



Circuit Reliability Review

Huntington Beach

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 Huntington Beach District

Costa Mesa

Fountain Valley

Huntington Beach

Newport Beach

Westminster

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.

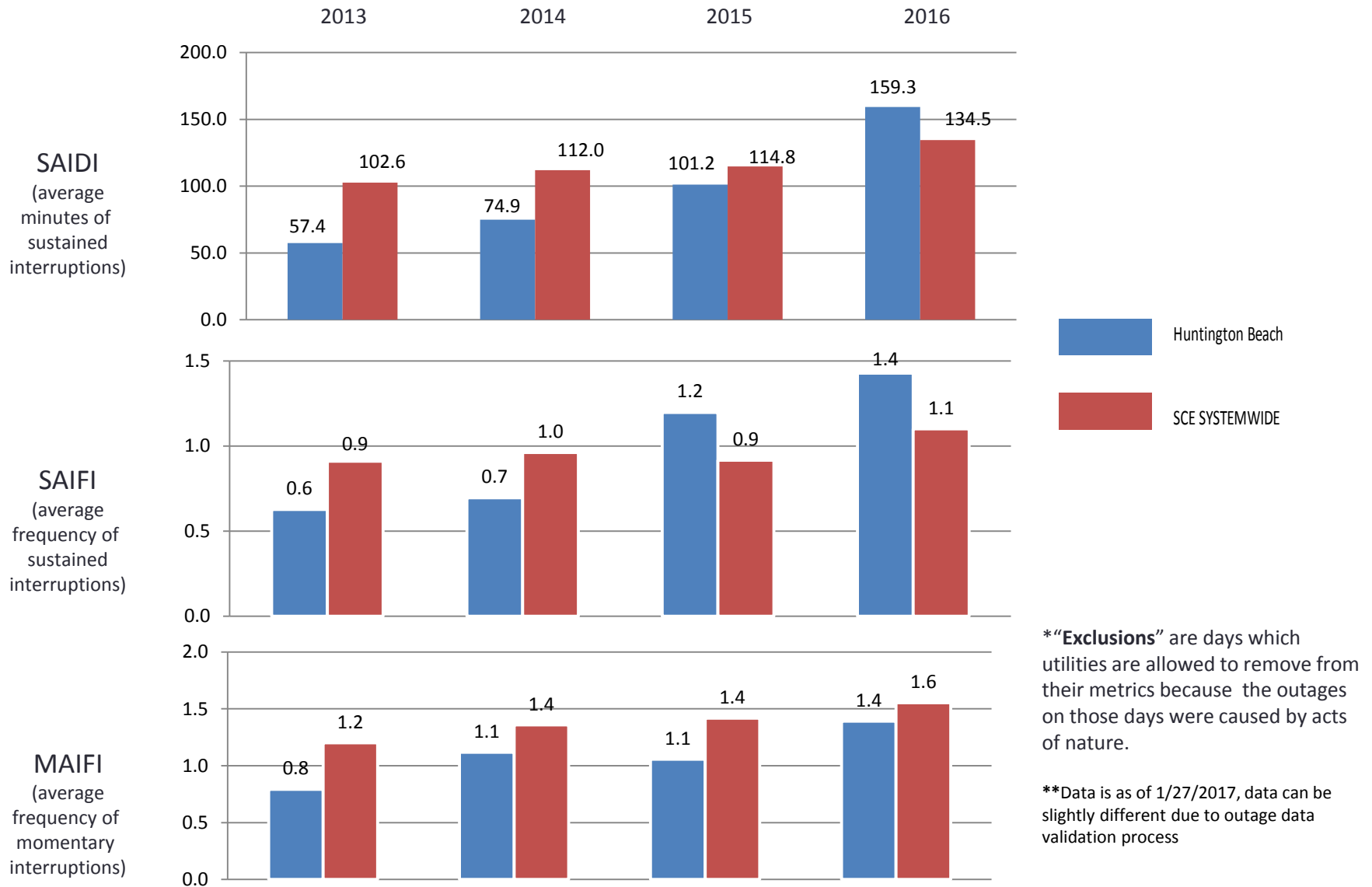
**In the columns showing "Rank," lower numbers indicate poorer performance.

