



# Circuit Reliability Review

## **Garden Grove**

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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://www.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 Santa Ana District

Anaheim

**Garden Grove**

Orange

Santa Ana

Tustin

Tustin Foothills

Villa Park

# 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
<b>SCE SystemWide</b>	<b>108.13</b>		<b>0.89</b>		<b>102.61</b>		<b>0.91</b>		<b>112.00</b>		<b>0.96</b>		<b>114.83</b>		<b>0.92</b>		<b>134.48</b>		<b>1.10</b>	

\*\*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.

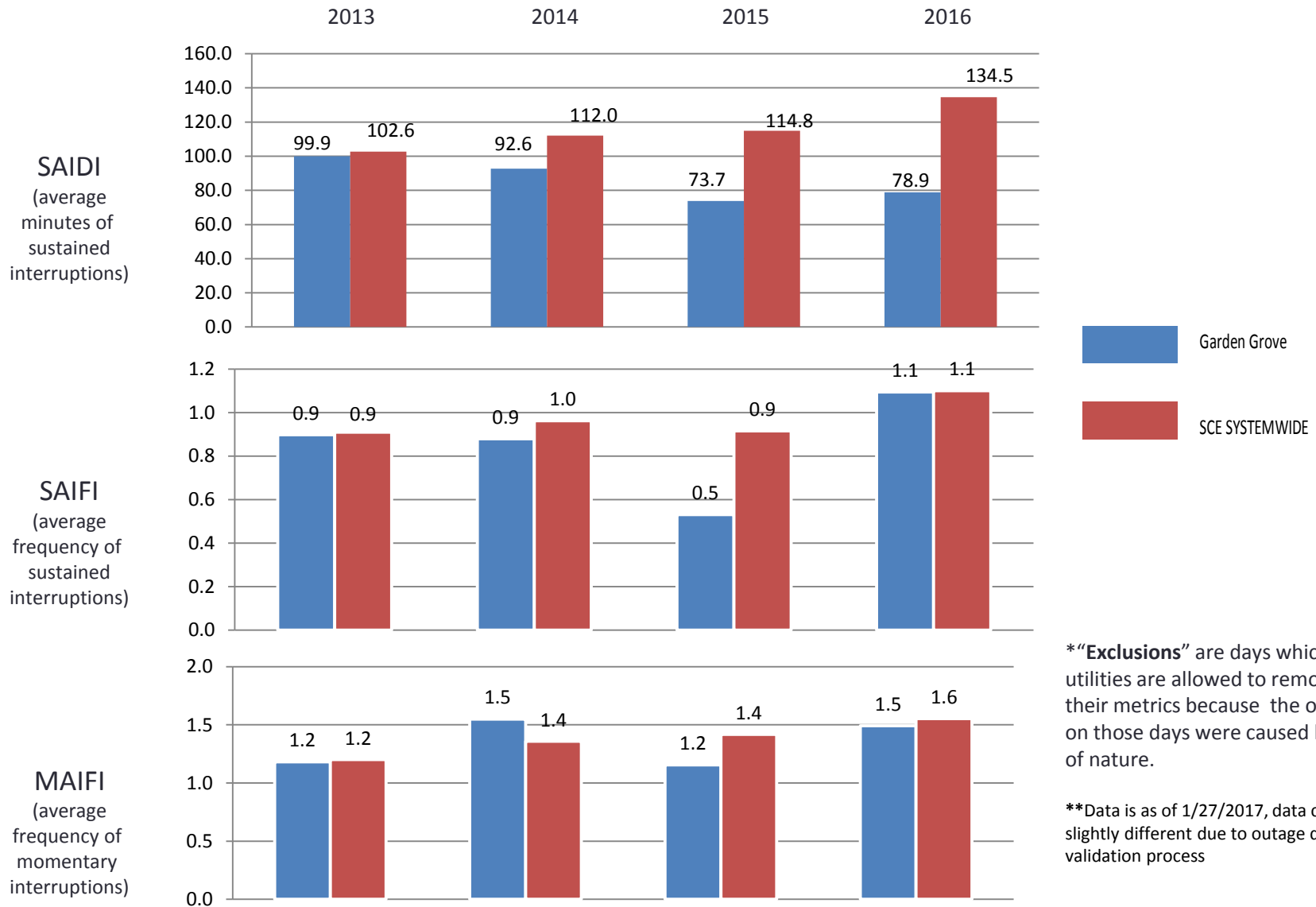
\*\*In the columns showing "Rank," lower numbers indicate poorer performance.

# Overview of Garden Grove

## There are 47 circuits that serve Garden Grove

Circuit Type	Sum of Customers	Circuit Type	Sum of Customers	Circuit Type	Sum of Customers	Circuit Type	Sum of Customers
AKRON(12KV)	3,216	LYNX(12KV)	694				
APACHE(12KV)	556	MARIGOLD(12KV)	3,684				
AUSTIN(12KV)	1,909	MCKEEVER(12KV)	3,488				
BELFAST(12KV)	2,490	MERCEDES(12KV)	2,543				
BISON(12KV)	2,534	OMAHA(12KV)	2,694				
BLACKHAWK(12KV)	2,741	PACKARD(12KV)	2,345				
CALLA(12KV)	934	PANTHER(12KV)	113				
CARNATION(12KV)	1,244	PONTIAC(12KV)	1,923				
CHEETAH(12KV)	2,706	RAMBLER(12KV)	3,327				
CHOCTAW(12KV)	43	SIOUX(12KV)	1,688				
CLOVER(12KV)	3,470	SNAPDRAGON(12KV)	89				
COMANCHE(12KV)	2,290	TITTLE(12KV)	3,074				
COUGAR(12KV)	485	TULIP(12KV)	2,909				
DAFFODIL(12KV)	1,146	TULSA(12KV)	2,290				
DALLAS(12KV)	2,940	WACO(12KV)	1,726				
DOCTRINE(4.16KV)	371	WICHITA(12KV)	1,392				
EDSEL(12KV)	1,615	YOUNGER(12KV)	3,943				
ELEPHANT(12KV)	816						
ESSEX(12KV)	1,787						
FLINT(12KV)	1,973						
FOXGLOVE(12KV)	1,440						
GAZELLE(12KV)	65						
GUAM(12KV)	3,324						
HOP(12KV)	144						
INDIANAPOLIS(12KV)	3,340						
JACQUE(12KV)	2,374						
JAGUAR(12KV)	2,316						
JEROME(12KV)	1,740						
JOPLIN(12KV)	2,824						
LEOPARD(12KV)	1,990						
<b>Grand Total</b>	<b>92,745</b>						

