



Circuit Reliability Review

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](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 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)

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.

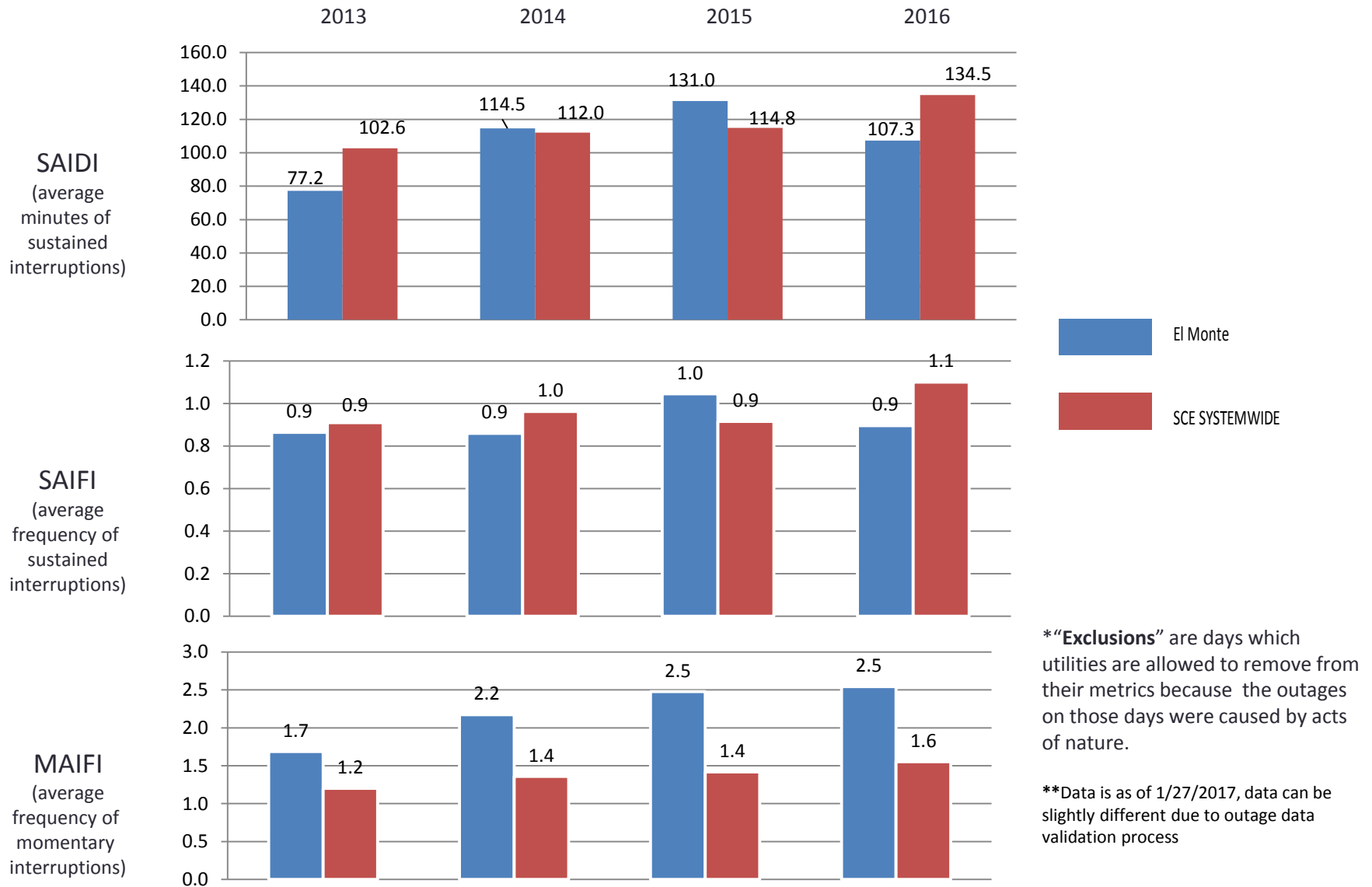
**In the columns showing "Rank," lower numbers indicate poorer performance.