Overview of Huntington Beach

There are 52 circuits that serve Huntington Beach

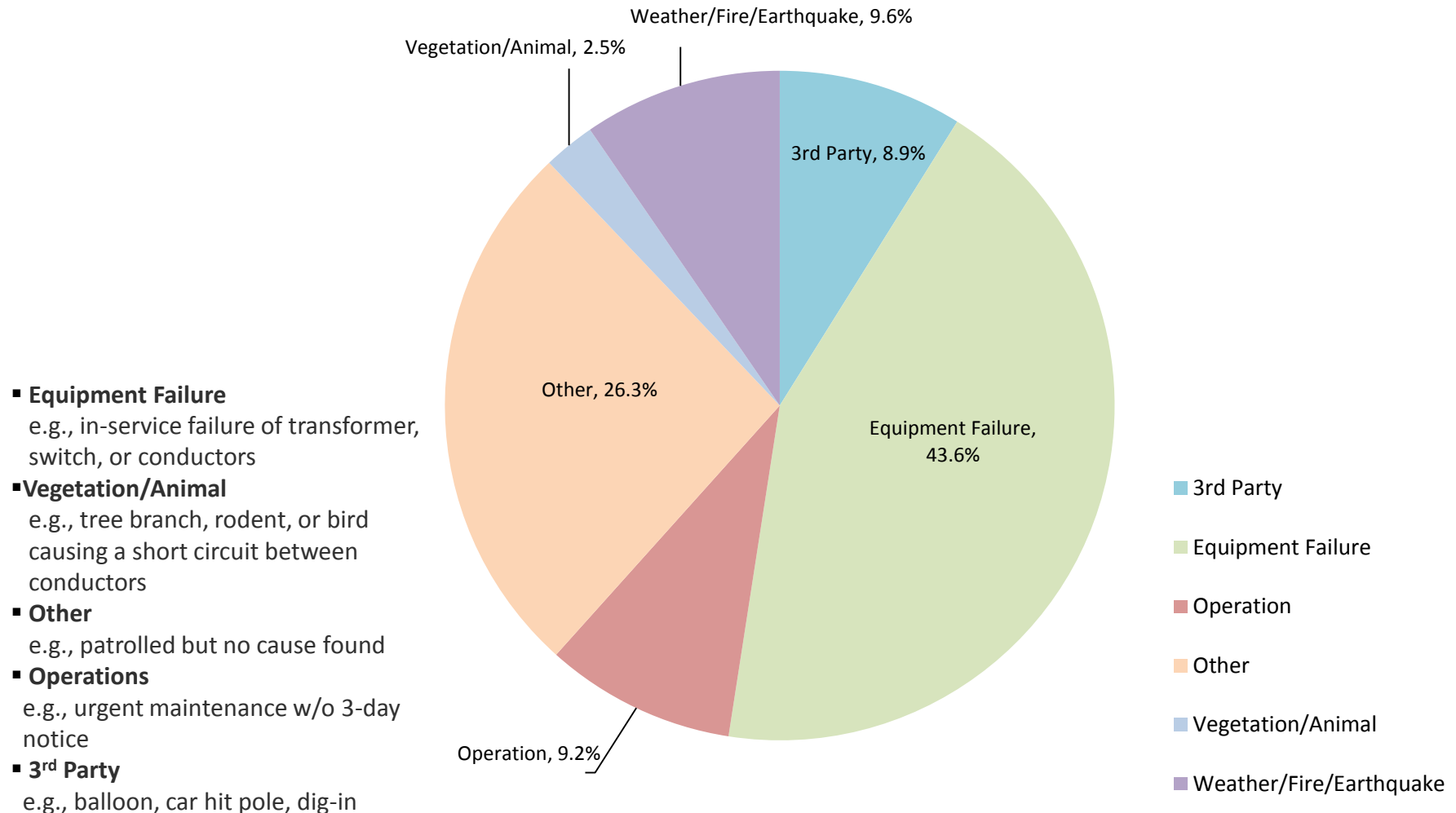
Circuit Type	Sum of Customers	Circuit Type	Sum of Customers	Circuit Type	Sum of Customers	Circuit Type	Sum of Customers
ABBOT(12KV)	2,000	MORRISON(12KV)	3,342				
BEACH(12KV)	1,162	OILERS(12KV)	3,561				
BISHOP(12KV)	1,293	OUTRIGGER(12KV)	2,566				
BUSHARD(12KV)	2,702	POLK(12KV)	4,362				
CALOL(12KV)	2,560	RAIDERS(12KV)	3,654				
CANOE(12KV)	3,161	RAMS(12KV)	1,944				
CHARGERS(12KV)	3,197	RECOVERY 1(12KV)	1				
CHEROKEE(12KV)	3,854	SAINTS(12KV)	3,359				
CHIPPEWA(12KV)	1,730	SCORE(12KV)	4,187				
CIVIC(4.16KV)	781	SCOW(12KV)	4,198				
CLAY(12KV)	3,712	SEAWEED(12KV)	1,552				
CRONIN(12KV)	4,844	SEWELL(12KV)	4,080				
CRYSTAL(4.16KV)	257	SKIFF(12KV)	153				
DARWIN(12KV)	850	SMELTZER(12KV)	3,707				
DINGY(12KV)	890	SOCO 1(33KV)	1				
DRIFTWOOD(12KV)	4,396	SONICS(12KV)	3,608				
FELLER(12KV)	1,579	SPEAKER(12KV)	78				
FERREE(12KV)	1,813	STANDARD(12KV)	3,704				
GEHRIG(12KV)	3,800	TINKER(12KV)	2,797				
GENEVA(4.16KV)	1,119	WATERFIELD(12KV)	2,756				
GIANTS(12KV)	1,221	WINTERSBURG(12KV)	2,783				
GREENBAY(12KV)	1,876	YOGI(12KV)	3,723				
HEIL(12KV)	1,600						
HUMBLE(12KV)	2,390						
JAZZ(12KV)	1,650						
KETCH(12KV)	2,568						
LAKERS(12KV)	1,682						
LANGLEY(12KV)	2,299						
LAUNCH(12KV)	2,728						
LYELL(12KV)	1,750						
Grand Total	125,580						

Reliability History of Circuits Serving Huntington Beach (No Exclusions)



