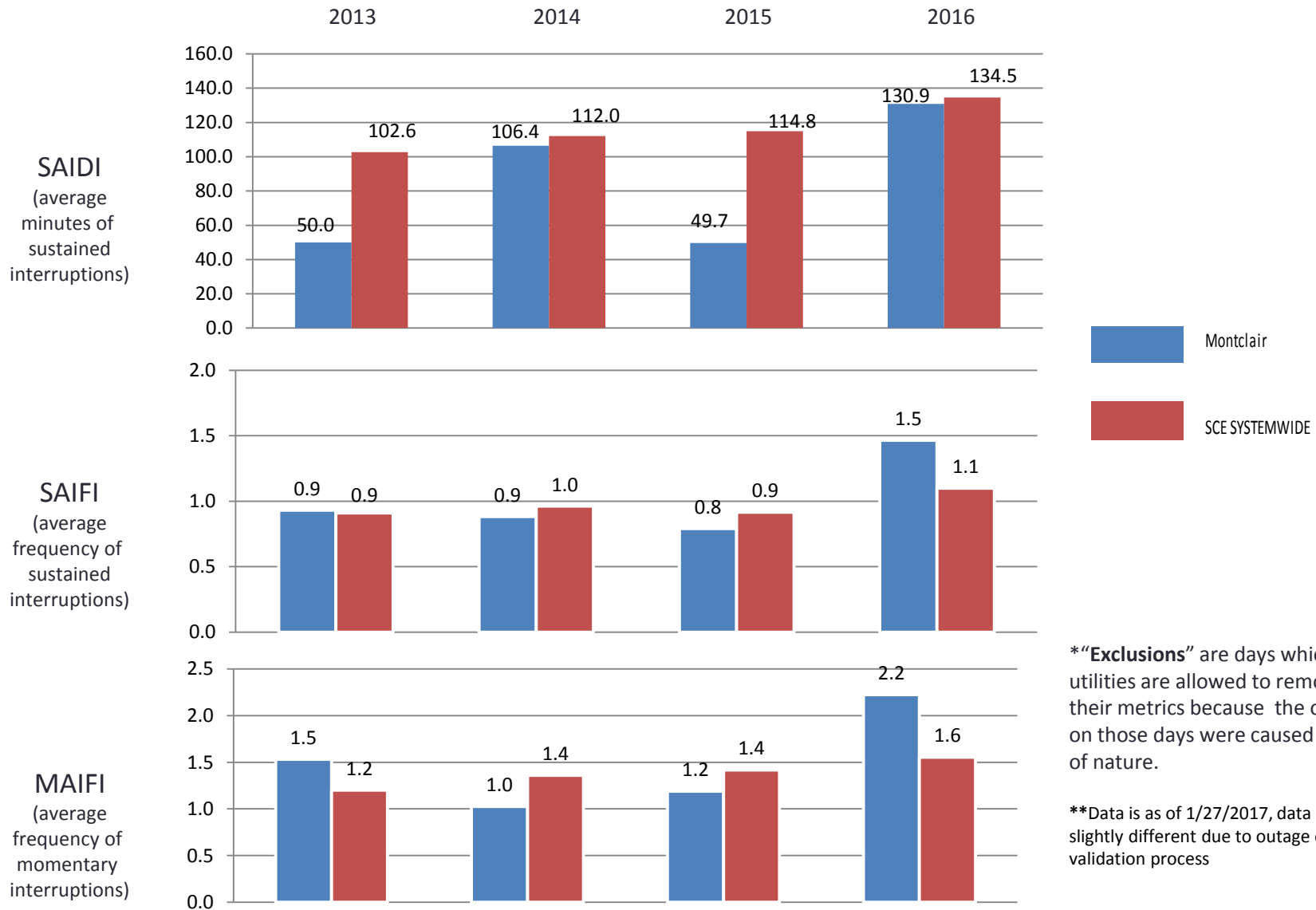
Overview of Montclair

There are 20 circuits that serve Montclair

Circuit Type	Sum of Customers	Circuit Type	Sum of Customers	Circuit Type	Sum of Customers	Circuit Type	Sum of Customers
ANAWALT(12KV)	2,324						
AVERY(12KV)	2,593						
BANDERA(12KV)	1,446						
BASELINE(12KV)	1,621						
CABLE(12KV)	2,030						
COLGATE(12KV)	1,510						
DESSAU(12KV)	1,640						
DOANE(12KV)	500						
GAYLORD(12KV)	2,115						
KADOTA(12KV)	2,787						
KINGSLEY(12KV)	2,163						
LEHIGH(12KV)	2,614						
MARBUCK(12KV)	2,347						
MONTCLAIR(12KV)	136						
PITZER(12KV)	1,455						
ROCK(12KV)	1,982						
SAN JOSE(12KV)	98						
SATELLITE(12KV)	3,920						
SUNSWEET(12KV)	2,316						
TILE(12KV)	1,926						