Overview of El Monte

There are 36 circuits that serve El Monte

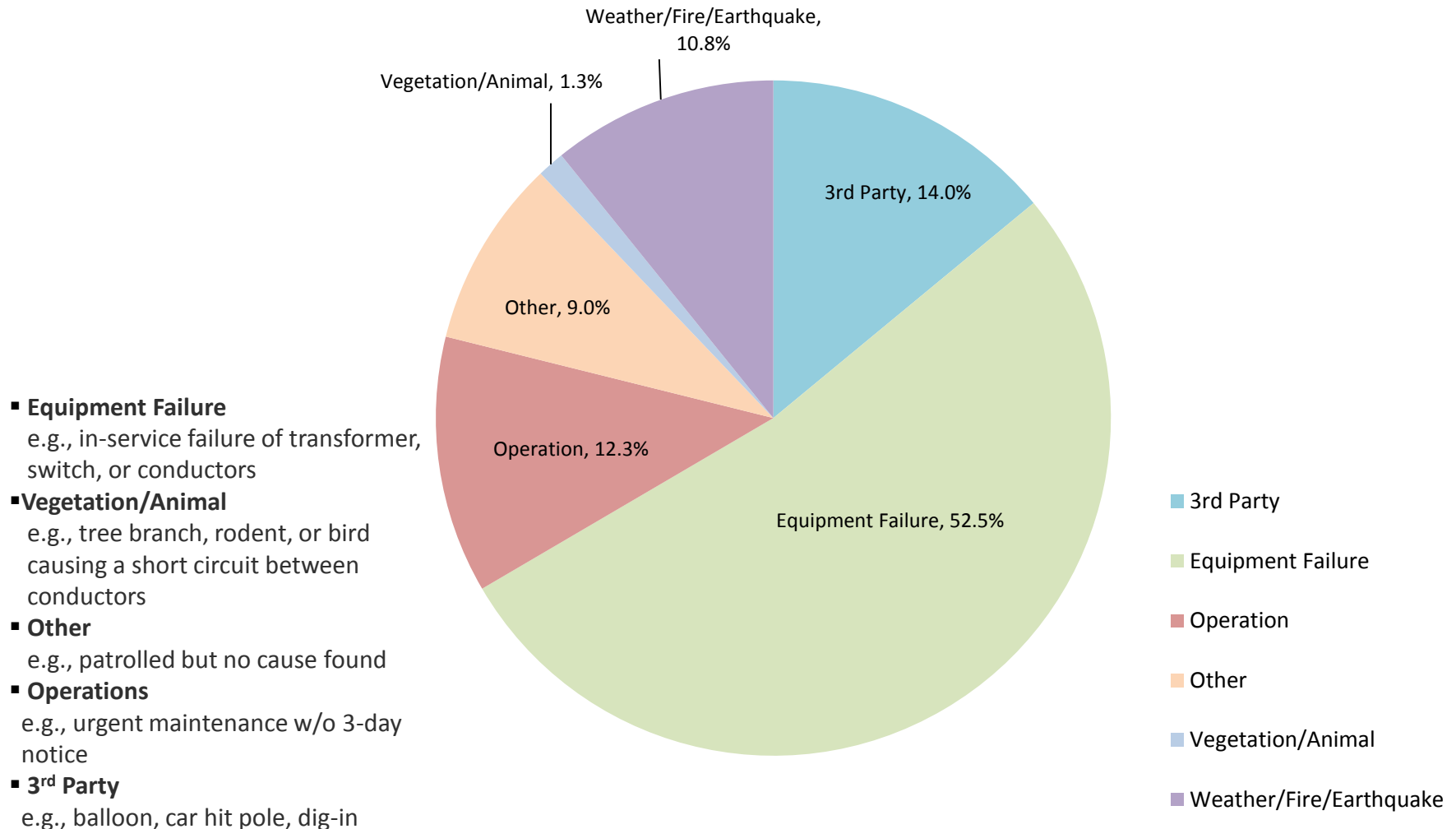
Circuit Type	Sum of Customers	Circuit Type	Sum of Customers	Circuit Type	Sum of Customers	Circuit Type	Sum of Customers
ALPACA(4.16KV)	730	TROY(4.16KV)	671				
ARDEN(4.16KV)	600	TYLER(4.16KV)	1,132				
AUTOBODY(4.16KV)	469	VELMA(16KV)	597				
BAYSE(4.16KV)	819	WASH(16KV)	4,476				
BENTEL(4.16KV)	564	WEAVER(4.16KV)	818				
BROOKS(4.16KV)	677	WHITMORE(16KV)	864				
BRYCE(16KV)	2,755						
CHANGE(16KV)	1,745						
CLAYTON(16KV)	3,105						
COGSWELL(4.16KV)	962						
COLUMBIA(4.16KV)	741						
DAROCA(16KV)	1,389						
EL MONTE(4.16KV)	769						
ENLOE(16KV)	1,830						
EXLINE(16KV)	2,801						
FORBID(16KV)	1,966						
GARDEA(16KV)	3,550						
GLADYS(16KV)	3,265						
GREGG(16KV)	2,417						
LA PORTE(16KV)	2,468						
MERIDIAN(16KV)	1,674						
MERVIN(4.16KV)	1,071						
OPPORTUNITY(16KV)	1,765						
POWDER(16KV)	1,389						
ROSEGLEN(16KV)	696						
ROWLAND(4.16KV)	636						
ROXIE(2.4KV)	90						
SEAMAN(4.16KV)	938						
SHIRLEY(4.16KV)	500						
TAMORA(16KV)	558						
Grand Total	51,497						

