



Department of Public Utilities

Electric, Gas, Water, and Wastewater Services

Monthly Status Report

Electric Reliability

Dennis Astley

Acting Deputy Utility Manager -

Electric Distribution

Total # Accounts	9045	
Total Interruptions	31	
Sum Customer Interruption Durations	11247:27:00	
#Customers Interrupted	7012.0	
SAIFI	0.78	
SAIDI	1:14	
CAIFI	0.414%	
CAIDI	1:36	
ASAI	99.1341%	

- **SAIFI - System Average Interruption Frequency Index**
A measure of interruptions per customer (Per Year)

$$\text{SAIFI} = \frac{\text{(Total number of customer interruptions)}}{\text{(Total number of customers served)}}$$

- **SAIDI – System Average Interruption Duration Index**
A measure of outage time per customer if all customers were out at the same time (hours per year)

$$\text{SAIDI} = \frac{\text{(Sum of all customer outage durations)}}{\text{(Total number of customers served)}}$$

- **CAIDI – Customer Average Interruption Duration Index**
A measure of the average outage duration per customer (hours per interruption)

$$\text{CAIDI} = \frac{\text{(Sum of all customer outage durations)}}{\text{(Total number of customer interruptions)}} = \frac{\text{SAIDI}}{\text{SAIFI}}$$

- **ASAI – Average System Availability Index**
A measure of the average service availability (Per unit)
$$\text{ASAI} = \frac{\text{(Service hours available)}}{\text{(Customer demand hours)}} = \frac{8760 - \text{SAIDI}}{8760}$$

Electric Distribution Reliability Study Twelve Month Outage History								Prepared by Dennis G Astley Deputy Utility Manager				
Date	Call Rcd.	Circuit	Cause	Start Time	End Time	Duration	Minutes	Customers Affected (Meters)	Combined Customer Outage Durations	Total Outage H:M:S	Running Consumer Pain Index	Running SAIDI
5/5/2025	Utilities	15	WEATHER	3:26	7:15	3:49	229	16	61:04:00	61:04:00	0:00:24	0:00:24
5/8/2025	Utilities	14	URD Failure	9:07	10:00	0:53	53	20	17:40:00	78:44:00	0:00:31	0:00:31
6/8/2025	Utilities	WR2	URD Failure	5:00	8:00	3:00	180	15	45:00:00	123:44:00	0:00:49	0:00:49
6/8/2025	Utilities	WR2	URD Failure	5:00	10:00	5:00	300	20	100:00:00	223:44:00	0:01:29	0:01:29
6/8/2025	Utilities	WR2	URD Failure	5:00	13:00	8:00	480	5	40:00:00	263:44:00	0:01:45	0:01:45
6/19/2025	Utilities	WR1	OH Failure	16:00	17:30	1:30	90	10	15:00:00	278:44:00	0:01:51	0:01:51
7/16/2025	Utilities	16	Weather	9:25	10:15	0:50	50	10	8:20:00	287:04:00	0:01:54	0:01:54
7/22/2025	Utilities	13	OH Failure	12:25	13:20	0:55	55	1675	1535:25:00	1822:29:00	0:12:05	0:12:05
7/22/2025	Utilities	13	Transformer Failure	17:30	18:45	1:15	75	10	12:30:00	1834:59:00	0:12:10	0:12:10
7/28/2025	Utilities	15	Weather	16:05	18:00	1:55	115	1	1:55:00	1836:54:00	0:12:11	0:12:11
8/8/2025	Utilities	WR1	Transformer Failure	3:20	6:00	2:40	160	2612	6965:20:00	8802:14:00	0:58:23	0:58:23
8/12/2025	Utilities	WR2	Vehicle	10:00	11:00	1:00	60	961	961:00:00	9763:14:00	1:04:46	1:04:46
8/25/2025	Utilities	WR1	weather	19:22	20:10	0:48	48	949	759:12:00	10522:26:00	1:09:48	1:09:48
11/4/2025	Utilities	13	Contractor	15:30	16:30	1:00	60	21	0:00:00	10522:26:00	1:09:56	1:09:48
11/4/2025	Utilities	16	URD Failure	22:30	3:30	5:00	300	35	175:00:00	10697:26:00	1:11:06	1:10:58
12/11/2025	Utilities	ELK RIDGE	Unknown	7:29	9:20	1:51	111	175	323:45:00	11021:11:00	1:13:15	1:13:07
12/12/2025	Utilities	WR1	URD Failure	4:30	7:30	3:00	180	50	150:00:00	11171:11:00	1:14:15	1:14:06
12/16/2025	Utilities	14	Contractor	0:30	2:30	2:00	120	14	0:00:00	11171:11:00	1:14:26	1:14:06
12/18/2025	Utilities	ELK RIDGE	weather	3:45	5:45	2:00	120	20	40:00:00	11211:11:00	1:14:42	1:14:22
12/18/2025	Utilities	13	TREE	5:45	9:30	3:45	225	20	75:00:00	11286:11:00	1:15:12	1:14:52
12/22/2025	Utilities	17	Contractor	10:30	11:00	0:30	30	15	0:00:00	11286:11:00	1:15:15	1:14:52
1/1/2026	Utilities	16	Unknown	15:00	16:15	1:15	75	6	7:30:00	11293:41:00	1:15:17	1:14:55
1/28/2026	Utilities	WR2	URD Failure	9:00	10:00	1:00	60	14	14:00:00	11307:41:00	1:15:23	1:15:01
2/6/2026	Utilities	ELK RIDGE	OH Failure	9:30	10:00:00	0:30:00	30	20	10:00:00	11317:41:00	1:15:27	1:15:05
2/17/2026	Utilities	16	weather	10:30	12:00	1:30	90	7	10:30:00	11328:11:00	1:15:31	1:15:09
3/6/2026	Utilities	16	LANL Error	13:30	13:50	0:20	20	231	77:00:00	11405:11:00	1:16:02	1:15:09
3/11/2026	Utilities	16	WEATHER	13:44	14:24	0:40	40	40	26:40:00	11431:51:00	1:16:12	1:15:39
3/18/2026	Utilities	WR1	URD Failure	16:00	3:30	11:30	690	6	69:00:00	11500:51:00	1:16:40	1:15:50
3/31/2026	Utilities	Bandelier	URD Failure	10:05	16:00	5:55	355	4	23:40:00	11524:31:00	1:16:49	1:16:17
4/17/2026	Utilities	WR2	URD Failure	10:00	11:00	1:00	60	10	10:00:00	11247:27:00	1:14:59	1:14:37
4/22/2026	Utilities	ELK RIDGE	LANL Error	15:00	16:30:00	1:30:00	90	20	0:00:00	11247:27:00	1:15:11	1:14:37

