

SAIDI

SAIDI (System Average Interruption Duration Index) – a system index of average duration of interruption in the power supply indicated in minutes per customer.

$$\text{SAIDI} = \frac{\text{total duration of interruptions for a group of customers}}{\text{Number of all customers}}$$

Area							
	⊕ Area	73	1,650	1,703.80	1,105	25,782	33,411.33
Cause							
	⊕ Planned Outage	46	97	82.38	650	1,726	1,697.77
	⊕ Equipment or Installation/Design	5	32	46.62	117	4,161	7,362.97
	⊕ Maintenance	2	4	2.47	51	4,633	5,405.00
	⊕ Weather	7	198	164.47	197	9,992	13,470.02
	⊕ Animals	3	1,129	1,036.92	16	1,205	1,105.22
	⊕ Public	7	187	366.17	44	2,071	2,734.27
	⊕ Other	0	0	0.00	4	817	118.02
	⊕ Unknown	3	3	4.78	26	1,177	1,518.08

Equipment/Material Failure

☒ Poles and Fixtures, Distribution	3	64	110.03	14	2,018	4,726.08
☒ Overhead Line Conductors and Devices, Distribution	8	344	460.10	74	5,206	9,415.32
☒ Underground Line Conductors and Devices, Distribution	0	0	0.00	24	1,598	2,706.53
☒ Line Transformer	0	0	0.00	9	20	61.03
☒ Secondaries and Services	4	6	5.53	116	224	375.10
☒ No Equipment Damaged	58	1,236	1,128.13	868	16,716	16,127.27

Voltage Level

☒ Voltage Level Codes	73	1,650	1,703.80	1,105	25,782	33,411.33
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Weather Condition

☒ Weather Condition Codes	73	1,650	1,703.80	1,105	25,782	33,411.33
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KEY RATIO TREND ANALYSIS COMPARES LINE-ITEM DATA FROM A COMPANY'S FINANCIAL STATEMENTS TO REVEAL INSIGHTS REGARDING PROFITABILITY, LIQUIDITY, OPERATIONAL EFFICIENCY, AND SOLVENCY. **KRTA CAN BE USED TO LOOK AT TRENDS OVER TIME FOR ONE COMPANY OR TO COMPARE COMPANIES WITHIN AN INDUSTRY OR SECTOR.**

What The KRTA DOES

- Assists in Analyzing System Operations
- Highlight Areas of Strengths and Weaknesses
- Indicator of Future Performance
- Provides Positive and Negative Trending

What The KRTA DOES

- A High Level Look at Comparisons to Peers
- Must be Looked at as a Whole

The KRTA DOES NOT

- Answer Why a Cooperative is High or Low in a Specific Ratio or Ratios
- View Ratios in Context of the Year's Unusual Events

Cautions: Differences exist in...

System characteristics

- Density
- Terrain
- Member mix
- Weather
- Strategic initiatives

Reporting errors In short – how are you different from the “median” cooperative

2018 Key Ratio Trend Analysis (KRTA)
La Plata Electric Association, Inc. (CO032)


Year	System Value	US Total			State Grouping			Consumer Size			Major Current Power Supplier			Plant Growth (2013-2018)		
		Median	NBR	Rank	Median	NBR	Rank	Median	NBR	Rank	Median	NBR	Rank	Median	NBR	Rank
RATIO 144 --- SYSTEM AVG. INTERRUPTION DURATION INDEX (SAIDI) - TOTAL																
2014	61.36	179.70	813	713	106.36	22	17	197.82	57	54	161.99	44	37	185.90	117	105
2015	165.66	194.60	811	463	121.76	22	10	225.61	56	37	177.50	44	24	199.55	117	71
2016	109.38	205.00	809	621	162.40	22	16	208.86	60	50	353.65	44	35	179.16	31	24
2017	161.99	207.48	813	501	143.86	22	10	225.64	63	43	193.60	44	29	271.00	29	22
2018	139.58	228.44	814	556	133.39	22	10	262.90	61	48	281.80	43	29	139.58	7	4

Year	System Value	US Total			State Grouping			Consumer Size			Major Current Power Supplier			Plant Growth (2013-2018)		
		Median	NBR	Rank	Median	NBR	Rank	Median	NBR	Rank	Median	NBR	Rank	Median	NBR	Rank
RATIO 142 --- SYSTEM AVG. INTERRUPTION DURATION INDEX (SAIDI) - PREARRANGED																
2014	3.96	2.61	813	331	2.73	22	8	4.10	57	30	1.43	44	15	1.53	117	39
2015	5.28	2.73	811	310	2.10	22	6	3.81	56	21	2.05	44	15	2.78	117	45
2016	5.38	2.69	809	312	2.60	22	8	3.57	60	22	3.62	44	19	1.20	31	8
2017	4.62	3.02	813	333	5.01	22	12	3.22	63	26	4.87	44	23	1.15	29	13
2018	15.62	3.61	814	151	5.83	22	6	4.98	61	8	8.35	43	17	2.05	7	2



DISTRIBUTION UTILITY OF THE FUTURE: RELIABILITY GOAL

To facilitate technology advances for a Distribution Utility of the Future, LPEA will strive to improve customer satisfaction in reliability by achieving the upper half of the System Average Interruption Duration Index (SAIDI) within the Key Ratio Trend Analysis (KRTA) of the Colorado peer group



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