Reliability History of Circuits Serving El Monte (No Exclusions)



Causes of Repair Outages in El Monte Circuits 2016 YTD

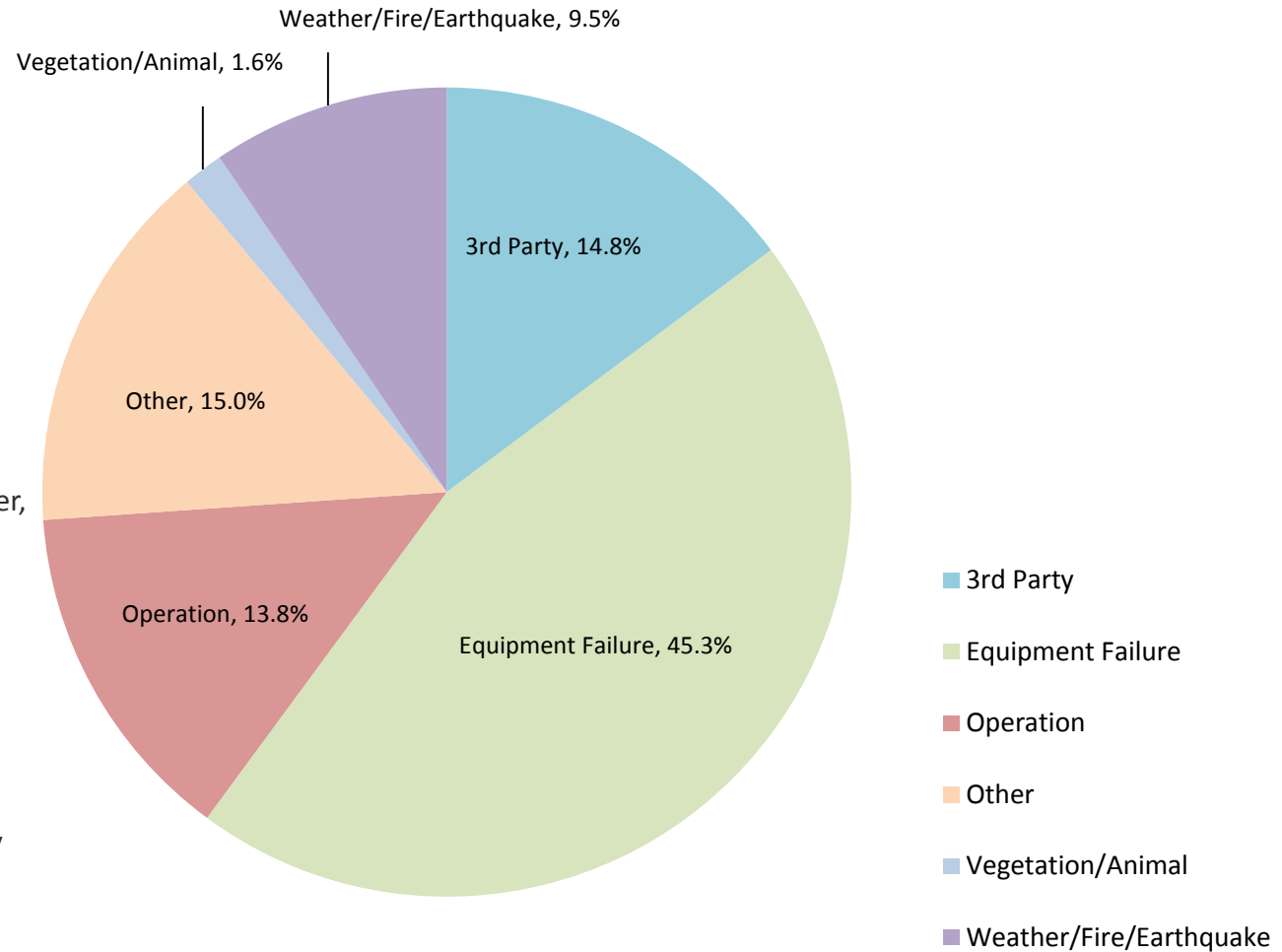