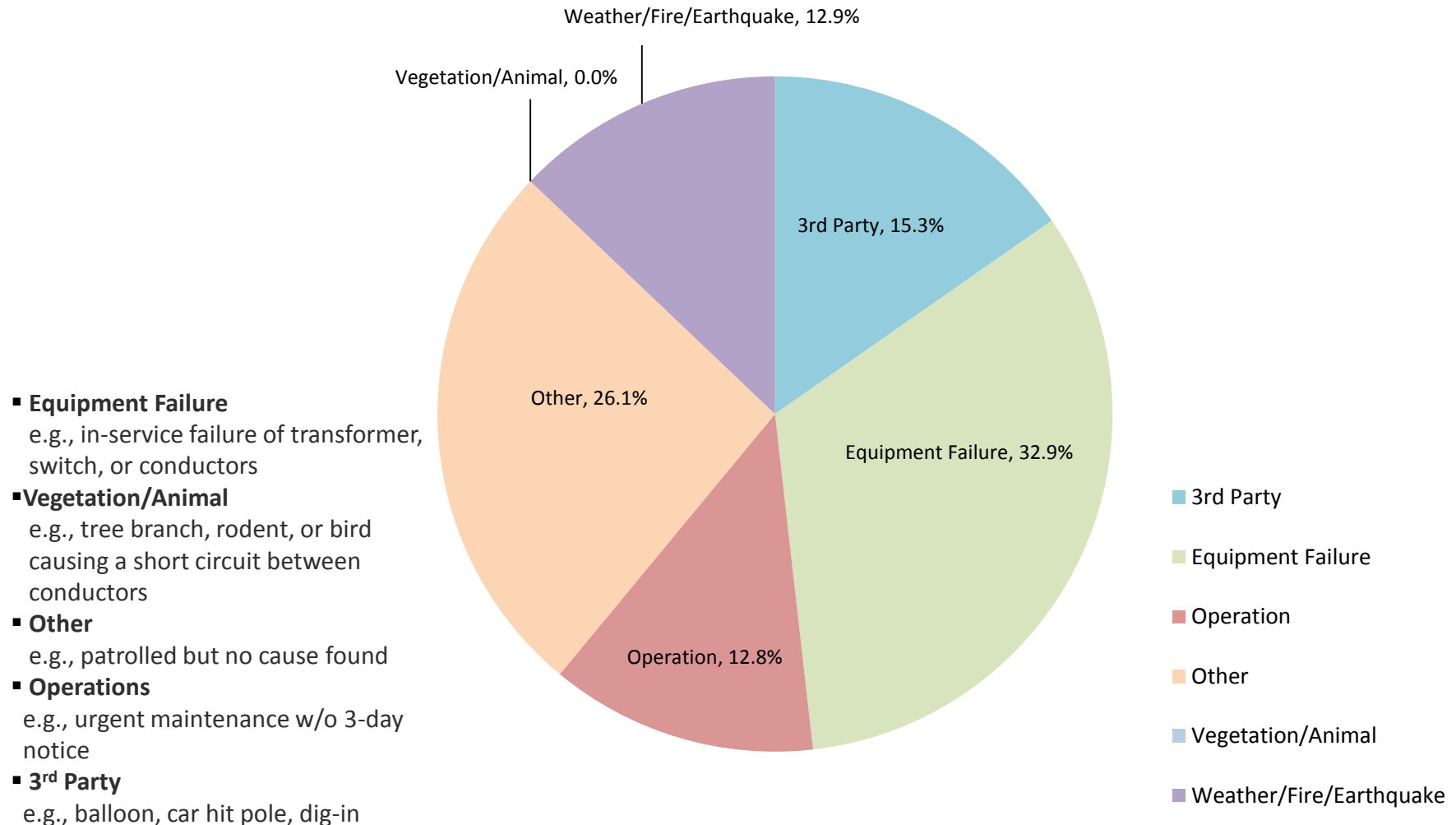
## Reliability History of Circuits Serving Garden Grove (No Exclusions)





# Causes of Repair Outages in Garden Grove Circuits 2016 YTD

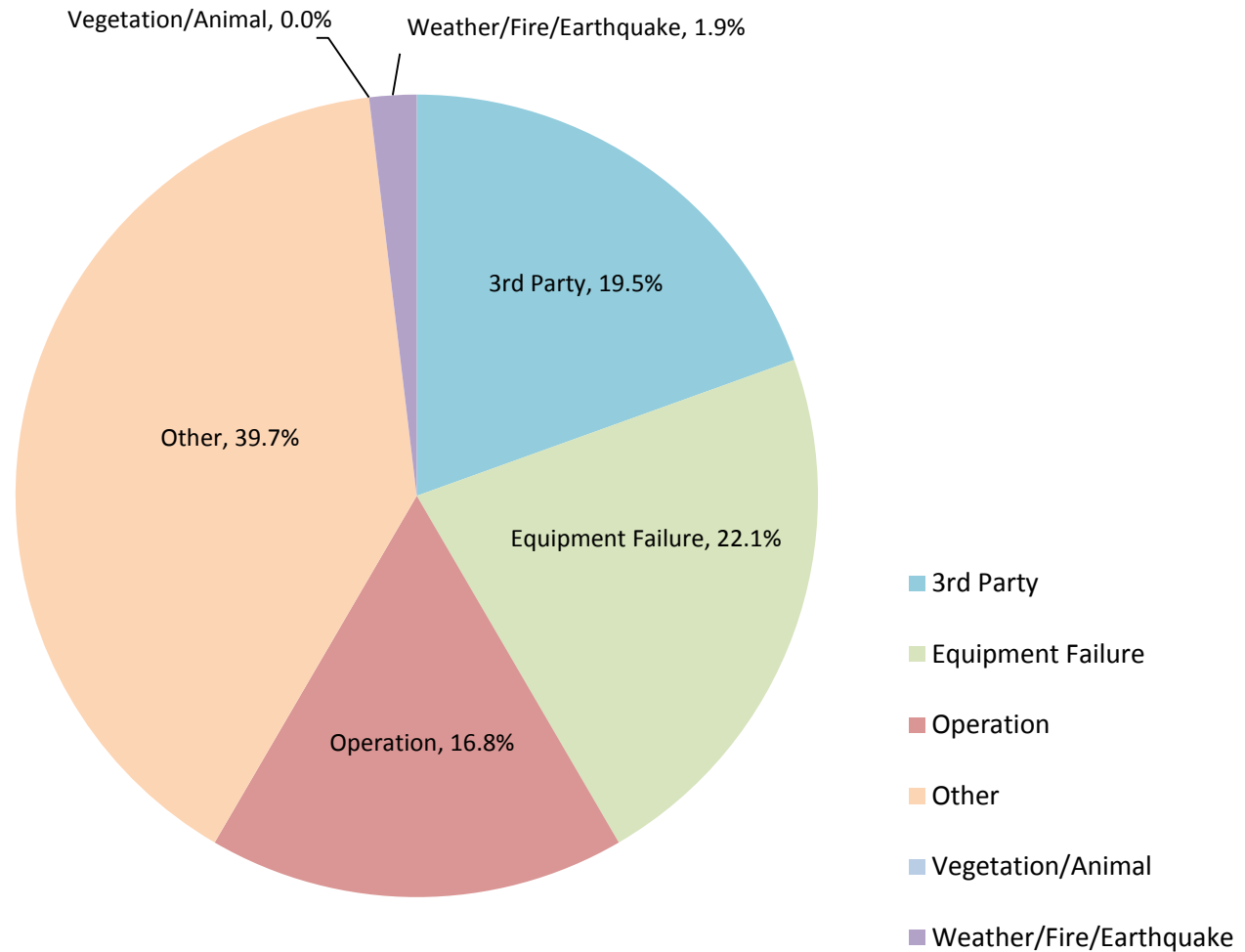
## Contributions to SAIDI by Outage Cause