Causes of Repair Outages in Huntington Beach Circuits 2016 YTD

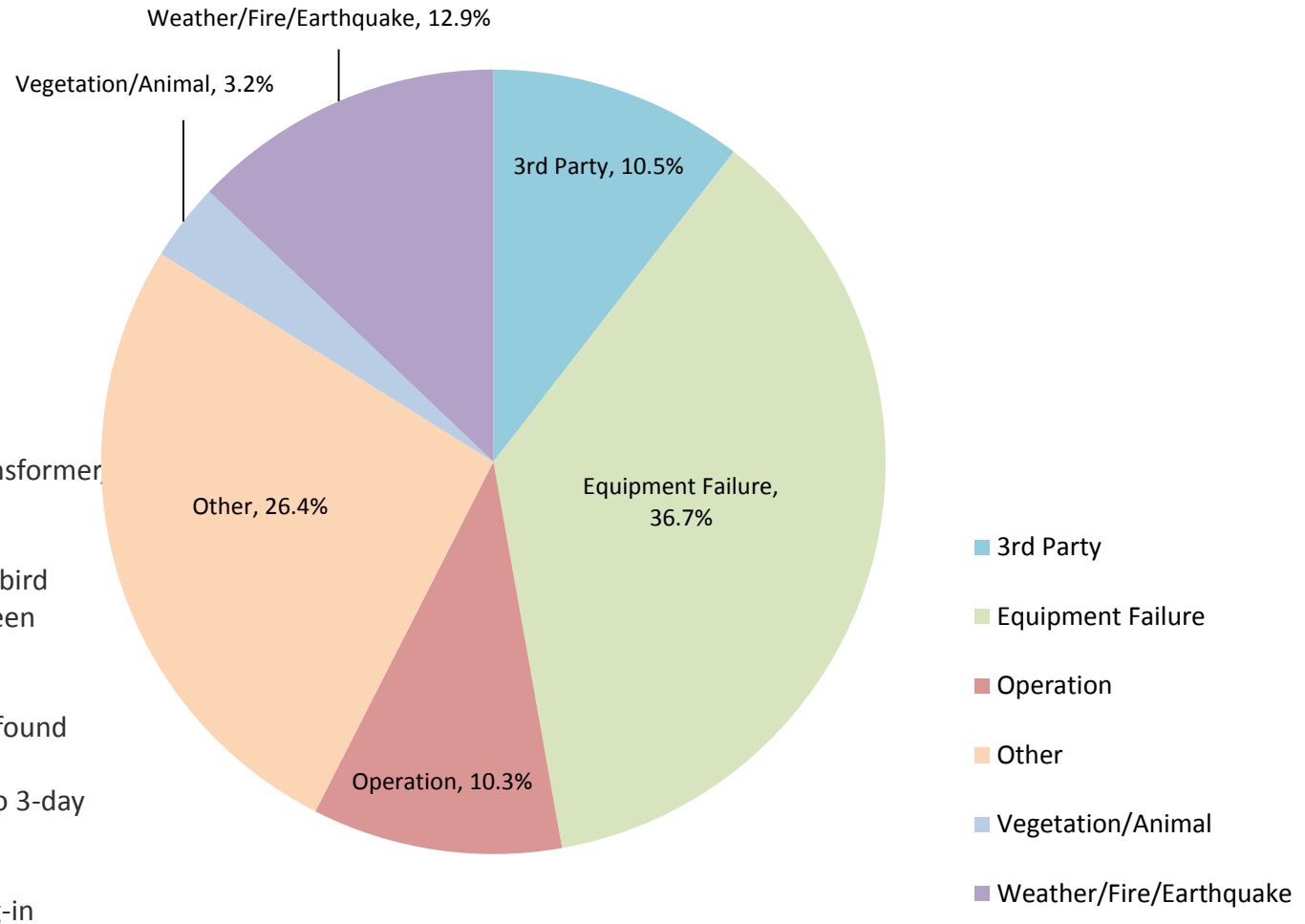
Contributions to SAIDI by Outage Cause



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

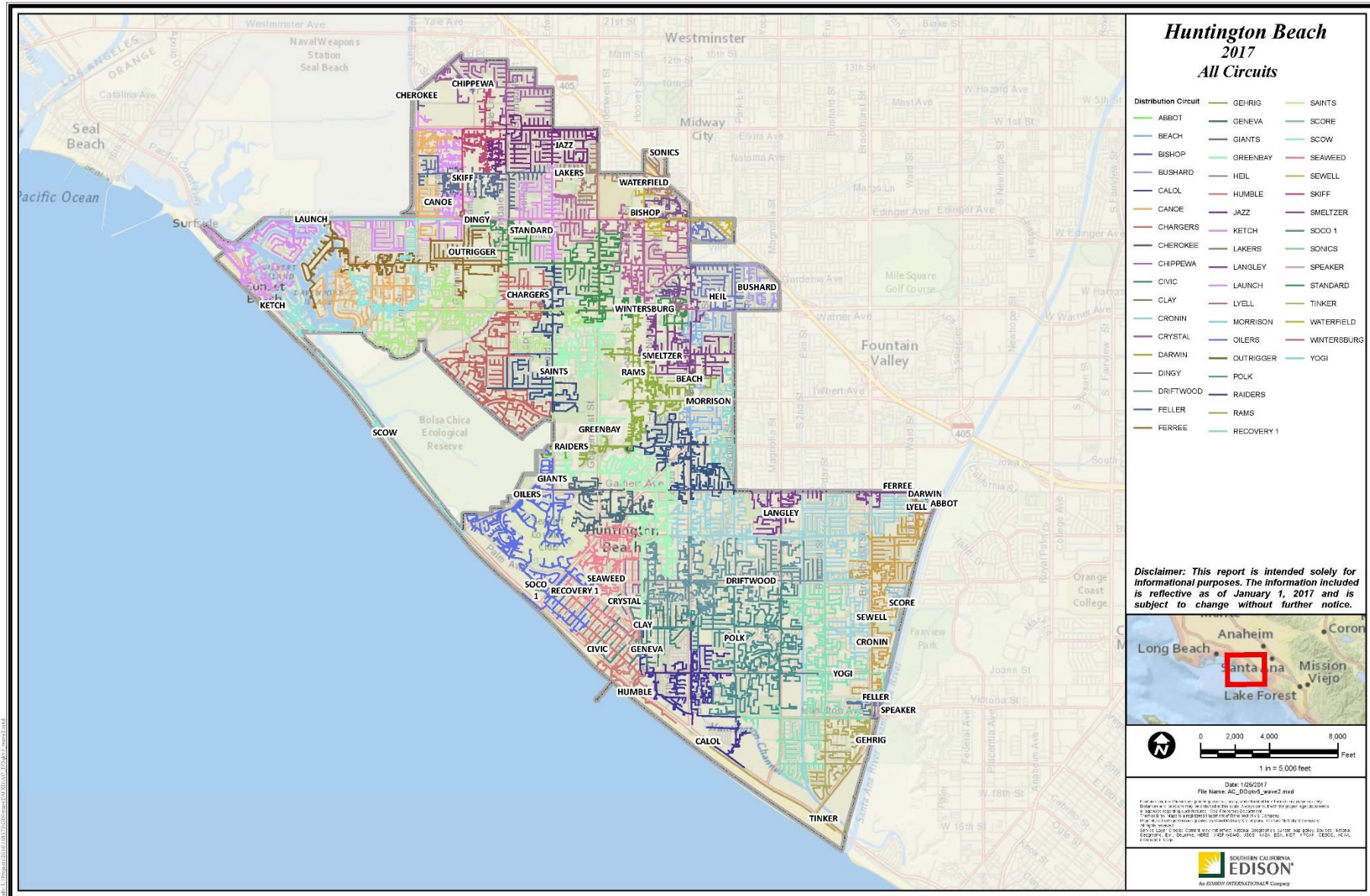
Causes of Repair Outages in Huntington Beach Circuits 2016 YTD

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 Huntington Beach

Updated through Year-End 2016

Average Reliability of 52 Circuits Serving Huntington Beach

	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
Huntington Beach	57.4	0.6	0.8	74.9	0.7	1.1	101.2	1.2	1.1	77.9	0.8	0.4	26.4	0.2	0.4	25.4	0.2	0.2	29.5	0.3	0.3	159.3	1.4	1.4
3rd Party	28%	40%	46%	15%	20%	35%	6%	11%	25%	2%	4%	0%	15%	19%	17%	31%	35%	25%	3%	5%	15%	9%	10%	12%
Equipment Failure	56%	38%	29%	55%	40%	30%	55%	44%	23%	31%	21%	25%	52%	36%	34%	46%	52%	39%	67%	67%	31%	44%	37%	31%
Operation	9%	12%	6%	10%	15%	5%	8%	9%	14%	3%	10%	11%	21%	22%	8%	23%	12%	1%	3%	2%	7%	9%	10%	8%
Other	2%	1%	5%	1%	3%	12%	18%	30%	20%	50%	47%	16%	5%	11%	15%	0%	0%	25%	5%	1%	0%	26%	26%	13%
Vegetation/Animal	2%	6%	7%	4%	7%	8%	1%	1%	0%	2%	3%	16%	8%	11%	25%	0%	0%	0%	0%	0%	36%	3%	3%	21%
Weather/Fire/Earthquake	3%	3%	7%	14%	16%	9%	12%	6%	17%	11%	15%	32%	0%	0%	0%	1%	0%	10%	22%	25%	11%	10%	13%	15%
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 Huntington Beach