Contributions to SAIDI by Outage Cause



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

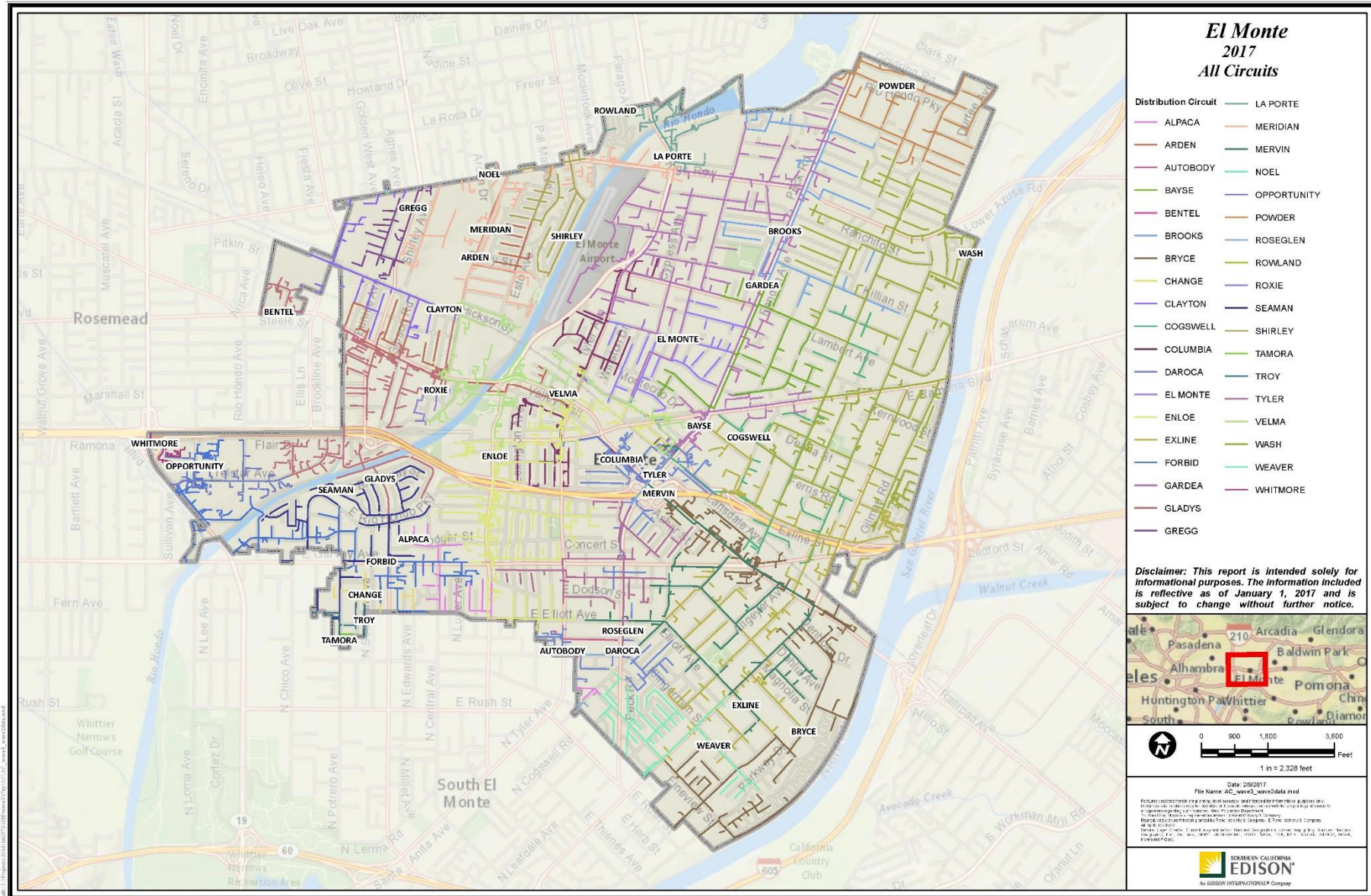
Causes of Repair Outages in El Monte Circuits 2016 YTD