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

# Causes of Repair Outages in Garden Grove 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
- **3<sup>rd</sup> 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 Garden Grove

**Updated through Year-End 2016**

## Average Reliability of 47 Circuits Serving Garden Grove

	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
<b>Garden Grove</b>	<b>99.9</b>	<b>0.9</b>	<b>1.2</b>	<b>92.6</b>	<b>0.9</b>	<b>1.5</b>	<b>73.7</b>	<b>0.5</b>	<b>1.2</b>	<b>42.8</b>	<b>0.6</b>	<b>0.7</b>	<b>16.4</b>	<b>0.2</b>	<b>0.3</b>	<b>12.5</b>	<b>0.2</b>	<b>0.3</b>	<b>7.3</b>	<b>0.1</b>	<b>0.2</b>	<b>78.9</b>	<b>1.1</b>	<b>1.5</b>
3rd Party	23%	33%	57%	11%	12%	26%	31%	50%	45%	9%	5%	8%	37%	73%	59%	17%	21%	28%	4%	4%	44%	15%	20%	27%
Equipment Failure	54%	40%	23%	60%	56%	34%	38%	24%	11%	14%	10%	10%	44%	7%	0%	69%	74%	61%	59%	42%	9%	33%	22%	18%
Operation	14%	11%	6%	15%	12%	11%	21%	18%	12%	12%	14%	46%	18%	19%	0%	8%	2%	0%	16%	49%	0%	13%	17%	22%
Other	6%	3%	2%	3%	1%	8%	4%	5%	4%	43%	68%	20%	1%	1%	0%	6%	2%	11%	16%	4%	46%	26%	40%	17%
Vegetation/Animal	1%	3%	8%	8%	14%	16%	2%	1%	11%	0%	0%	5%	0%	0%	24%	0%	0%	0%	0%	0%	0%	0%	0%	8%
Weather/Fire/Earthquake	2%	10%	3%	4%	5%	5%	5%	1%	17%	23%	3%	11%	0%	0%	17%	0%	0%	0%	5%	1%	0%	13%	2%	9%
<b>SCE Systemwide</b>	<b>102.6</b>	<b>0.9</b>	<b>1.2</b>	<b>112.0</b>	<b>1.0</b>	<b>1.4</b>	<b>114.8</b>	<b>0.9</b>	<b>1.4</b>	<b>40.5</b>	<b>0.3</b>	<b>0.4</b>	<b>34.8</b>	<b>0.3</b>	<b>0.4</b>	<b>29.4</b>	<b>0.2</b>	<b>0.3</b>	<b>29.8</b>	<b>0.3</b>	<b>0.4</b>	<b>134.5</b>	<b>1.1</b>	<b>1.6</b>

### Notes:

No outages are excluded from the metrics.

### Outage Causes:

Other: e.g., patrolled but no cause could be found

Operations: e.g., urgent maintenance w/o 3-day notice to customers

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

Vegetation/Animal: e.g., tree branch, rodent, or bird causing short circuit across conductors

SAIDI (minutes) = the cumulative amount of time the average customer is interrupted by "sustained" (longer than 5 minutes) outages.

SAIFI (interruptions) = the number of times the average customer is interrupted by "sustained" outages.

MAIFI (interruptions) = the number of times the average customer is interrupted by "momentary" (lasting 5 minutes or less) outages.

## Reliability Histories for Individual Circuits Serving Garden Grove

	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
<b>AKRON(12KV) - Customers: 3,216</b>	<b>90.7</b>	<b>0.9</b>	<b>2.1</b>	<b>164.0</b>	<b>4.0</b>	<b>4.0</b>	<b>5.4</b>	<b>0.0</b>	<b>1.0</b>	<b>89.9</b>	<b>1.3</b>	<b>0.8</b>	<b>48.5</b>	<b>0.1</b>	<b>0.0</b>	<b>53.9</b>	<b>0.5</b>	<b>1.5</b>	<b>59.8</b>	<b>0.6</b>	<b>0.4</b>	<b>252.2</b>	<b>2.4</b>	<b>2.7</b>
3rd Party	31%	50%	72%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	69%	50%	28%	42%	81%	75%	0%	0%	0%	8%	3%	0%	100%	100%	0%	100%	99%	100%	100%	100%	100%	67%	48%	69%
Operation	0%	0%	0%	58%	19%	25%	5%	45%	0%	51%	16%	100%	0%	0%	0%	0%	1%	0%	0%	0%	0%	18%	9%	31%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	41%	81%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	15%	43%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	95%	55%	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%
<b>APACHE(12KV) - Customers: 556</b>	<b>5.4</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>49.9</b>	<b>1.0</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>49.9</b>	<b>1.0</b>	<b>2.0</b>
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%	100%	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%	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%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	50%
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%	50%
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%
<b>AUSTIN(12KV) - Customers: 1,909</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>148.4</b>	<b>1.3</b>	<b>1.0</b>	<b>1.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.9</b>	<b>0.1</b>	<b>0.0</b>	<b>1.9</b>	<b>0.1</b>	<b>1.0</b>
3rd Party	0%	0%	0%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	0%	75%	81%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	8%	8%	0%	100%	100%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%	100%	0%	100%	100%	100%
Other	0%	0%	0%	16%	10%	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%
<b>BELFAST(12KV) - Customers: 2,490</b>	<b>1.3</b>	<b>0.0</b>	<b>0.0</b>	<b>2.4</b>	<b>0.0</b>	<b>1.0</b>	<b>58.1</b>	<b>0.1</b>	<b>0.0</b>	<b>15.9</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.0</b>	<b>88.5</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>104.4</b>	<b>2.0</b>	<b>1.0</b>
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Equipment Failure	48%	35%	0%	91%	90%	100%	7%	7%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	85%	50%	0%
Operation	52%	65%	0%	0%	0%	0%	93%	93%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	9%	10%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	15%	50%	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 Garden Grove