	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
ABBOT(12KV) - Customers: 2,000	82.3	1.5	1.5	47.1	0.1	1.0	185.1	1.7	1.5	3.8	0.0	0.0	178.4	1.1	1.0	63.1	1.0	2.0	116.8	0.5	2.0	362.2	2.7	5.0
3rd Party	2%	0%	65%	0%	0%	100%	0%	0%	68%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	20%
Equipment Failure	95%	99%	35%	100%	95%	0%	90%	37%	32%	0%	0%	0%	100%	100%	0%	100%	100%	100%	100%	99%	49%	99%	99%	60%
Operation	3%	1%	0%	0%	5%	0%	1%	5%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	1%	0%
Other	0%	0%	0%	0%	0%	0%	9%	57%	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%	51%	0%	0%	20%
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%
BEACH(12KV) - Customers: 1,162	33.6	0.1	0.0	78.6	2.0	0.0	50.3	1.1	1.0	91.5	1.0	0.0	0.0	0.0	0.0	40.7	0.1	0.0	45.8	0.2	0.8	177.9	1.3	0.8
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	80%	98%	100%	0%	0%	0%	0%	0%	0%	99%	99%	100%	66%	90%	100%
Equipment Failure	100%	100%	0%	40%	50%	100%	52%	5%	0%	0%	0%	0%	0%	0%	0%	94%	50%	0%	0%	0%	0%	21%	4%	0%
Operation	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	2%	0%	0%	0%	0%	6%	50%	0%	1%	1%	0%	12%	6%	0%
Other	0%	0%	0%	0%	0%	0%	48%	95%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	60%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BISHOP(12KV) - Customers: 1,293	0.0	0.0	0.0	54.1	1.0	0.0	38.2	1.0	0.0	29.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.1	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%	100%	100%	0%	40%	4%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	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%	60%	96%	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%
BUSHARD(12KV) - Customers: 2,702	7.0	0.0	1.0	122.7	1.0	0.1	154.1	2.9	5.1	40.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	72.1	1.0	1.0	112.2	2.0	2.0
3rd Party	0%	0%	100%	0%	0%	0%	15%	34%	39%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	36%	49%	0%
Equipment Failure	0%	0%	0%	98%	98%	100%	70%	32%	41%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	100%	0%	1%	50%
Operation	100%	100%	0%	2%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	2%	0%	3%	1%	0%
Other	0%	0%	0%	0%	0%	0%	15%	34%	20%	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%	95%	96%	0%	61%	49%	0%

Reliability Histories for Individual Circuits Serving Huntington Beach

	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
CALOL(12KV) - Customers: 2,560	0.0	0.0	0.0	1.2	0.0	0.0	294.5	2.1	0.0	48.6	1.0	0.0	0.0	0.0	0.0	10.3	0.0	0.0	0.1	0.0	0.0	59.1	1.0	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%	100%	100%	0%	98%	99%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	0%	0%	0%	2%	1%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	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%	100%	100%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	100%	100%	0%
CANOE(12KV) - Customers: 3,161	129.3	1.4	0.0	200.3	1.1	0.1	336.9	1.3	2.6	33.4	1.0	0.0	58.9	0.8	0.9	61.6	1.1	0.9	20.9	0.2	1.9	174.7	3.1	3.7
3rd Party	0%	0%	0%	94%	95%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	90%	96%	0%	6%	5%	0%	17%	61%	12%	15%	1%	0%	0%	0%	0%	41%	89%	100%	6%	13%	0%	18%	33%	25%
Operation	10%	4%	0%	0%	0%	100%	2%	2%	39%	0%	0%	0%	0%	0%	0%	59%	11%	0%	46%	32%	51%	26%	5%	26%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	85%	99%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	16%	32%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	34%	26%	25%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	82%	37%	49%	0%	0%	0%	0%	0%	0%	0%	0%	0%	48%	56%	49%	6%	3%	25%
CHARGERS(12KV) - Customers: 3,197	9.2	0.1	0.0	0.0	0.0	0.0	150.9	1.3	1.0	0.0	0.0	0.0	17.5	0.1	1.0	14.5	0.0	0.0	3.1	0.0	0.0	35.1	0.1	1.0
3rd Party	0%	0%	0%	0%	0%	0%	31%	11%	98%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	12%	4%	0%	0%	0%	0%	20%	9%	2%	0%	0%	0%	91%	83%	100%	97%	77%	0%	53%	20%	0%	90%	73%	100%
Operation	88%	96%	0%	0%	0%	0%	5%	2%	0%	0%	0%	0%	9%	17%	0%	0%	0%	0%	0%	0%	0%	5%	11%	0%
Other	0%	0%	0%	0%	0%	0%	44%	77%	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%	1%	0%	0%	0%	0%	0%	0%	0%	3%	23%	0%	47%	80%	0%	5%	15%	0%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CHEROKEE(12KV) - Customers: 3,854	39.5	1.1	1.0	69.0	1.1	0.0	45.6	0.1	0.0	76.5	1.1	2.1	46.0	0.1	1.0	97.5	1.0	0.0	42.5	1.0	0.0	262.6	3.3	3.1
3rd Party	0%	0%	100%	70%	93%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	94%	97%	0%	0%	0%	0%	35%	30%	0%
Equipment Failure	62%	4%	0%	27%	5%	0%	80%	39%	0%	9%	2%	0%	0%	0%	0%	5%	2%	0%	86%	97%	0%	18%	32%	0%
Operation	9%	3%	0%	3%	1%	0%	20%	61%	100%	19%	4%	0%	100%	100%	0%	1%	0%	0%	0%	0%	0%	23%	5%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	72%	94%	50%	0%	0%	0%	0%	0%	0%	14%	3%	0%	23%	33%	34%
Vegetation/Animal	26%	91%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	32%
Weather/Fire/Earthquake	3%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	34%