Contributions to SAIFI by Outage Cause



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

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





Back-up Slides

Reliability Histories of Circuits Serving El Monte

Updated through Year-End 2016

Average Reliability of 36 Circuits Serving El Monte

	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
El Monte	77.2	0.9	1.7	114.5	0.9	2.2	131.0	1.0	2.5	13.6	0.1	0.4	46.3	0.4	1.2	17.3	0.1	0.5	30.1	0.4	0.5	107.3	0.9	2.5
3rd Party	21%	14%	30%	9%	9%	40%	12%	10%	25%	15%	44%	29%	8%	11%	6%	48%	70%	42%	4%	3%	9%	14%	15%	17%
Equipment Failure	46%	38%	21%	53%	47%	20%	48%	47%	10%	3%	2%	4%	69%	63%	28%	44%	11%	0%	54%	41%	37%	53%	45%	21%
Operation	10%	17%	2%	19%	17%	3%	22%	24%	2%	51%	10%	8%	5%	3%	7%	8%	18%	0%	8%	27%	10%	12%	14%	6%
Other	8%	15%	15%	4%	12%	20%	15%	15%	33%	20%	26%	59%	10%	22%	31%	0%	0%	11%	8%	7%	34%	9%	15%	31%
Vegetation/Animal	5%	15%	24%	2%	6%	9%	0%	0%	24%	6%	13%	0%	1%	0%	14%	0%	1%	47%	1%	0%	7%	1%	2%	17%
Weather/Fire/Earthquake	10%	2%	9%	12%	9%	7%	3%	4%	6%	4%	4%	0%	7%	1%	15%	0%	0%	0%	25%	22%	3%	11%	9%	7%
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 EI Monte

	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
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%
ARDEN(4.16KV) - Customers: 600	3.1	0.1	1.0	0.5	0.1	2.0	18.1	0.0	0.0	0.0	0.0	0.0	8.1	0.1	1.0	0.0	0.0	0.0	140.4	2.0	0.0	148.5	2.1	1.0
3rd Party	88%	71%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	64%	50%	0%	60%	48%	100%
Equipment Failure	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	36%	50%	0%	34%	48%	0%
Operation	12%	29%	0%	100%	100%	0%	100%	100%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	5%	4%	0%
Other	0%	0%	100%	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%
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%
BAYSE(4.16KV) - Customers: 819	100.8	0.1	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.1	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	36%	53%	0%	100%	100%	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	64%	47%	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 El Monte