	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
<b>BISON(12KV) - Customers: 2,534</b>	<b>16.7</b>	<b>0.1</b>	<b>0.0</b>	<b>212.1</b>	<b>1.7</b>	<b>3.7</b>	<b>0.3</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>10.4</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>10.4</b>	<b>0.1</b>	<b>0.0</b>
3rd Party	0%	0%	0%	0%	0%	27%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	77%	53%	0%	5%	5%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	67%	50%	0%	0%	0%	0%	67%	50%	0%
Operation	0%	0%	0%	70%	23%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	33%	50%	0%	0%	0%	0%	33%	50%	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	23%	47%	0%	0%	0%	27%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	24%	72%	46%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>BLACKHAWK(12KV) - Customers: 2,741</b>	<b>21.6</b>	<b>0.6</b>	<b>1.1</b>	<b>54.7</b>	<b>1.0</b>	<b>0.0</b>	<b>34.9</b>	<b>0.1</b>	<b>0.0</b>	<b>62.9</b>	<b>1.0</b>	<b>1.0</b>	<b>5.0</b>	<b>0.1</b>	<b>1.0</b>	<b>6.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>74.0</b>	<b>1.1</b>	<b>2.0</b>
3rd Party	45%	30%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	44%	11%	0%	100%	100%	0%	19%	13%	0%	3%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	11%	3%	0%
Operation	11%	59%	0%	0%	0%	0%	81%	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%	97%	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	89%	97%	50%
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%	50%
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%
<b>CALLA(12KV) - Customers: 934</b>	<b>97.1</b>	<b>1.1</b>	<b>0.0</b>	<b>350.1</b>	<b>3.4</b>	<b>1.0</b>	<b>43.7</b>	<b>0.1</b>	<b>5.0</b>	<b>0.9</b>	<b>0.0</b>	<b>0.0</b>	<b>12.0</b>	<b>1.2</b>	<b>1.2</b>	<b>0.0</b>	<b>0.0</b>	<b>1.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>12.9</b>	<b>1.2</b>	<b>2.3</b>
3rd Party	44%	11%	0%	45%	59%	99%	0%	0%	20%	0%	0%	0%	87%	100%	100%	0%	0%	0%	0%	0%	0%	81%	99%	50%
Equipment Failure	53%	89%	0%	26%	7%	1%	57%	35%	20%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	50%
Operation	3%	1%	0%	13%	29%	0%	11%	20%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	1%	0%
Other	0%	0%	0%	15%	4%	0%	0%	0%	0%	0%	0%	0%	13%	0%	0%	0%	0%	0%	0%	0%	0%	12%	0%	0%
Vegetation/Animal	0%	0%	0%	1%	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	32%	45%	40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>CARNATION(12KV) - Customers: 1,244</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>237.4</b>	<b>1.2</b>	<b>1.9</b>	<b>157.4</b>	<b>0.8</b>	<b>0.4</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>3.2</b>	<b>0.0</b>	<b>0.0</b>	<b>36.9</b>	<b>0.1</b>	<b>2.0</b>	<b>3.4</b>	<b>0.0</b>	<b>0.0</b>	<b>43.5</b>	<b>0.2</b>	<b>2.0</b>
3rd Party	0%	0%	0%	8%	3%	100%	28%	68%	100%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	50%
Equipment Failure	0%	0%	0%	58%	17%	0%	65%	14%	0%	0%	0%	0%	0%	0%	0%	97%	50%	50%	100%	100%	0%	90%	45%	50%
Operation	0%	0%	0%	0%	1%	0%	7%	18%	0%	0%	0%	0%	0%	0%	0%	3%	50%	0%	0%	0%	0%	3%	42%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	7%	14%	0%
Vegetation/Animal	0%	0%	0%	33%	80%	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 Garden Grove

	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
<b>CHEETAH(12KV) - Customers: 2,706</b>	<b>258.0</b>	<b>2.2</b>	<b>2.9</b>	<b>33.0</b>	<b>0.1</b>	<b>2.0</b>	<b>88.0</b>	<b>0.4</b>	<b>1.7</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>7.7</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>7.7</b>	<b>0.0</b>	<b>0.0</b>
3rd Party	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	98%	98%	100%	0%	0%	0%	6%	30%	35%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	100%	100%	0%
Operation	2%	2%	0%	57%	65%	0%	12%	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	43%	35%	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%	0%	5%	19%	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%	77%	26%	65%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>CHOCTAW(12KV) - Customers: 43</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>234.7</b>	<b>2.7</b>	<b>1.3</b>	<b>0.0</b>	<b>0.0</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>234.7</b>	<b>2.7</b>	<b>2.3</b>
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%	79%	63%	23%	0%	0%	0%	0%	0%	0%	0%	0%	0%	79%	63%	13%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	21%	37%	77%	0%	0%	0%	0%	0%	0%	0%	0%	0%	21%	37%	43%
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%	43%
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%
<b>CLOVER(12KV) - Customers: 3,470</b>	<b>22.6</b>	<b>1.0</b>	<b>1.0</b>	<b>60.2</b>	<b>0.5</b>	<b>0.8</b>	<b>195.5</b>	<b>1.9</b>	<b>0.0</b>	<b>5.3</b>	<b>0.0</b>	<b>0.0</b>	<b>1.4</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.0</b>	<b>12.4</b>	<b>0.4</b>	<b>0.0</b>	<b>19.1</b>	<b>0.4</b>	<b>1.0</b>
3rd Party	60%	97%	100%	77%	59%	100%	33%	54%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	100%
Equipment Failure	14%	1%	0%	3%	1%	0%	3%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	1%	1%	0%	8%	1%	0%
Operation	0%	0%	0%	20%	40%	0%	62%	45%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	99%	99%	0%	92%	99%	0%
Other	25%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	1%	0%	0%	0%	0%	0%	3%	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%
<b>COMANCHE(12KV) - Customers: 2,290</b>	<b>5.6</b>	<b>0.0</b>	<b>0.0</b>	<b>65.6</b>	<b>0.3</b>	<b>2.0</b>	<b>89.9</b>	<b>0.2</b>	<b>0.0</b>	<b>50.1</b>	<b>1.0</b>	<b>2.0</b>	<b>0.0</b>	<b>0.0</b>	<b>2.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>50.1</b>	<b>1.0</b>	<b>4.0</b>
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	25%
Equipment Failure	0%	0%	0%	50%	36%	0%	100%	99%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	100%	100%	0%	50%	64%	0%	0%	1%	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%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	50%
Vegetation/Animal	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	25%
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 Garden Grove