Reliability Histories for Individual Circuits Serving Huntington Beach

	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
CHIPPEWA(12KV) - Customers: 1,730	10.9	0.1	1.0	86.6	1.2	1.0	104.4	1.2	0.0	61.2	1.1	1.1	36.7	1.0	1.9	2.6	0.0	1.0	3.0	0.0	0.0	103.5	2.1	4.0
3rd Party	0%	0%	0%	0%	0%	0%	74%	91%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	100%	100%	0%	5%	2%	0%
Equipment Failure	93%	90%	0%	47%	17%	100%	19%	5%	0%	0%	0%	0%	100%	100%	49%	0%	0%	0%	0%	0%	0%	35%	47%	24%
Operation	7%	10%	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%	7%	4%	0%	100%	100%	100%	0%	0%	0%	0%	0%	100%	0%	0%	0%	59%	51%	51%
Vegetation/Animal	0%	0%	0%	4%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	51%	0%	0%	0%	0%	0%	0%	0%	0%	25%
Weather/Fire/Earthquake	0%	0%	0%	50%	80%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CIVIC(4.16KV) - Customers: 781	112.6	1.0	1.0	37.3	0.2	0.0	3.9	0.1	1.0	18.4	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	20.6	0.0	0.0
3rd Party	86%	96%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	14%	4%	0%	100%	100%	0%	80%	27%	0%	100%	100%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	100%	100%	0%
Operation	0%	0%	0%	0%	0%	0%	20%	73%	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%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CLAY(12KV) - Customers: 3,712	46.4	0.5	1.6	46.0	0.2	3.9	13.5	0.4	0.0	0.0	0.0	0.0	95.3	1.0	1.0	0.8	0.0	0.0	1.6	0.0	1.0	97.8	1.1	2.0
3rd Party	58%	80%	38%	3%	3%	26%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	40%	19%	0%	71%	33%	26%	100%	100%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	100%	100%	0%	3%	2%	0%
Operation	2%	1%	0%	14%	33%	24%	0%	0%	0%	0%	0%	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	97%	98%	50%
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%	62%	12%	30%	24%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	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%
CRONIN(12KV) - Customers: 4,844	114.2	1.1	1.0	42.3	0.7	2.0	28.9	0.4	2.6	187.5	1.3	1.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	187.7	1.3	1.9
3rd Party	0%	0%	0%	2%	0%	50%	98%	99%	61%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	89%	96%	0%	35%	36%	0%	0%	0%	0%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	1%	0%
Operation	11%	4%	0%	57%	62%	0%	2%	1%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	1%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	39%	82%	77%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	82%	76%	0%
Vegetation/Animal	0%	0%	0%	5%	2%	50%	0%	0%	0%	16%	22%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	16%	22%	100%
Weather/Fire/Earthquake	0%	0%	100%	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 Huntington Beach

	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
CRYSTAL(4.16KV) - Customers: 257	90.5	1.0	0.0	6.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.1	0.0	0.0	0.0	0.0	9.0	0.1	0.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	99%	97%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	100%	100%	0%
Operation	1%	3%	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%
DARWIN(12KV) - Customers: 850	150.5	0.9	0.1	185.8	2.2	2.1	45.6	0.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	155.5	1.2	0.0	0.0	0.0	1.1	155.5	1.2	1.1
3rd Party	0%	0%	0%	0%	0%	49%	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%	100%	100%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	100%	100%	0%
Operation	0%	0%	0%	100%	100%	51%	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%	100%	0%	0%	100%
Weather/Fire/Earthquake	100%	100%	100%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DINGY(12KV) - Customers: 890	75.9	1.0	1.0	161.0	2.1	2.9	71.7	0.3	0.7	38.9	1.0	0.0	31.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.4	1.1	0.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	98%	100%	100%	46%	48%	67%	93%	95%	100%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	45%	6%	0%
Operation	2%	0%	0%	10%	4%	0%	7%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	55%	94%	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%	45%	48%	33%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DRIFTWOOD(12KV) - Customers: 4,396	33.3	0.1	0.0	199.0	3.0	1.0	121.3	1.0	2.0	0.0	0.0	0.0	8.1	0.1	0.0	1.2	0.0	0.0	0.0	0.0	0.0	9.3	0.1	0.0
3rd Party	0%	0%	0%	27%	34%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	100%	100%	100%	62%	33%	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	100%	100%	0%	0%	0%	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%	10%	32%	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 Huntington Beach

	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
FELLER(12KV) - Customers: 1,579	8.5	0.0	0.0	458.6	1.6	1.2	0.2	0.0	0.0	110.3	0.8	0.2	0.0	0.0	1.0	5.2	0.1	0.0	0.0	0.0	0.0	115.5	0.9	1.2
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%	83%
Equipment Failure	8%	6%	0%	0%	0%	0%	0%	0%	0%	99%	98%	100%	0%	0%	0%	100%	100%	0%	0%	0%	0%	99%	98%	17%
Operation	0%	0%	0%	0%	0%	0%	100%	100%	0%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%
Other	92%	94%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	2%	1%	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%	97%	98%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
FERREE(12KV) - Customers: 1,813	27.3	1.0	0.0	1.3	0.0	1.0	8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	0.0	1.0	0.0	0.0	1.0	3.6	0.0	2.0
3rd Party	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	100%	100%	0%
Operation	59%	98%	0%	100%	100%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	50%
Vegetation/Animal	41%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	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%
GEHRIG(12KV) - Customers: 3,800	45.4	2.0	0.0	9.7	1.0	2.0	97.2	1.1	1.1	309.6	1.6	1.0	221.2	1.0	1.9	0.0	0.0	0.0	54.9	1.1	0.5	585.7	3.7	3.4
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	87%	56%	0%	0%	0%	50%	4%	1%	0%	88%	63%	0%	99%	96%	100%	0%	0%	0%	47%	50%	0%	88%	68%	57%
Operation	13%	44%	0%	0%	0%	0%	0%	0%	0%	4%	35%	100%	1%	4%	0%	0%	0%	0%	0%	0%	0%	3%	16%	29%
Other	0%	0%	0%	100%	100%	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%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	96%	99%	0%	8%	1%	0%	0%	0%	0%	0%	0%	0%	53%	50%	100%	9%	15%	14%
GENEVA(4.16KV) - Customers: 1,119	0.0	0.0	0.0	308.6	1.0	0.0	0.0	0.0	1.0	5.6	0.0	0.0	0.0	0.0	0.0	16.5	0.2	0.0	3.2	0.0	0.0	25.2	0.2	0.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	0%	100%	100%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	35%	12%	0%
Operation	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	65%	88%	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%