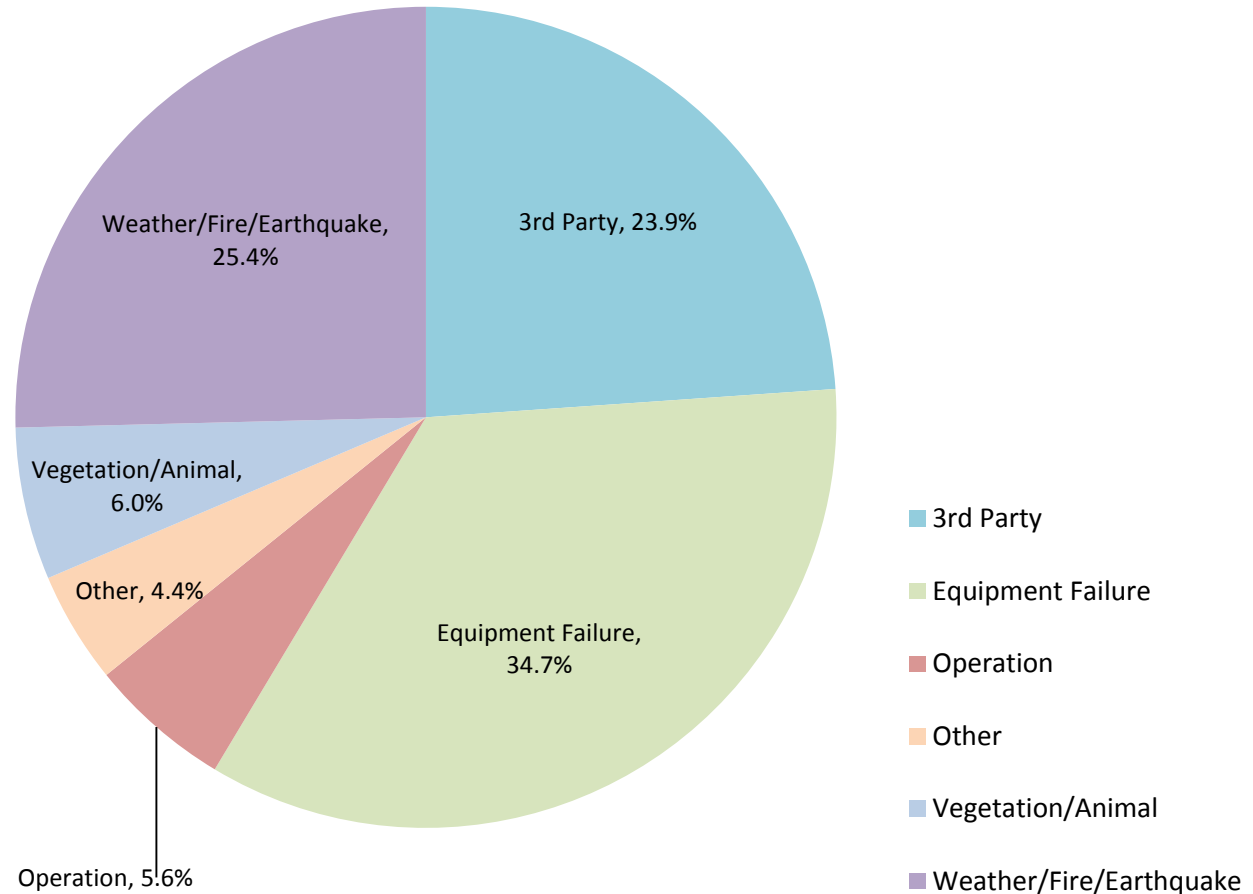
Grand Total 37,523

Reliability History of Circuits Serving Montclair (No Exclusions)