	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
<b>COUGAR(12KV) - Customers: 485</b>	<b>133.1</b>	<b>0.2</b>	<b>1.0</b>	<b>16.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
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	62%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	38%	50%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	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%	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%
<b>DAFFODIL(12KV) - Customers: 1,146</b>	<b>268.2</b>	<b>2.2</b>	<b>2.0</b>	<b>84.6</b>	<b>1.1</b>	<b>0.0</b>	<b>46.8</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
3rd Party	4%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	60%	90%	50%	100%	100%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	36%	6%	50%	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%
<b>DALLAS(12KV) - Customers: 2,940</b>	<b>245.9</b>	<b>0.6</b>	<b>3.0</b>	<b>5.8</b>	<b>0.0</b>	<b>1.8</b>	<b>66.0</b>	<b>0.4</b>	<b>3.9</b>	<b>50.5</b>	<b>1.0</b>	<b>0.0</b>	<b>1.6</b>	<b>0.0</b>	<b>0.0</b>	<b>7.5</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>59.6</b>	<b>1.1</b>	<b>0.0</b>
3rd Party	0%	0%	53%	0%	0%	0%	39%	12%	51%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	13%	6%	0%
Equipment Failure	98%	92%	47%	0%	0%	44%	31%	22%	24%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	2%	8%	0%	100%	100%	56%	27%	65%	25%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	3%	3%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	95%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	81%	91%	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%	3%	1%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%
<b>DOCTRINE(4.16KV) - Customers: 371</b>	<b>662.1</b>	<b>1.8</b>	<b>0.0</b>	<b>8.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>187.0</b>	<b>3.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.0</b>	<b>187.0</b>	<b>3.0</b>	<b>1.0</b>
3rd Party	4%	56%	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%	74%	50%	0%	0%	0%	0%	58%	33%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	58%	33%	0%
Operation	96%	44%	0%	26%	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%	42%	67%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	42%	67%	100%
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 Garden Grove

	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
<b>EDSEL(12KV) - Customers: 1,615</b>	<b>25.6</b>	<b>0.1</b>	<b>0.0</b>	<b>18.6</b>	<b>0.0</b>	<b>0.0</b>	<b>73.6</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.0</b>
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	99%	51%	0%	100%	100%	0%	95%	80%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	1%	49%	0%	0%	0%	0%	5%	20%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
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%
<b>ELEPHANT(12KV) - Customers: 816</b>	<b>128.9</b>	<b>0.1</b>	<b>1.8</b>	<b>40.9</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.9</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.9</b>
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%	97%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	100%
Operation	0%	3%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	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%
<b>ESSEX(12KV) - Customers: 1,787</b>	<b>518.9</b>	<b>0.6</b>	<b>1.0</b>	<b>140.6</b>	<b>1.1</b>	<b>0.0</b>	<b>71.5</b>	<b>0.8</b>	<b>0.9</b>	<b>35.1</b>	<b>0.0</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>27.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>62.2</b>	<b>0.1</b>	<b>1.0</b>
3rd Party	0%	0%	0%	0%	0%	0%	50%	93%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	100%	100%	0%	83%	88%	0%	32%	4%	0%	100%	100%	0%	0%	0%	0%	42%	41%	0%	0%	0%	0%	75%	70%	0%
Operation	0%	0%	0%	0%	0%	0%	2%	1%	0%	0%	0%	100%	0%	0%	0%	58%	59%	0%	0%	0%	0%	25%	30%	100%
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%	17%	12%	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%	16%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>FLINT(12KV) - Customers: 1,973</b>	<b>13.2</b>	<b>0.0</b>	<b>1.0</b>	<b>37.9</b>	<b>0.0</b>	<b>2.0</b>	<b>192.8</b>	<b>1.8</b>	<b>0.0</b>	<b>20.0</b>	<b>1.0</b>	<b>0.0</b>	<b>44.1</b>	<b>1.1</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.0</b>	<b>64.1</b>	<b>2.1</b>	<b>2.0</b>
3rd Party	0%	0%	0%	0%	0%	0%	24%	37%	0%	0%	0%	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	69%	51%	50%
Equipment Failure	0%	0%	0%	100%	100%	100%	76%	63%	0%	20%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	6%	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%	0%	0%	0%	80%	99%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	25%	48%	50%
Vegetation/Animal	0%	0%	100%	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 Garden Grove

	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
<b>FOXGLOVE(12KV) - Customers: 1,440</b>	<b>23.5</b>	<b>0.1</b>	<b>0.6</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>64.3</b>	<b>0.1</b>	<b>0.0</b>	<b>120.0</b>	<b>1.0</b>	<b>0.0</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>120.2</b>	<b>1.0</b>	<b>1.0</b>
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%	15%	42%	0%	100%	100%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%	99%	100%
Operation	0%	0%	0%	0%	0%	0%	85%	58%	0%	0%	0%	0%	100%	100%	0%	0%	0%	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%	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%
<b>GAZELLE(12KV) - Customers: 65</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>15.0</b>	<b>1.0</b>	<b>3.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
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%	67%	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%	100%	100%	33%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>GUAM(12KV) - Customers: 3,324</b>	<b>82.1</b>	<b>0.6</b>	<b>0.0</b>	<b>111.1</b>	<b>0.1</b>	<b>2.8</b>	<b>6.2</b>	<b>0.0</b>	<b>0.1</b>	<b>82.3</b>	<b>1.0</b>	<b>2.0</b>	<b>0.4</b>	<b>0.0</b>	<b>1.0</b>	<b>43.9</b>	<b>1.0</b>	<b>2.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>126.6</b>	<b>2.1</b>	<b>5.0</b>
3rd Party	96%	99%	0%	0%	1%	36%	0%	0%	0%	10%	2%	50%	0%	0%	100%	0%	0%	0%	0%	0%	0%	6%	1%	40%
Equipment Failure	4%	1%	0%	96%	95%	64%	51%	7%	0%	26%	2%	0%	0%	0%	0%	100%	100%	49%	0%	0%	0%	51%	51%	19%
Operation	0%	0%	0%	4%	4%	0%	4%	1%	100%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	45%	91%	0%	65%	96%	50%	0%	0%	0%	0%	0%	51%	0%	0%	0%	42%	48%	40%
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%
<b>HOPI(12KV) - Customers: 144</b>	<b>93.6</b>	<b>1.0</b>	<b>1.0</b>	<b>170.1</b>	<b>2.0</b>	<b>1.9</b>	<b>2.4</b>	<b>0.0</b>	<b>0.0</b>	<b>171.3</b>	<b>2.0</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>171.3</b>	<b>2.0</b>	<b>2.0</b>
3rd Party	0%	0%	0%	2%	0%	48%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	100%	100%	0%	98%	100%	52%	100%	100%	0%	71%	51%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	71%	51%	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%	29%	49%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	29%	49%	49%
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%	51%
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 Garden Grove