	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
BENTEL(4.16KV) - Customers: 564	125.1	1.0	2.0	357.6	2.1	1.0	0.3	0.0	2.3	0.0	0.0	0.0	0.8	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	1.0
3rd Party	0%	0%	49%	51%	50%	100%	0%	0%	87%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	51%	14%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	100%	100%	0%	35%	46%	0%	100%	100%	13%	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%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BROOKS(4.16KV) - Customers: 677	380.0	1.0	1.0	11.9	1.0	3.0	182.3	1.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.9
3rd Party	0%	0%	100%	0%	0%	0%	0%	0%	33%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	100%
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%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	100%	100%	100%	100%	98%	67%	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	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	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%
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%

Reliability Histories for Individual Circuits Serving El Monte

	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
CLAYTON(16KV) - Customers: 3,105	20.0	0.3	1.8	64.7	1.2	2.4	248.6	2.0	1.0	0.0	0.0	0.9	120.9	0.3	4.5	0.0	0.0	0.0	52.5	1.1	0.0	173.4	1.4	5.4
3rd Party	14%	5%	56%	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%	12%	17%	33%	39%	50%	100%	0%	0%	0%	100%	100%	53%	0%	0%	0%	9%	2%	0%	72%	24%	45%
Operation	21%	20%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	23%	0%	0%	0%	46%	94%	0%	14%	73%	20%
Other	65%	75%	44%	0%	0%	0%	60%	50%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	36%	2%	0%	11%	2%	16%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	23%	0%	0%	0%	10%	2%	0%	3%	1%	20%
Weather/Fire/Earthquake	0%	0%	0%	88%	83%	67%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
COGSWELL(4.16KV) - Customers: 962	52.5	0.1	0.0	346.3	2.0	0.0	20.4	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
3rd Party	0%	0%	0%	33%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	55%	88%	0%	2%	1%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	45%	12%	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%	65%	49%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
COLUMBIA(4.16KV) - Customers: 741	0.2	0.0	0.0	76.9	0.2	1.5	2.2	0.0	2.0	0.0	0.0	0.0	2.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.1	0.0
3rd Party	0%	0%	0%	11%	16%	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	0%	3%	1%	39%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	100%	100%	0%	86%	83%	61%	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%	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%	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%

Reliability Histories for Individual Circuits Serving El Monte

	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
EL MONTE(4.16KV) - Customers: 769	12.2	0.2	1.0	8.2	0.0	2.0	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	0.0	0.0	0.0	0.0
3rd Party	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	6%	1%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	34%	89%	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%	50%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	60%	10%	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%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	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%
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%