Reliability Histories for Individual Circuits Serving Huntington Beach

	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
GIANTS(12KV) - Customers: 1,221	83.2	0.4	0.9	0.0	0.0	0.0	86.9	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.7	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	88%	58%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	100%	100%	0%
Operation	12%	42%	0%	0%	0%	0%	21%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	76%	87%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	3%	3%	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%
GREENBAY(12KV) - Customers: 1,876	41.0	0.1	0.0	22.1	0.1	0.0	319.5	3.7	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.8	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	100%	100%	0%	99%	82%	0%	74%	67%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	1%	18%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	100%	100%	0%
Other	0%	0%	0%	0%	0%	0%	25%	33%	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%
HEIL(12KV) - Customers: 1,600	189.4	1.2	1.0	0.0	0.0	0.0	23.2	1.0	0.0	221.1	1.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	221.6	1.1	0.0
3rd Party	94%	96%	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%	81%	95%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	81%	96%	0%
Operation	6%	4%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	100%	100%	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%	19%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	19%	4%	0%
HUMBLE(12KV) - Customers: 2,390	6.6	0.0	0.0	13.3	0.1	0.0	50.4	0.7	2.3	0.5	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	5.4	0.0	0.0	6.3	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%	17%	15%	0%	94%	93%	57%	100%	100%	0%	0%	0%	0%	100%	100%	0%	100%	100%	0%	100%	100%	0%
Operation	100%	100%	0%	22%	67%	0%	3%	5%	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%	61%	18%	0%	3%	3%	43%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Reliability Histories for Individual Circuits Serving Huntington Beach

	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
JAZZ(12KV) - Customers: 1,650	4.6	0.0	3.0	137.2	1.8	1.6	108.4	2.4	1.6	103.7	1.9	0.0	0.8	0.0	0.0	22.8	0.0	0.0	0.0	0.0	0.0	127.3	1.9	0.0
3rd Party	0%	0%	0%	6%	7%	0%	54%	42%	19%	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%	100%	100%	0%	83%	52%	0%	0%	0%	0%	16%	1%	0%
Operation	100%	100%	100%	0%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	17%	48%	0%	0%	0%	0%	3%	1%	0%
Other	0%	0%	0%	38%	37%	80%	0%	0%	61%	46%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	38%	49%	0%
Vegetation/Animal	0%	0%	0%	56%	55%	20%	46%	57%	19%	54%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	44%	49%	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%
KETCH(12KV) - Customers: 2,568	271.3	3.3	5.5	35.8	1.1	2.0	230.0	2.7	1.9	846.6	3.6	1.1	158.2	1.0	0.0	0.7	0.0	0.0	5.9	0.1	0.0	1011.4	4.6	1.1
3rd Party	0%	0%	36%	0%	0%	50%	4%	3%	0%	0%	0%	0%	87%	91%	0%	0%	0%	0%	0%	0%	0%	14%	19%	0%
Equipment Failure	95%	91%	64%	67%	92%	50%	58%	65%	42%	47%	48%	0%	1%	0%	0%	0%	0%	0%	5%	32%	0%	39%	38%	0%
Operation	5%	9%	0%	33%	8%	0%	2%	0%	0%	0%	0%	0%	12%	9%	0%	100%	100%	0%	70%	54%	0%	2%	3%	0%
Other	0%	0%	0%	0%	0%	0%	7%	2%	0%	53%	52%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	45%	40%	100%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	14%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	29%	30%	58%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
LAKERS(12KV) - Customers: 1,682	14.0	0.1	0.0	35.7	0.1	1.0	101.1	1.0	0.2	43.1	1.1	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	45.9	1.1	0.0
3rd Party	0%	0%	0%	37%	19%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	91%	95%	0%	45%	20%	0%	92%	93%	100%	65%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	61%	7%	0%
Operation	9%	5%	0%	19%	61%	0%	8%	7%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	6%	3%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	35%	93%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	33%	90%	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%
LANGLEY(12KV) - Customers: 2,299	57.2	0.1	2.0	15.9	0.1	2.0	3.8	0.0	0.0	18.4	0.0	1.0	17.1	0.0	0.0	0.0	0.0	0.0	12.0	1.0	2.0	47.6	1.1	3.0
3rd Party	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	71%	41%	50%	73%	61%	0%	0%	0%	0%	0%	0%	0%	96%	89%	0%	0%	0%	0%	100%	100%	50%	60%	97%	34%
Operation	29%	59%	0%	27%	39%	0%	100%	100%	0%	56%	39%	0%	4%	11%	0%	0%	0%	0%	0%	0%	0%	23%	2%	0%
Other	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	34%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	0%	0%	0%	44%	61%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17%	2%	33%

Reliability Histories for Individual Circuits Serving Huntington Beach

	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
LAUNCH(12KV) - Customers: 2,728	49.0	1.0	0.7	48.9	0.4	3.0	16.9	0.1	0.0	29.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.7	1.0	0.0
3rd Party	95%	100%	100%	0%	0%	33%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	5%	0%	0%	50%	19%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	50%	81%	33%	100%	100%	0%	16%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	16%	1%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	84%	99%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	84%	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%	33%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
LYELL(12KV) - Customers: 1,750	114.2	1.0	0.2	61.7	0.2	2.2	24.0	0.0	0.0	12.6	1.0	1.0	0.0	0.0	0.0	32.2	0.1	0.0	7.1	0.0	1.0	51.9	1.1	2.0
3rd Party	64%	74%	100%	0%	0%	45%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	35%	20%	0%	100%	100%	55%	100%	100%	0%	100%	100%	100%	0%	0%	0%	100%	100%	0%	0%	0%	0%	86%	99%	50%
Operation	1%	6%	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%	100%	100%	0%	14%	1%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	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%
MORRISON(12KV) - Customers: 3,342	148.0	1.5	2.1	264.8	1.1	2.9	104.4	1.6	0.8	132.4	2.5	0.0	43.6	0.0	0.0	0.0	0.0	0.0	5.3	0.0	1.0	181.3	2.5	1.0
3rd Party	30%	29%	100%	0%	0%	67%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	70%	71%	0%	89%	96%	0%	99%	98%	100%	2%	0%	0%	100%	100%	100%	0%	0%	0%	93%	82%	0%	28%	3%	1%
Operation	0%	0%	0%	6%	2%	0%	1%	2%	0%	19%	41%	0%	0%	0%	0%	0%	0%	0%	7%	18%	0%	14%	40%	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%	100%	0%	0%	99%
Weather/Fire/Earthquake	0%	0%	0%	5%	2%	33%	0%	0%	0%	79%	59%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	58%	58%	0%
OILERS(12KV) - Customers: 3,561	8.9	0.0	0.0	22.7	0.1	0.0	88.9	2.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	136.2	0.9	0.0	137.9	0.9	0.0
3rd Party	0%	0%	0%	0%	0%	0%	18%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	68%	47%	0%	97%	95%	0%	8%	1%	0%	100%	100%	0%	0%	0%	0%	44%	13%	0%	83%	91%	0%	83%	90%	0%
Operation	32%	53%	0%	3%	5%	0%	1%	1%	100%	0%	0%	0%	0%	0%	0%	56%	88%	0%	0%	0%	0%	0%	1%	0%
Other	0%	0%	0%	0%	0%	0%	73%	49%	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%	17%	9%	0%	17%	9%	0%