	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
<b>INDIANAPOLIS(12KV) - Customers: 3,340</b>	<b>100.7</b>	<b>2.2</b>	<b>2.0</b>	<b>94.5</b>	<b>1.1</b>	<b>4.0</b>	<b>13.4</b>	<b>0.2</b>	<b>2.0</b>	<b>49.8</b>	<b>1.0</b>	<b>1.0</b>	<b>1.1</b>	<b>0.0</b>	<b>0.0</b>	<b>23.2</b>	<b>1.4</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>74.2</b>	<b>2.4</b>	<b>2.0</b>
3rd Party	1%	0%	100%	0%	0%	0%	0%	0%	50%	4%	1%	0%	100%	100%	0%	30%	30%	100%	0%	0%	0%	13%	18%	50%
Equipment Failure	57%	50%	0%	100%	100%	75%	57%	21%	0%	0%	0%	0%	0%	0%	0%	66%	69%	0%	0%	0%	0%	21%	40%	0%
Operation	40%	49%	0%	0%	0%	0%	43%	79%	0%	0%	0%	0%	0%	0%	0%	5%	1%	0%	0%	0%	0%	1%	0%	0%
Other	0%	0%	0%	0%	0%	25%	0%	0%	0%	96%	99%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	65%	42%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%
Weather/Fire/Earthquake	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>JACQUE(12KV) - Customers: 2,374</b>	<b>372.4</b>	<b>1.4</b>	<b>0.0</b>	<b>7.2</b>	<b>0.0</b>	<b>2.0</b>	<b>42.1</b>	<b>1.1</b>	<b>0.0</b>	<b>57.5</b>	<b>0.9</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>5.6</b>	<b>0.0</b>	<b>0.0</b>	<b>31.2</b>	<b>0.4</b>	<b>1.9</b>	<b>94.3</b>	<b>1.3</b>	<b>1.9</b>
3rd Party	0%	0%	0%	0%	0%	0%	21%	88%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	35%	49%	100%	11%	14%	100%
Equipment Failure	42%	20%	0%	76%	43%	0%	55%	7%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	17%	12%	0%	12%	5%	0%
Operation	0%	0%	0%	24%	57%	100%	2%	1%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	48%	39%	0%	77%	81%	0%
Other	58%	80%	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%	21%	5%	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%
<b>JAGUAR(12KV) - Customers: 2,316</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>75.7</b>	<b>0.4</b>	<b>0.0</b>	<b>106.3</b>	<b>1.4</b>	<b>0.0</b>	<b>18.2</b>	<b>0.1</b>	<b>1.0</b>	<b>3.0</b>	<b>0.0</b>	<b>0.0</b>	<b>3.5</b>	<b>0.0</b>	<b>0.0</b>	<b>37.6</b>	<b>0.2</b>	<b>0.0</b>	<b>62.3</b>	<b>0.3</b>	<b>1.0</b>
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	6%	8%	0%
Equipment Failure	0%	0%	0%	100%	100%	0%	7%	4%	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%	5%	8%	0%
Other	0%	0%	0%	0%	0%	0%	79%	92%	0%	46%	25%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	74%	58%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	13%	4%	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%	54%	75%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	16%	25%	100%
<b>JEROME(12KV) - Customers: 1,740</b>	<b>55.7</b>	<b>1.1</b>	<b>0.0</b>	<b>344.4</b>	<b>2.0</b>	<b>2.9</b>	<b>68.0</b>	<b>1.1</b>	<b>0.0</b>	<b>19.6</b>	<b>1.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.9</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>19.6</b>	<b>1.2</b>	<b>0.9</b>
3rd Party	0%	0%	0%	0%	0%	0%	85%	93%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Equipment Failure	72%	7%	0%	100%	100%	65%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	2%	1%	0%	0%	0%	0%	15%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	35%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%
Vegetation/Animal	26%	93%	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 Garden Grove

	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
<b>JOPLIN(12KV) - Customers: 2,824</b>	<b>50.1</b>	<b>1.2</b>	<b>2.0</b>	<b>75.5</b>	<b>2.0</b>	<b>0.9</b>	<b>54.6</b>	<b>0.1</b>	<b>1.9</b>	<b>42.2</b>	<b>0.9</b>	<b>0.0</b>	<b>21.6</b>	<b>0.0</b>	<b>0.0</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>7.4</b>	<b>0.0</b>	<b>1.1</b>	<b>71.4</b>	<b>0.9</b>	<b>1.1</b>
3rd Party	69%	91%	100%	0%	0%	0%	5%	26%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	9%	2%	0%	44%	50%	0%	44%	46%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	22%	7%	0%	4%	0%	0%	49%	26%	100%	4%	3%	0%	100%	100%	0%	100%	100%	0%	0%	0%	0%	33%	6%	0%
Other	0%	0%	0%	1%	1%	0%	3%	3%	0%	96%	97%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	56%	91%	100%
Vegetation/Animal	0%	0%	0%	51%	49%	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%	100%	100%	0%	10%	3%	0%
<b>LEOPARD(12KV) - Customers: 1,990</b>	<b>21.9</b>	<b>0.0</b>	<b>1.0</b>	<b>357.9</b>	<b>0.7</b>	<b>0.1</b>	<b>16.2</b>	<b>0.1</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>4.1</b>	<b>0.0</b>	<b>0.0</b>	<b>23.6</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>27.7</b>	<b>0.1</b>	<b>0.0</b>
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	7%	18%	0%	100%	97%	100%	18%	10%	0%	0%	0%	0%	0%	0%	0%	98%	65%	0%	0%	0%	0%	84%	43%	0%
Operation	93%	82%	0%	0%	3%	0%	17%	15%	0%	0%	0%	0%	100%	100%	0%	2%	35%	0%	0%	0%	0%	16%	57%	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%	65%	76%	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%
<b>LYNX(12KV) - Customers: 694</b>	<b>221.5</b>	<b>0.5</b>	<b>2.0</b>	<b>184.7</b>	<b>1.6</b>	<b>2.0</b>	<b>82.8</b>	<b>1.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>112.6</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>112.6</b>	<b>0.2</b>	<b>0.0</b>
3rd Party	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%
Equipment Failure	0%	0%	0%	68%	71%	50%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	100%	100%	0%	32%	29%	50%	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%	50%	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%
<b>MARIGOLD(12KV) - Customers: 3,684</b>	<b>306.3</b>	<b>1.1</b>	<b>0.0</b>	<b>17.8</b>	<b>0.1</b>	<b>1.0</b>	<b>312.4</b>	<b>2.2</b>	<b>0.0</b>	<b>6.0</b>	<b>0.0</b>	<b>0.7</b>	<b>48.3</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.1</b>	<b>1.9</b>	<b>0.0</b>	<b>0.0</b>	<b>56.2</b>	<b>0.2</b>	<b>1.8</b>
3rd Party	97%	97%	0%	18%	58%	100%	42%	47%	0%	0%	0%	0%	4%	11%	0%	0%	0%	0%	0%	0%	0%	4%	10%	0%
Equipment Failure	1%	1%	0%	11%	3%	0%	56%	51%	0%	0%	0%	0%	96%	87%	0%	0%	0%	100%	100%	100%	0%	86%	81%	59%
Operation	0%	0%	0%	54%	12%	0%	3%	2%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	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	3%	2%	0%	17%	27%	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%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	7%	41%