Causes of Repair Outages in Montclair Circuits 2016 YTD

Contributions to SAIDI by Outage Cause

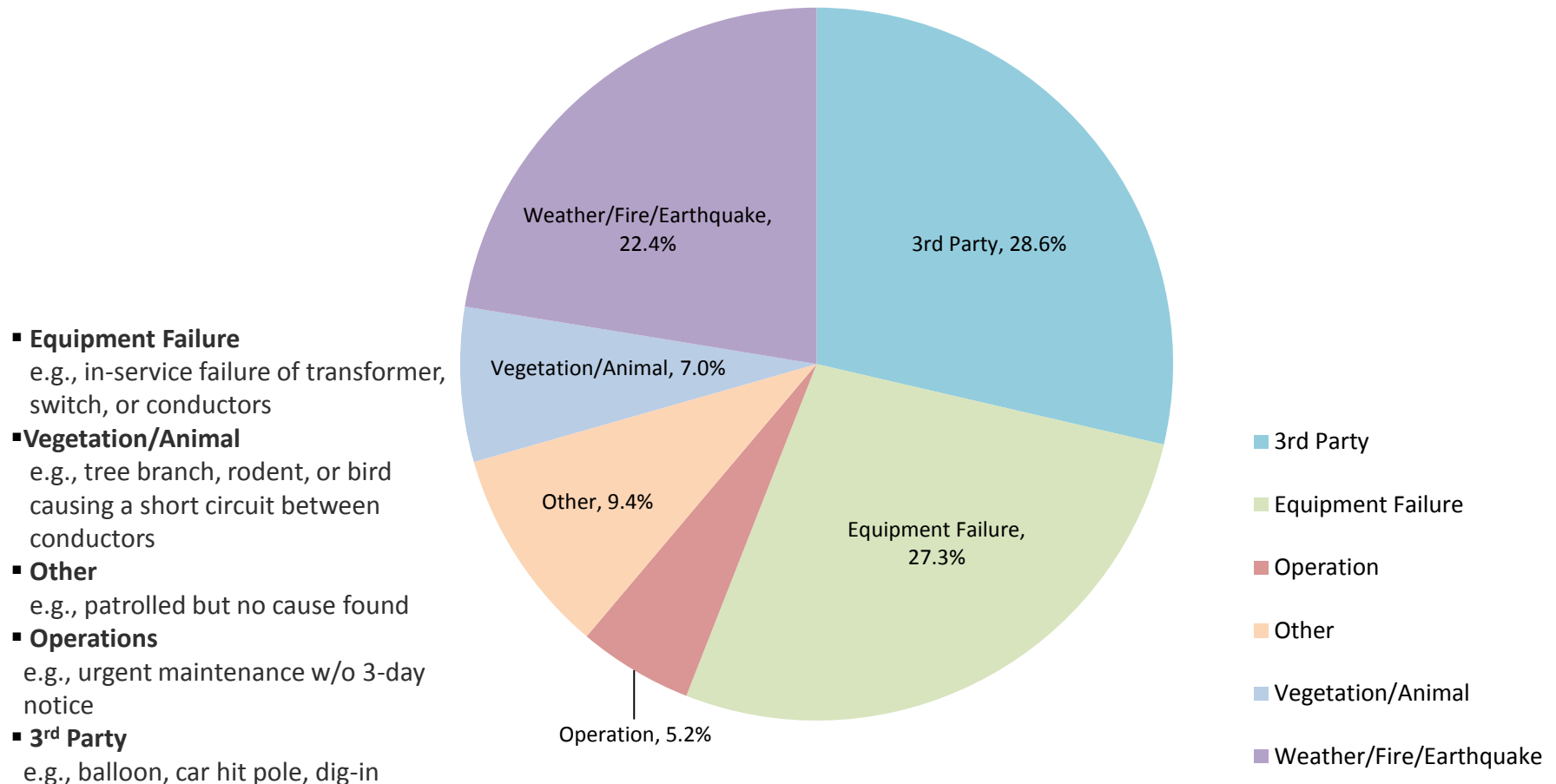


- **Equipment Failure**
e.g., in-service failure of transformer, switch, or conductors
- **Vegetation/Animal**
e.g., tree branch, rodent, or bird causing a short circuit between conductors
- **Other**
e.g., patrolled but no cause found
- **Operations**
e.g., urgent maintenance w/o 3-day notice
- **3rd Party**
e.g., balloon, car hit pole, dig-in