Reliability Histories for Individual Circuits Serving Huntington Beach

	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
OUTRIGGER(12KV) - Customers: 2,566	200.1	2.4	2.0	41.0	0.1	0.0	115.9	1.5	0.3	40.2	1.0	0.0	3.4	0.0	0.0	71.6	0.3	1.6	12.8	0.1	0.0	128.0	1.4	1.6
3rd Party	30%	42%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	4%	5%	0%	99%	92%	100%	17%	8%	0%	5%	1%	0%	100%	100%	0%	72%	85%	100%	100%	100%	0%	54%	26%	100%
Operation	39%	50%	0%	1%	8%	0%	78%	91%	100%	0%	0%	0%	0%	0%	0%	28%	15%	0%	0%	0%	0%	16%	3%	0%
Other	20%	2%	0%	0%	0%	0%	0%	0%	0%	95%	99%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%	70%	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	7%	1%	0%	0%	0%	0%	5%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
POLK(12KV) - Customers: 4,362	49.2	1.0	0.0	22.5	1.1	1.0	8.3	0.2	0.0	0.1	0.0	0.0	0.0	0.0	1.0	2.9	0.0	0.0	5.1	0.0	0.0	8.1	0.1	1.0
3rd Party	60%	96%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Equipment Failure	36%	2%	0%	0%	0%	0%	99%	98%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	4%	2%	0%	100%	100%	0%	1%	2%	0%	100%	100%	0%	0%	0%	0%	100%	100%	0%	100%	100%	0%	100%	100%	0%
Other	0%	0%	0%	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%
RAIDERS(12KV) - Customers: 3,654	40.5	0.4	0.6	8.3	0.0	0.0	121.9	1.2	2.1	29.3	1.0	0.9	1.4	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	33.6	1.0	0.9
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	37%	4%	0%	76%	14%	0%	9%	2%	0%	0%	0%	0%	0%	0%	0%	97%	87%	0%	0%	0%	0%	8%	2%	0%
Operation	1%	3%	0%	3%	27%	0%	1%	1%	0%	25%	92%	0%	100%	100%	0%	3%	13%	0%	0%	0%	0%	26%	90%	0%
Other	0%	0%	0%	0%	0%	0%	60%	89%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	20%	59%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	62%	93%	100%	0%	0%	0%	31%	9%	100%	75%	8%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	66%	8%	100%
RAMS(12KV) - Customers: 1,944	12.8	0.2	1.0	57.3	0.4	1.0	154.9	2.1	0.9	24.3	0.9	1.0	2.7	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	27.1	0.9	3.0
3rd Party	0%	0%	100%	67%	69%	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%	57%	52%	100%	100%	100%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	90%	99%	100%
Operation	0%	0%	0%	32%	31%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	10%	1%	0%
Other	99%	99%	0%	0%	0%	0%	43%	48%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	1%	1%	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%	1%	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 Huntington Beach

	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
RECOVERY 1(12KV) - Customers: 1	0.0	0.0	0.0	0.0	0.0	0.0	158.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	100%	100%	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%
SAINTS(12KV) - Customers: 3,359	8.9	0.0	1.0	141.2	1.0	0.0	152.7	1.1	1.9	0.0	0.0	0.0	13.4	0.1	0.0	0.0	0.0	0.0	28.1	0.0	0.0	41.5	0.1	0.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	100%	100%	100%	99%	99%	0%	26%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	68%	26%	0%
Operation	0%	0%	0%	0%	0%	0%	17%	5%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	32%	74%	0%
Other	0%	0%	0%	1%	1%	0%	56%	93%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	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%
SCORE(12KV) - Customers: 4,187	0.9	0.0	0.0	62.1	1.0	4.0	48.1	0.7	1.0	53.3	0.5	0.8	1.6	0.0	1.0	64.2	0.1	0.1	203.2	2.0	0.1	322.3	2.7	1.9
3rd Party	0%	0%	0%	0%	0%	0%	9%	1%	0%	0%	0%	0%	49%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	0%	14%	1%	50%	62%	73%	0%	0%	0%	0%	11%	42%	0%	0%	0%	0%	48%	51%	0%	30%	38%	0%
Operation	26%	67%	0%	2%	1%	0%	29%	26%	2%	0%	0%	0%	40%	48%	0%	100%	100%	100%	4%	2%	0%	22%	7%	4%
Other	0%	0%	0%	0%	0%	50%	0%	0%	98%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	53%
Vegetation/Animal	0%	0%	0%	84%	98%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	74%	33%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	49%	47%	100%	47%	55%	44%
SCOW(12KV) - Customers: 4,198	111.6	0.3	0.2	121.8	0.2	1.0	15.0	0.1	0.0	86.3	2.1	1.0	0.5	0.0	0.0	61.6	0.2	0.9	0.9	0.0	0.0	149.2	2.3	1.9
3rd Party	0%	0%	0%	0%	0%	0%	7%	16%	0%	0%	0%	0%	0%	0%	0%	98%	70%	100%	0%	0%	0%	40%	5%	47%
Equipment Failure	100%	100%	100%	91%	49%	0%	93%	84%	0%	71%	53%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	41%	49%	53%
Operation	0%	0%	0%	9%	51%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	30%	0%	100%	100%	0%	2%	2%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	29%	47%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17%	44%	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%