## Reliability Histories for Individual Circuits Serving Garden Grove

	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
MCKEEVER(12KV) - Customers: 3,488	136.5	1.3	2.3	23.3	0.1	1.0	5.9	0.0	0.0	37.4	1.0	2.8	11.6	0.0	0.0	0.0	0.0	0.0	14.6	1.0	0.0	63.6	2.1	2.8
3rd Party	20%	16%	79%	0%	0%	99%	65%	76%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	80%	84%	21%	95%	86%	1%	35%	24%	0%	100%	100%	64%	99%	56%	0%	0%	0%	0%	60%	2%	0%	91%	51%	64%
Operation	0%	0%	0%	5%	14%	0%	0%	0%	0%	0%	0%	36%	1%	44%	0%	0%	0%	0%	40%	98%	0%	9%	49%	36%
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%
MERCEDES(12KV) - Customers: 2,543	32.6	0.0	1.0	283.4	3.9	3.6	55.2	0.2	1.0	5.6	0.0	1.0	25.5	0.1	0.0	0.0	0.0	0.0	6.7	0.0	0.0	37.8	0.1	1.0
3rd Party	0%	0%	100%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	8%	7%	0%	34%	44%	5%	71%	19%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	4%	2%	0%	28%	79%	0%	39%	20%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	73%	62%	100%
Other	91%	86%	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%	35%	40%	83%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	1%	7%	0%	27%	14%	12%	1%	2%	0%	61%	80%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	27%	38%	0%
OMAHA(12KV) - Customers: 2,694	18.5	1.6	0.5	138.3	0.6	0.5	151.2	1.4	1.5	84.3	1.2	0.5	49.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	134.0	1.2	0.5
3rd Party	34%	34%	100%	0%	0%	0%	18%	34%	33%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	13%	0%	0%	95%	95%	100%	76%	60%	67%	0%	0%	0%	90%	51%	0%	0%	0%	0%	0%	0%	0%	33%	2%	0%
Operation	4%	1%	0%	5%	5%	0%	4%	4%	0%	5%	5%	100%	10%	49%	0%	0%	0%	0%	0%	0%	0%	7%	7%	100%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	95%	95%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	60%	91%	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	49%	64%	0%	0%	0%	0%	2%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PACKARD(12KV) - Customers: 2,345	15.8	0.0	0.0	18.9	0.3	0.4	24.5	0.0	0.0	0.6	0.0	1.0	0.0	0.0	0.0	16.8	0.0	0.0	0.2	0.0	0.0	17.5	0.0	1.0
3rd Party	0%	0%	0%	6%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	36%	15%	0%	60%	57%	100%	93%	82%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	64%	85%	0%	34%	23%	0%	7%	18%	0%	100%	100%	100%	0%	0%	0%	100%	100%	0%	100%	100%	0%	100%	100%	100%
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%

## Reliability Histories for Individual Circuits Serving Garden Grove

	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
<b>PANTHER(12KV) - Customers: 113</b>	<b>97.4</b>	<b>1.0</b>	<b>1.9</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
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%	47%	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%	53%	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%
<b>PONTIAC(12KV) - Customers: 1,923</b>	<b>262.0</b>	<b>3.2</b>	<b>3.2</b>	<b>35.5</b>	<b>0.1</b>	<b>1.0</b>	<b>93.0</b>	<b>0.1</b>	<b>1.6</b>	<b>3.0</b>	<b>0.4</b>	<b>1.6</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>39.0</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.0</b>	<b>42.1</b>	<b>0.6</b>	<b>2.6</b>
3rd Party	15%	22%	10%	22%	45%	100%	5%	6%	0%	0%	0%	63%	0%	0%	0%	2%	5%	0%	0%	0%	100%	2%	1%	78%
Equipment Failure	36%	24%	40%	76%	39%	0%	3%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	42%	22%	41%	1%	15%	0%	30%	32%	0%	100%	100%	37%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	68%	22%
Other	0%	0%	0%	0%	0%	0%	63%	59%	0%	0%	0%	0%	0%	0%	0%	98%	95%	0%	0%	0%	0%	91%	30%	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	8%	31%	9%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>RAMBLER(12KV) - Customers: 3,327</b>	<b>21.0</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>25.0</b>	<b>0.1</b>	<b>3.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.9</b>	<b>141.3</b>	<b>1.9</b>	<b>2.7</b>	<b>1.3</b>	<b>0.0</b>	<b>0.0</b>	<b>3.8</b>	<b>0.0</b>	<b>0.0</b>	<b>146.4</b>	<b>1.9</b>	<b>3.7</b>
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	33%	0%	0%	0%	47%	48%	33%	0%	0%	0%	0%	0%	0%	46%	48%	25%
Equipment Failure	57%	10%	0%	0%	0%	0%	85%	61%	0%	0%	0%	0%	28%	2%	0%	0%	0%	0%	97%	92%	0%	29%	3%	0%
Operation	43%	90%	0%	0%	0%	0%	15%	39%	0%	0%	0%	100%	25%	49%	0%	100%	100%	0%	3%	8%	0%	25%	49%	25%
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%	67%	0%	0%	0%	0%	0%	67%	0%	0%	0%	0%	0%	0%	0%	0%	50%
<b>SIoux(12KV) - Customers: 1,688</b>	<b>65.3</b>	<b>0.1</b>	<b>0.6</b>	<b>43.6</b>	<b>1.0</b>	<b>0.0</b>	<b>51.8</b>	<b>1.0</b>	<b>0.0</b>	<b>57.5</b>	<b>1.2</b>	<b>1.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.9</b>	<b>3.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>60.6</b>	<b>1.2</b>	<b>2.1</b>
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	83%	85%	0%	96%	99%	0%	8%	1%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	5%	0%	0%
Operation	17%	15%	100%	4%	1%	0%	92%	99%	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%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	95%	100%	55%
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%	45%
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 Garden Grove