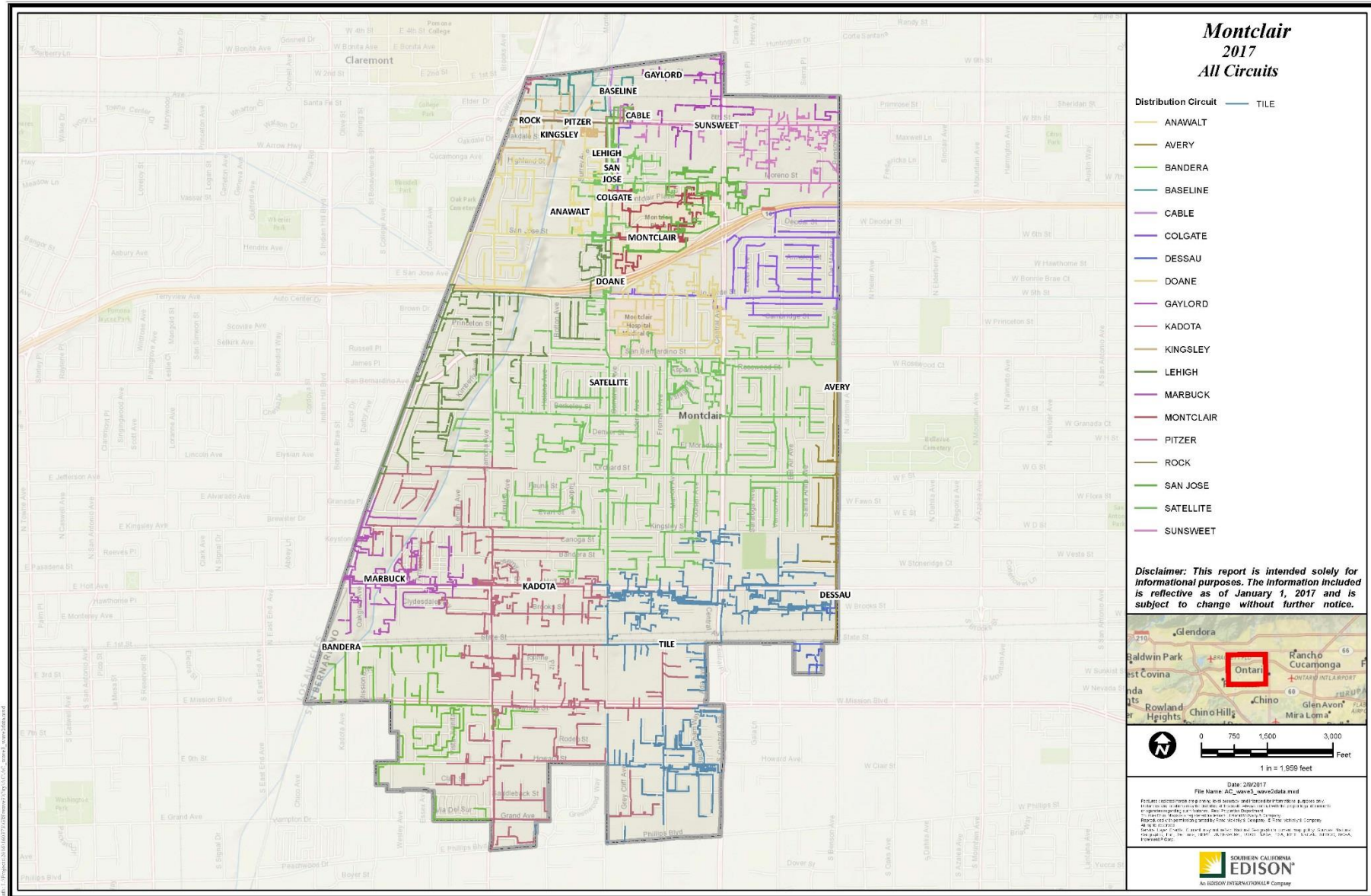
SAIDI = the cumulative amount of time the average customer is interrupted by “sustained” outages each year.