CIRCUIT SAIDI IS CALCULATED ACCORDING TO THE NUMBER OF CUSTOMERS IN EACH CIRCUIT RESPECTIVELY

<u>Running SAIDI Circuit 13</u>	<u>Running SAIDI Circuit 14</u>	<u>Running SAIDI Circuit 15</u>	<u>Running SAIDI Circuit 16</u>	<u>Running SAIDI Circuit 17</u>	<u>Running SAIDI Circuit 18</u>	<u>Running SAIDI Circuit EA4 & ELK RIDGE</u>	<u>Running SAIDI Circuit WR1</u>	<u>Running SAIDI Circuit WR2</u>	<u>Monthly SAIDI</u>	
	0:01:58	0:01:57							MAY	0:00:31
								0:02:49		
								0:06:15		
								0:02:30		
			0:00:16				0:00:56		JUNE	0:01:20
0:55:40										
0:00:27										
		0:00:04							JULY	0:10:20
							7:14:53			
								1:00:00		
							0:47:24		AUGUST	0:11:25
0:00:00			0:05:42						NOVEMBER	0:01:10
						1:57:44				
0:02:43						0:14:33				
									DECEMBER	0:03:54
			0:00:15							
								0:00:52	JANUARY	0:00:35
						0:03:38				
			0:00:21						FEBRUARY	0:00:08
			0:00:52							
							0:04:18			
						0:08:36			MARCH	0:00:47
								0:00:37	April	0:00:04
0:58:50	0:01:58	0:02:01	0:07:26	0:00:00	0:00:00	0:00:00	8:07:32	1:12:25	Total	0:01:51
1655	539	1875	1842	209	213	165	1586	961	9045	
NUMBER OF CUSTOMERS BY CIRCUIT										

EACH POINT IS A MONTHLY SAIDI HISTORY
60 MINUTES = LACDPU SAIDI BENCHMARK

SAIDI = STANDARD AVERAGE INTERRUPTION DURATION

SAIDI= $\frac{\text{Sum of all customer outage durations}}{\text{Total number of customers served}}$