	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
<b>SNAPDRAGON(12KV) - Customers: 89</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>70.1</b>	<b>1.2</b>	<b>0.0</b>	<b>288.1</b>	<b>2.3</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
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%	100%	100%	0%	100%	100%	100%	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%
<b>TITLE(12KV) - Customers: 3,074</b>	<b>63.7</b>	<b>0.5</b>	<b>4.5</b>	<b>82.6</b>	<b>1.2</b>	<b>5.4</b>	<b>88.5</b>	<b>1.1</b>	<b>4.0</b>	<b>270.1</b>	<b>0.9</b>	<b>1.4</b>	<b>8.4</b>	<b>0.0</b>	<b>0.0</b>	<b>53.0</b>	<b>0.5</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>331.5</b>	<b>1.5</b>	<b>1.4</b>
3rd Party	17%	13%	43%	47%	36%	19%	56%	91%	50%	0%	0%	0%	0%	0%	0%	81%	91%	0%	0%	0%	0%	13%	32%	0%
Equipment Failure	22%	4%	0%	16%	7%	19%	32%	5%	0%	3%	0%	0%	100%	100%	0%	19%	9%	0%	0%	0%	0%	8%	5%	0%
Operation	2%	1%	0%	0%	0%	18%	9%	3%	25%	2%	51%	49%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	32%	49%
Other	0%	0%	0%	0%	0%	0%	2%	0%	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	9%	12%	43%	37%	57%	26%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	50%	70%	14%	0%	0%	18%	0%	0%	0%	96%	49%	51%	0%	0%	0%	0%	0%	0%	0%	0%	0%	78%	31%	51%
<b>TULIP(12KV) - Customers: 2,909</b>	<b>38.0</b>	<b>1.0</b>	<b>0.0</b>	<b>11.6</b>	<b>0.0</b>	<b>1.0</b>	<b>174.7</b>	<b>0.5</b>	<b>2.9</b>	<b>106.0</b>	<b>1.0</b>	<b>0.0</b>	<b>6.5</b>	<b>0.0</b>	<b>0.0</b>	<b>0.3</b>	<b>0.0</b>	<b>0.0</b>	<b>3.8</b>	<b>0.0</b>	<b>0.0</b>	<b>116.5</b>	<b>1.1</b>	<b>0.0</b>
3rd Party	74%	97%	0%	0%	0%	100%	89%	94%	84%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	91%	95%	0%
Equipment Failure	2%	1%	0%	96%	76%	0%	8%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	2%	1%	0%	4%	24%	0%	3%	4%	16%	0%	0%	0%	100%	100%	0%	100%	100%	0%	100%	100%	0%	9%	5%	0%
Other	22%	2%	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%
<b>TULSA(12KV) - Customers: 2,290</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>5.9</b>	<b>0.0</b>	<b>0.5</b>	<b>78.6</b>	<b>1.0</b>	<b>0.9</b>	<b>102.5</b>	<b>2.0</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>56.1</b>	<b>1.0</b>	<b>0.0</b>	<b>158.6</b>	<b>3.0</b>	<b>1.0</b>
3rd Party	0%	0%	0%	0%	0%	0%	97%	96%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	0%	100%	100%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	85%	97%	0%	30%	32%	0%
Operation	0%	0%	0%	0%	0%	0%	0%	0%	0%	44%	50%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	29%	33%	100%
Other	0%	0%	0%	0%	0%	100%	0%	0%	0%	56%	50%	0%	0%	0%	0%	0%	0%	0%	15%	3%	0%	41%	34%	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%	2%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

## Reliability Histories for Individual Circuits Serving Garden Grove

	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
<b>WACO(12KV) - Customers: 1,726</b>	<b>87.1</b>	<b>1.6</b>	<b>2.0</b>	<b>23.6</b>	<b>0.2</b>	<b>1.0</b>	<b>120.1</b>	<b>0.2</b>	<b>0.0</b>	<b>16.6</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>16.6</b>	<b>1.0</b>	<b>0.0</b>
3rd Party	82%	97%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	18%	3%	0%	80%	89%	100%	60%	39%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%
Operation	0%	0%	0%	20%	11%	0%	15%	41%	0%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	1%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	96%	99%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	96%	99%	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%	25%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>WICHITA(12KV) - Customers: 1,392</b>	<b>104.5</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>2.0</b>	<b>150.5</b>	<b>1.3</b>	<b>2.0</b>	<b>16.0</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.0</b>	<b>16.0</b>	<b>1.0</b>	<b>2.0</b>
3rd Party	96%	99%	0%	0%	0%	0%	99%	98%	100%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	50%
Equipment Failure	4%	1%	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	0%	0%	50%	1%	2%	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%	100%	100%	100%	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%
<b>YOUNGER(12KV) - Customers: 3,943</b>	<b>32.3</b>	<b>1.0</b>	<b>1.9</b>	<b>36.8</b>	<b>0.1</b>	<b>1.0</b>	<b>44.1</b>	<b>0.0</b>	<b>2.0</b>	<b>2.1</b>	<b>0.0</b>	<b>1.0</b>	<b>45.7</b>	<b>1.5</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>6.1</b>	<b>0.0</b>	<b>0.0</b>	<b>53.8</b>	<b>1.5</b>	<b>1.0</b>
3rd Party	17%	3%	100%	0%	0%	100%	0%	0%	100%	100%	100%	0%	92%	100%	0%	0%	0%	0%	0%	0%	0%	82%	98%	0%
Equipment Failure	82%	97%	0%	59%	42%	0%	3%	14%	0%	0%	0%	0%	8%	0%	0%	0%	0%	0%	100%	100%	0%	18%	2%	0%
Operation	1%	0%	0%	24%	49%	0%	97%	86%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
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%	18%	9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%