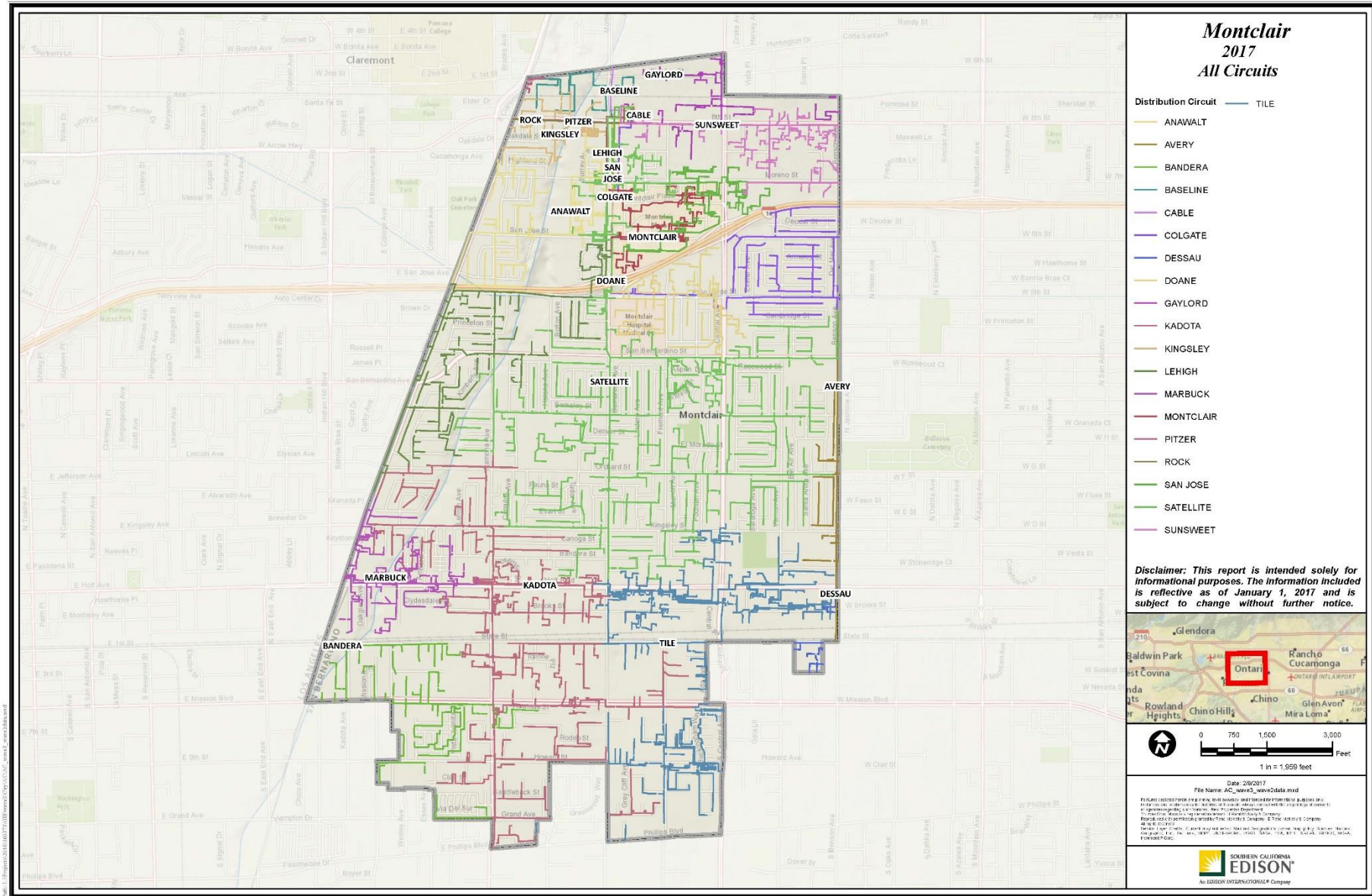
Causes of Repair Outages in Montclair Circuits 2016 YTD

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 Montclair

Updated through Year-End 2016

Average Reliability of 20 Circuits Serving Montclair

	2013			2014			2015			1st Qtr 2016			2nd Qtr 2016			3rd Qtr 2016			4th Qtr 2016			2016		
	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI
Montclair	50.0	0.9	1.5	106.4	0.9	1.0	49.7	0.8	1.2	27.5	0.3	0.2	20.3	0.3	1.1	44.4	0.4	0.4	38.7	0.5	0.5	130.9	1.5	2.2
3rd Party	31%	27%	27%	5%	10%	0%	10%	10%	21%	15%	35%	0%	35%	50%	14%	34%	32%	17%	13%	9%	14%	24%	29%	13%
Equipment Failure	51%	56%	10%	49%	49%	30%	41%	37%	19%	21%	25%	0%	38%	21%	24%	41%	39%	40%	36%	23%	17%	35%	27%	23%
Operation	13%	12%	32%	8%	10%	7%	29%	45%	2%	1%	0%	0%	5%	8%	17%	11%	4%	0%	3%	8%	24%	6%	5%	13%
Other	0%	0%	18%	1%	7%	20%	1%	0%	18%	3%	1%	54%	3%	6%	8%	1%	1%	0%	10%	23%	1%	4%	9%	10%
Vegetation/Animal	6%	5%	13%	7%	13%	35%	1%	0%	24%	0%	0%	0%	1%	1%	37%	13%	24%	42%	4%	1%	12%	6%	7%	29%
Weather/Fire/Earthquake	0%	0%	0%	30%	11%	9%	18%	7%	17%	60%	38%	46%	17%	15%	0%	0%	0%	0%	34%	37%	32%	25%	22%	12%
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.