Reliability Histories for Individual Circuits Serving El Monte

	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
GARDEA(16KV) - Customers: 3,550	34.2	1.0	2.0	39.3	0.0	4.0	34.4	0.2	2.1	1.3	0.0	1.0	53.9	0.1	0.0	4.0	0.0	1.0	35.4	1.0	0.0	94.7	1.1	2.0
3rd Party	0%	0%	51%	0%	0%	50%	96%	97%	52%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	96%	100%	49%	100%	100%	0%	0%	0%	0%	100%	100%	0%	39%	16%	0%	78%	33%	0%	100%	100%	0%	65%	94%	0%
Operation	4%	0%	0%	0%	0%	0%	3%	3%	0%	0%	0%	0%	0%	0%	0%	2%	9%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	48%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	49%
Vegetation/Animal	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	58%	100%	0%	0%	0%	1%	1%	51%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	61%	84%	0%	0%	0%	0%	0%	0%	0%	35%	5%	0%
GLADYS(16KV) - Customers: 3,265	328.4	3.1	4.9	237.9	1.2	2.8	108.4	1.3	3.0	13.0	0.3	0.9	134.6	1.0	1.0	108.9	0.1	0.0	48.3	0.1	1.0	304.7	1.5	2.9
3rd Party	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	98%	97%	81%	97%	97%	100%	100%	100%	0%	0%	0%	0%	100%	100%	0%	91%	50%	0%	85%	59%	0%	90%	74%	0%
Operation	1%	0%	0%	3%	3%	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%	9%	50%	0%	0%	0%	0%	3%	3%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	33%	97%	100%	100%	0%	0%	100%	0%	0%	0%	15%	41%	100%	7%	23%	100%
Vegetation/Animal	2%	3%	19%	0%	0%	0%	0%	0%	67%	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%
GREGG(16KV) - Customers: 2,417	24.5	0.1	1.9	37.1	0.1	3.9	38.2	2.0	3.0	0.0	0.0	0.0	3.7	0.0	0.0	1.8	0.0	1.0	33.8	0.5	1.6	39.3	0.5	2.6
3rd Party	0%	0%	0%	57%	48%	75%	0%	0%	33%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	56%	26%	0%	11%	18%	0%	14%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	48%	4%	0%	41%	3%	0%
Operation	1%	2%	0%	0%	0%	0%	86%	100%	0%	0%	0%	0%	0%	0%	100%	100%	100%	0%	2%	0%	63%	6%	6%	39%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	50%	96%	37%	53%	91%	23%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	67%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	38%
Weather/Fire/Earthquake	43%	73%	100%	33%	34%	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
LA PORTE(16KV) - Customers: 2,468	149.7	1.8	1.6	0.0	0.0	1.0	193.2	1.7	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.9	18.3	0.0	0.0	18.4	0.0	0.9
3rd Party	51%	39%	20%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	20%	3%	0%	0%	0%	0%	48%	39%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	100%	99%	0%
Operation	0%	0%	0%	0%	0%	0%	7%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	45%	59%	46%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	27%	57%	19%	0%	0%	0%	0%	0%	46%	0%	0%	0%	0%	0%	0%	100%	100%	100%	0%	0%	0%	0%	1%	100%
Weather/Fire/Earthquake	1%	0%	61%	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 El Monte

	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
MERIDIAN(16KV) - Customers: 1,674	26.0	0.0	1.0	0.0	0.0	1.0	100.9	1.0	2.9	36.9	0.0	0.0	1.5	0.0	2.7	0.0	0.0	1.2	0.0	0.0	0.0	38.5	0.0	3.9
3rd Party	98%	96%	100%	0%	0%	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%	2%	0%	0%	0%	0%	0%	7%	50%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
Operation	2%	4%	0%	0%	0%	0%	97%	100%	32%	100%	100%	0%	93%	50%	33%	0%	0%	0%	0%	0%	0%	100%	98%	23%
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%	68%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	30%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	67%	0%	0%	0%	0%	0%	0%	0%	0%	47%
MERVIN(4.16KV) - Customers: 1,071	295.6	1.0	2.6	276.3	3.0	1.0	572.6	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.9
3rd Party	99%	98%	62%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	100%
Equipment Failure	0%	0%	0%	3%	33%	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	1%	2%	38%	92%	34%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	4%	33%	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%
OPPORTUNITY(16KV) - Customers: 1,765	2.1	0.0	0.0	0.0	0.0	0.0	22.7	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	3.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	33%
Equipment Failure	69%	45%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	17%	36%	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%	100%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	33%
Vegetation/Animal	14%	18%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	33%
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%
POWDER(16KV) - Customers: 1,389	57.4	1.2	1.0	0.0	0.0	0.0	1.2	0.0	1.0	0.0	0.0	0.0	14.1	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	14.1	0.0	4.0
3rd Party	93%	86%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	0%	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	7%	14%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	25%	0%	0%	0%	0%	0%	0%	0%	0%	25%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	53%	79%	50%	0%	0%	0%	0%	0%	0%	53%	79%	50%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	47%	21%	25%	0%	0%	0%	0%	0%	0%	47%	21%	25%