Reliability Histories for Individual Circuits Serving Huntington Beach

	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
SEAWEEED(12KV) - Customers: 1,552	49.6	0.3	0.0	55.1	0.2	0.0	169.3	0.4	0.0	0.0	0.0	1.0	39.1	0.2	0.0	207.4	0.4	0.0	169.9	1.0	0.0	416.4	1.6	1.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	21%	67%	0%	0%	0%	0%	0%	0%	0%	2%	8%	0%
Equipment Failure	9%	11%	0%	10%	10%	0%	98%	90%	0%	0%	0%	0%	79%	33%	0%	68%	33%	0%	100%	100%	100%	82%	74%	0%
Operation	0%	0%	0%	83%	53%	0%	2%	10%	0%	0%	0%	0%	0%	0%	0%	32%	67%	0%	0%	0%	0%	16%	18%	0%
Other	36%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	55%	39%	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%	7%	37%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
SEWELL(12KV) - Customers: 4,080	73.9	0.1	2.0	121.7	1.2	2.5	152.3	2.0	2.8	320.2	1.3	0.0	0.0	0.0	0.0	11.8	0.0	0.0	0.0	0.0	0.0	332.0	1.4	0.0
3rd Party	0%	0%	0%	34%	80%	20%	7%	49%	36%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	93%	71%	100%	66%	20%	80%	62%	27%	28%	0%	0%	0%	0%	0%	0%	30%	58%	0%	0%	0%	0%	1%	2%	0%
Operation	7%	29%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	70%	42%	0%	0%	0%	0%	3%	1%	0%
Other	0%	0%	0%	0%	0%	0%	31%	24%	36%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	96%	97%	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%
SKIFF(12KV) - Customers: 153	0.0	0.0	0.0	612.8	3.9	0.0	3.9	0.5	0.0	25.0	1.0	0.0	199.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	224.9	2.0	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%	100%	100%	0%	100%	100%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	89%	50%	0%
Operation	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	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%
SMELTZER(12KV) - Customers: 3,707	57.6	0.7	0.5	40.0	1.1	2.0	103.9	2.0	3.0	13.5	1.0	2.5	0.0	0.0	0.0	1.5	0.0	0.0	58.1	0.1	0.0	73.1	1.2	2.5
3rd Party	56%	75%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	38%	22%	0%	84%	95%	50%	0%	0%	0%	24%	2%	60%	0%	0%	0%	0%	0%	0%	37%	44%	0%	34%	7%	60%
Operation	2%	1%	0%	14%	4%	0%	78%	51%	100%	2%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	2%	1%	0%
Other	0%	0%	0%	0%	0%	0%	22%	49%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	63%	56%	0%	50%	7%	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	4%	2%	0%	2%	1%	50%	0%	0%	0%	74%	98%	40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	14%	85%	40%

Reliability Histories for Individual Circuits Serving Huntington Beach

	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
SOCO 1(33KV) - Customers: 1	0.0	0.0	0.0	0.0	0.0	0.0	158.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operation	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	100%	100%	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%
SONICS(12KV) - Customers: 3,608	165.5	2.6	1.7	28.8	0.1	0.0	82.1	1.1	1.0	32.4	1.0	0.0	70.0	0.8	0.9	103.4	1.0	1.9	65.7	0.2	0.0	271.5	3.0	2.8
3rd Party	79%	87%	100%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	94%	99%	48%	0%	0%	0%	36%	33%	32%
Equipment Failure	16%	7%	0%	29%	54%	0%	82%	98%	0%	10%	1%	0%	8%	3%	0%	6%	1%	0%	100%	98%	0%	30%	7%	0%
Operation	5%	6%	0%	71%	46%	0%	18%	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%	90%	99%	0%	61%	89%	0%	0%	0%	52%	0%	2%	0%	27%	58%	35%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	31%	8%	100%	0%	0%	0%	0%	0%	0%	8%	2%	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%
SPEAKER(12KV) - Customers: 78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.2	0.1	0.0	20.2	0.1	0.0
3rd Party	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	0%	0%	0%	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%	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%	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%
STANDARD(12KV) - Customers: 3,704	9.2	0.0	1.0	3.6	0.0	0.0	162.1	3.0	0.3	2.9	0.0	0.0	14.0	0.0	0.0	141.2	1.2	0.0	53.4	0.7	0.9	211.5	2.0	0.9
3rd Party	60%	89%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	8%	0%	0%	0%	0%	3%	5%	0%
Equipment Failure	40%	11%	0%	11%	1%	0%	82%	67%	100%	0%	0%	0%	100%	100%	0%	96%	92%	0%	100%	100%	100%	96%	94%	100%
Operation	0%	0%	0%	89%	99%	0%	2%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
Other	0%	0%	0%	0%	0%	0%	15%	33%	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 Huntington Beach

	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
TINKER(12KV) - Customers: 2,797	21.7	0.0	2.0	5.6	0.0	1.0	179.5	2.1	0.0	33.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	33.5	0.0	1.0
3rd Party	0%	0%	0%	9%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Equipment Failure	100%	100%	50%	22%	7%	100%	100%	100%	0%	16%	53%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	16%	53%	0%
Operation	0%	0%	0%	70%	92%	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%	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%	84%	47%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	84%	47%	100%
WATERFIELD(12KV) - Customers: 2,756	98.2	1.3	0.0	246.2	2.2	1.0	2.6	0.0	0.0	0.0	0.0	1.0	60.9	0.9	0.1	0.0	0.0	0.0	68.7	1.6	2.2	129.6	2.5	3.3
3rd Party	47%	90%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	78%	94%	100%	0%	0%	0%	22%	35%	46%	48%	57%	34%
Equipment Failure	48%	6%	0%	57%	55%	100%	100%	100%	0%	0%	0%	0%	19%	4%	0%	0%	0%	0%	78%	65%	54%	51%	42%	37%
Operation	5%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	3%	3%	0%	0%	0%	0%	0%	0%	0%	1%	1%	29%
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%	43%	45%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
WINTERSBURG(12KV) - Customers: 2,783	0.0	0.0	0.0	16.0	0.0	3.0	105.0	2.5	2.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	1.0	5.2	0.0	1.0
3rd Party	0%	0%	0%	0%	0%	67%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%
Equipment Failure	0%	0%	0%	0%	0%	33%	58%	3%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	85%	87%	0%
Operation	0%	0%	0%	100%	100%	0%	14%	43%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	15%	13%	0%
Other	0%	0%	0%	0%	0%	0%	22%	40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetation/Animal	0%	0%	0%	0%	0%	0%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weather/Fire/Earthquake	0%	0%	0%	0%	0%	0%	4%	13%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
YOGI(12KV) - Customers: 3,723	7.1	0.0	0.0	37.1	0.3	0.0	56.9	0.4	0.6	222.2	0.8	0.0	0.0	0.0	0.0	23.3	0.1	0.0	24.2	0.0	0.0	269.7	1.0	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	89%	75%	0%	83%	61%	0%	23%	9%	0%	0%	0%	0%	0%	0%	0%	5%	8%	0%	100%	100%	0%	9%	4%	0%
Operation	11%	25%	0%	17%	39%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	95%	92%	0%	0%	0%	0%	8%	11%	0%
Other	0%	0%	0%	0%	0%	0%	77%	91%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	82%	85%	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%