Reliability Histories for Individual Circuits Serving Montclair

	2013			2014			2015			1st Qtr 2016			2nd Qtr 2016			3rd Qtr 2016			4th Qtr 2016			2016		
	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI
ANAWALT(12KV) - Customers: 2,324	8.9	0.0	1.4	97.5	0.8	1.8	15.2	0.0	2.0	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%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	0%	89%	95%	44%	60%	19%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	43%	0%	0%	0%	40%	81%	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	100%	100%	57%	10%	3%	56%	0%	0%	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%
AVERY(12KV) - Customers: 2,593	79.2	1.0	2.0	0.0	0.0	2.0	3.0	0.0	1.0	0.0	0.0	0.0	0.7	0.0	1.0	0.0	0.0	0.0	78.8	1.1	1.9	79.5	1.1	2.9
3rd Party	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	52%	1%	1%	34%
Equipment Failure	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%	0%
Operation	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	6%	0%	11%	6%	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%	50%	0%	0%	100%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	34%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	88%	94%	48%	87%	93%	32%
BANDERA(12KV) - Customers: 1,446	8.4	0.1	0.0	49.3	1.0	0.0	59.2	1.4	1.0	44.8	0.4	0.0	1.4	0.0	1.0	98.3	0.6	1.0	60.6	1.0	0.0	205.0	2.0	2.0
3rd Party	0%	0%	0%	80%	99%	0%	0%	0%	100%	100%	100%	0%	0%	0%	0%	38%	77%	100%	100%	100%	0%	70%	93%	50%
Equipment Failure	100%	100%	0%	20%	1%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	57%	21%	0%	0%	0%	0%	28%	6%	0%
Operation	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	4%	2%	0%	0%	0%	0%	2%	1%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	50%
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%
BASELINE(12KV) - Customers: 1,621	149.1	0.8	2.5	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	16.3	0.4	0.0	0.3	0.0	0.0	18.0	0.2	0.7	34.6	0.6	0.7
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	100%	100%	60%	100%	100%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	52%	27%	100%
Operation	0%	0%	40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	1%	0%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	47%	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%

Reliability Histories for Individual Circuits Serving Montclair

	2013			2014			2015			1st Qtr 2016			2nd Qtr 2016			3rd Qtr 2016			4th Qtr 2016			2016		
	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI
CABLE(12KV) - Customers: 2,030	133.8	1.1	2.0	130.6	1.1	0.0	173.7	2.1	1.0	2.3	0.0	0.0	0.0	0.0	0.0	139.1	1.0	1.6	2.0	0.0	0.0	143.4	1.1	1.6
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	69%	91%	0%	100%	100%	0%	98%	96%	0%	0%	0%	0%	0%	0%	0%	59%	96%	100%	0%	0%	0%	57%	94%	100%
Operation	31%	9%	50%	0%	0%	0%	1%	2%	0%	100%	100%	0%	0%	0%	0%	41%	4%	0%	0%	0%	0%	41%	5%	0%
Other	0%	0%	50%	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%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	1%	2%	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%
COLGATE(12KV) - Customers: 1,510	0.0	0.0	0.0	29.0	0.1	2.0	2.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	18.6	0.1	0.0	0.0	0.0	0.0	18.6	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	0%	0%	0%	30%	13%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	100%	100%	0%
Operation	0%	0%	0%	70%	88%	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%	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%	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%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DESSAU(12KV) - Customers: 1,640	22.5	1.1	1.0	112.4	1.1	0.0	126.3	2.1	2.0	0.0	0.0	0.0	78.9	1.0	0.0	78.6	1.0	0.0	0.0	0.0	0.0	157.6	2.0	0.0
3rd Party	80%	94%	100%	68%	93%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	99%	99%	0%	0%	0%	0%	49%	50%	0%
Equipment Failure	0%	0%	0%	25%	5%	0%	12%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	20%	6%	0%	7%	2%	0%	24%	45%	4%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	1%	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%	64%	52%	96%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	50%	50%	0%
DOANE(12KV) - Customers: 500	10.6	1.0	1.0	7.0	0.1	0.0	15.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4	0.1	0.0	8.4	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	15%	1%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	85%	99%	100%	61%	41%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	39%	59%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	100%	100%	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%