Reliability Histories for Individual Circuits Serving El Monte

	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
ROSEGLN(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%
ROWLAND(4.16KV) - Customers: 636	5.0	0.1	0.0	0.0	0.0	0.0	156.6	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	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%	5%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	100%	100%	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%	95%	99%	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%
ROXIE(2.4KV) - Customers: 90	162.1	2.0	1.0	519.6	2.0	1.4	0.0	0.0	1.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
3rd Party	0%	0%	0%	14%	50%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%
Equipment Failure	23%	50%	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%	26%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%
Vegetation/Animal	77%	50%	100%	0%	0%	74%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	86%	50%	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%

Reliability Histories for Individual Circuits Serving El Monte

	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
SHIRLEY(4.16KV) - Customers: 500	6.3	0.0	0.0	30.1	0.1	1.0	0.0	0.0	0.0	477.4	0.4	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	477.4	0.4	1.0
3rd Party	0%	0%	0%	94%	83%	100%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Equipment Failure	0%	0%	0%	6%	17%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	100%	100%	0%	0%	0%	0%	0%	0%	100%	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%	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%
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%
TYLER(4.16KV) - Customers: 1,132	75.8	0.1	1.0	381.5	3.0	3.8	8.0	1.0	1.0	0.0	0.0	1.0	43.8	0.1	1.0	0.0	0.0	0.0	29.0	1.0	0.0	72.8	1.1	2.0
3rd Party	0%	0%	100%	0%	0%	53%	0%	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%
Equipment Failure	100%	100%	0%	96%	67%	21%	13%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	60%	5%	0%
Operation	0%	0%	0%	1%	0%	0%	87%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	40%	95%	0%
Other	0%	0%	0%	3%	33%	26%	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%

Reliability Histories for Individual Circuits Serving El Monte

	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
VELMA(16KV) - Customers: 597	91.7	1.5	1.9	205.3	1.2	1.9	10.1	0.0	1.8	90.5	0.1	1.9	12.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	102.9	0.1	1.9
3rd Party	0%	0%	0%	51%	84%	0%	0%	0%	0%	0%	0%	52%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	52%
Equipment Failure	20%	33%	0%	18%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	1%	0%	0%	81%	88%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	12%	46%	0%
Other	0%	0%	0%	29%	8%	48%	0%	0%	0%	100%	100%	48%	0%	0%	0%	0%	0%	0%	0%	0%	0%	88%	54%	48%
Vegetation/Animal	80%	67%	100%	1%	0%	52%	19%	12%	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%
WASH(16KV) - Customers: 4,476	82.5	1.3	3.0	171.3	1.1	5.0	85.2	0.1	4.0	3.6	0.0	0.0	67.6	1.0	1.0	3.2	0.0	1.0	18.0	0.0	0.0	92.3	1.1	2.0
3rd Party	25%	3%	33%	1%	1%	60%	8%	8%	50%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	50%
Equipment Failure	1%	0%	0%	98%	98%	20%	89%	87%	0%	100%	100%	0%	0%	0%	0%	100%	100%	0%	96%	57%	0%	26%	4%	0%
Operation	0%	0%	0%	1%	0%	0%	1%	4%	0%	0%	0%	0%	9%	1%	0%	0%	0%	0%	4%	43%	0%	7%	1%	0%
Other	74%	97%	34%	0%	0%	20%	0%	0%	50%	0%	0%	0%	74%	98%	0%	0%	0%	0%	0%	0%	0%	54%	93%	0%
Vegetation/Animal	0%	0%	34%	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%	2%	1%	0%	0%	0%	0%	17%	1%	100%	0%	0%	0%	0%	0%	0%	12%	1%	50%
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%
WHITMORE(16KV) - Customers: 864	324.8	1.9	0.6	296.4	2.3	2.4	203.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	7.6	0.6	0.0	7.6	0.6	1.0
3rd Party	0%	0%	0%	6%	44%	41%	92%	96%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	100%	100%	100%	0%	0%	0%	6%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	2%	44%	0%	2%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	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%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Weather/Fire/Earthquake	0%	0%	0%	92%	11%	59%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%