Reliability Histories for Individual Circuits Serving Montclair

	2013			2014			2015			1st Qtr 2016			2nd Qtr 2016			3rd Qtr 2016			4th Qtr 2016			2016		
	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI
GAYLORD(12KV) - Customers: 2,115	52.6	1.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.2	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.2	1.4	0.0
3rd Party	0%	0%	80%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	64%	97%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	93%	73%	0%	0%	0%	0%	0%	0%	0%	93%	73%	0%
Operation	36%	3%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	27%	0%	0%	0%	0%	0%	0%	0%	7%	27%	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%
KADOTA(12KV) - Customers: 2,787	18.7	0.1	0.0	73.7	1.1	0.0	66.7	1.1	1.3	1.2	0.0	1.0	137.4	2.1	1.9	8.8	0.0	0.0	91.1	0.7	0.8	238.5	2.8	3.7
3rd Party	0%	0%	0%	0%	0%	0%	84%	94%	100%	0%	0%	0%	70%	97%	100%	0%	0%	0%	0%	0%	0%	40%	72%	53%
Equipment Failure	100%	100%	0%	3%	0%	0%	3%	1%	0%	85%	86%	0%	23%	2%	0%	93%	82%	0%	100%	100%	100%	55%	27%	21%
Operation	0%	0%	0%	88%	91%	0%	0%	0%	0%	0%	0%	0%	7%	1%	0%	7%	18%	0%	0%	0%	0%	4%	1%	0%
Other	0%	0%	0%	9%	9%	0%	10%	3%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	27%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	3%	2%	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%	15%	14%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
KINGSLEY(12KV) - Customers: 2,163	17.8	0.1	0.8	332.7	2.9	2.4	0.1	0.0	2.4	102.8	1.3	0.0	34.5	0.1	4.1	140.4	1.8	1.4	0.0	0.0	1.1	277.7	3.1	6.6
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	23%	1%	0%	0%	0%	0%	11%	1%	0%
Equipment Failure	85%	70%	0%	97%	98%	16%	0%	0%	0%	100%	100%	0%	89%	42%	75%	0%	0%	0%	0%	0%	0%	48%	42%	47%
Operation	0%	0%	100%	3%	2%	0%	0%	0%	16%	0%	0%	0%	6%	33%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
Other	0%	0%	0%	0%	0%	84%	100%	100%	42%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	15%	30%	0%	0%	0%	0%	0%	0%	42%	0%	0%	0%	5%	25%	25%	77%	99%	100%	0%	0%	100%	40%	57%	53%
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%
LEHIGH(12KV) - Customers: 2,614	19.5	0.9	1.0	167.4	1.1	0.0	70.7	1.0	0.0	11.7	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	11.7	0.0	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	0%	0%	0%	98%	96%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	92%	100%	3%	0%	1%	0%	38%	94%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Other	0%	0%	97%	2%	3%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%
Vegetation/Animal	8%	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%	57%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Reliability Histories for Individual Circuits Serving Montclair

	2013			2014			2015			1st Qtr 2016			2nd Qtr 2016			3rd Qtr 2016			4th Qtr 2016			2016		
	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI
MARBUCK(12KV) - Customers: 2,347	137.4	2.0	3.0	0.0	0.0	0.0	128.8	1.2	1.9	0.0	0.0	0.0	8.3	0.0	0.0	14.9	0.2	0.2	87.6	1.1	0.0	110.8	1.3	0.2
3rd Party	98%	100%	33%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	2%	0%	33%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	99%	94%	100%	0%	0%	0%	21%	14%	100%
Operation	0%	0%	0%	0%	0%	0%	71%	95%	0%	0%	0%	0%	0%	0%	0%	1%	6%	0%	0%	0%	0%	0%	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%	33%	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%	29%	5%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	79%	86%	0%
MONTCLAIR(12KV) - Customers: 136	0.8	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	0%	0%	0%	0%	0%	0%	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%	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%
PITZER(12KV) - Customers: 1,455	34.8	1.1	3.0	109.8	0.4	0.0	26.9	0.3	1.0	59.8	2.1	0.0	1.8	0.0	0.0	0.0	0.0	0.0	45.6	1.0	1.0	107.1	3.1	1.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	56%	67%	0%
Equipment Failure	0%	0%	0%	91%	90%	0%	33%	9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	5%	1%	33%	0%	0%	0%	67%	91%	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	95%	99%	67%	2%	7%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	2%	1%	0%
Weather/Fire/Earthquake	0%	0%	0%	7%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	43%	32%	100%
ROCK(12KV) - Customers: 1,982	21.4	0.1	2.0	17.3	0.0	2.0	4.1	0.0	0.0	2.2	0.0	0.0	0.0	0.0	3.6	58.8	0.1	0.0	0.0	0.0	0.0	61.1	0.1	3.6
3rd Party	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	55%	32%	0%	0%	1%	50%	90%	35%	0%	0%	0%	0%	0%	0%	45%	94%	64%	0%	0%	0%	0%	91%	51%	45%
Operation	4%	36%	50%	100%	99%	0%	7%	61%	0%	0%	0%	0%	0%	0%	0%	6%	36%	0%	0%	0%	0%	6%	29%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	27%	0%	0%	0%	0%	0%	0%	0%	0%	27%
Vegetation/Animal	40%	33%	0%	0%	0%	50%	4%	4%	0%	100%	100%	0%	0%	0%	27%	0%	0%	0%	0%	0%	0%	4%	19%	27%
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%

Reliability Histories for Individual Circuits Serving Montclair

	2013			2014			2015			1st Qtr 2016			2nd Qtr 2016			3rd Qtr 2016			4th Qtr 2016			2016		
	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI
SAN JOSE(12KV) - Customers: 98	218.1	3.0	0.9	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	0.0	0.0	0.0	0.0	0.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	79%	96%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	21%	4%	100%	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%
SATELLITE(12KV) - Customers: 3,920	58.0	1.5	1.0	469.7	2.5	1.1	34.4	2.0	1.0	157.9	1.0	1.0	0.1	0.0	2.0	3.6	0.0	1.0	43.4	0.1	0.0	204.9	1.2	4.0
3rd Party	0%	0%	0%	1%	2%	0%	17%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	56%	43%	0%	12%	4%	0%
Equipment Failure	99%	100%	0%	0%	0%	0%	30%	50%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	29%	18%	0%	6%	2%	0%
Operation	1%	0%	100%	0%	1%	0%	53%	50%	0%	1%	1%	0%	100%	100%	50%	0%	0%	0%	9%	37%	0%	3%	4%	25%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	2%	4%	0%
Vegetation/Animal	0%	0%	0%	16%	52%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	100%	0%	0%	0%	0%	0%	50%
Weather/Fire/Earthquake	0%	0%	0%	82%	46%	100%	0%	0%	0%	99%	99%	100%	0%	0%	0%	0%	0%	0%	6%	3%	0%	78%	87%	25%
SUNSWEET(12KV) - Customers: 2,316	50.3	2.6	1.0	56.7	1.3	3.0	125.6	1.2	3.9	0.0	0.0	0.0	0.0	0.0	1.0	9.5	0.0	0.0	109.3	2.4	3.1	118.8	2.5	4.1
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	100%	100%	0%	100%	100%	67%	100%	100%	49%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%	3%	0%	0%
Operation	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	3%	20%	65%	11%	22%	49%
Other	0%	0%	0%	0%	0%	33%	0%	0%	51%	0%	0%	0%	0%	0%	0%	0%	0%	0%	58%	77%	4%	53%	76%	3%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	22%	2%	0%	20%	2%	24%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%	1%	32%	12%	1%	24%
TILE(12KV) - Customers: 1,926	46.2	2.1	0.6	28.4	1.1	3.2	0.3	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	301.1	3.0	2.1	90.0	1.0	0.0	391.2	4.0	4.1
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	55%	44%	33%	0%	0%	0%	43%	33%	17%
Equipment Failure	68%	95%	100%	75%	8%	29%	0%	0%	0%	0%	0%	0%	0%	0%	0%	41%	52%	67%	100%	100%	0%	55%	64%	35%
Operation	32%	5%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	4%	4%	0%	0%	0%	0%	3%	3%	0%
Other	0%	0%	0%	25%	92%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	24%
Vegetation/Animal	0%	0%	0%	0%	0%	71%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	24%
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%