



Department of Public Utilities

Electric, Gas, Water, and Wastewater Services

Monthly Status Report

Electric Reliability

Dennis Astley

Deputy Utility Manager -

Electric Distribution

Total # Accounts	9045	
Total Interruptions	37	
Sum Customer Interruption Durations	24496:3 5:00	
#Customers Interrupted	11968.0	
SAIFI	1.32	
SAIDI	2:42	
CAIFI	0.309%	
CAIDI	2:02	
ASAI	98.5603%	

- **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
8/8/2025	Utilities	WR1	Transformer Failure	3:20	6:00	2:40	160	2612	6965:20:00	6965:20:00	0:46:12	0:46:12
8/12/2025	Utilities	WR2	Vehicle	10:00	11:00	1:00	60	961	961:00:00	7926:20:00	0:52:35	0:52:35
8/25/2025	Utilities	WR1	weather	19:22	20:10	0:48	48	949	759:12:00	8685:32:00	0:57:37	0:57:37
11/4/2025	Utilities	13	Contractor	15:30	16:30	1:00	60	21	0:00:00	8685:32:00	0:57:45	0:57:37
11/4/2025	Utilities	16	URD Failure	22:30	3:30	5:00	300	35	175:00:00	8860:32:00	0:58:55	0:58:47
12/11/2025	Utilities	ELK RIDGE	Unknown	7:29	9:20	1:51	111	175	323:45:00	9184:17:00	1:01:04	1:00:55
12/12/2025	Utilities	WR1	URD Failure	4:30	7:30	3:00	180	50	150:00:00	9334:17:00	1:02:03	1:01:55
12/16/2025	Utilities	14	Contractor	0:30	2:30	2:00	120	14	0:00:00	9334:17:00	1:02:15	1:01:55
12/18/2025	Utilities	ELK RIDGE	weather	3:45	5:45	2:00	120	20	40:00:00	9374:17:00	1:02:31	1:02:11
12/18/2025	Utilities	13	TREE	5:45	9:30	3:45	225	20	75:00:00	9449:17:00	1:03:00	1:02:41
12/22/2025	Utilities	17	Contractor	10:30	11:00	0:30	30	15	0:00:00	9449:17:00	1:03:03	1:02:41
1/1/2026	Utilities	16	Unknown	15:00	16:15	1:15	75	6	7:30:00	9456:47:00	1:03:06	1:02:44
1/28/2026	Utilities	WR2	URD Failure	9:00	10:00	1:00	60	14	14:00:00	9470:47:00	1:03:12	1:02:49
2/6/2026	Utilities	ELK RIDGE	OH Failure	9:30	10:00:00	0:30:00	30	20	10:00:00	9480:47:00	1:03:16	1:02:53
2/17/2026	Utilities	16	weather	10:30	12:00	1:30	90	7	10:30:00	9491:17:00	1:03:20	1:02:58
3/6/2026	Utilities	16	LANL Error	13:30	13:50	0:20	20	231	77:00:00	9568:17:00	1:03:51	1:03:28
3/11/2026	Utilities	16	WEATHER	13:44	14:24	0:40	40	40	26:40:00	9594:57:00	1:04:01	1:03:39
3/18/2026	Utilities	WR1	URD Failure	16:00	3:30	11:30	690	6	69:00:00	9663:57:00	1:04:29	1:04:06
3/31/2026	Utilities	Bandelier	URD Failure	10:05	16:00	5:55	355	4	23:40:00	9687:37:00	1:04:38	1:04:16
4/17/2026	Utilities	WR2	URD Failure	10:00	11:00	1:00	60	10	10:00:00	9697:37:00	1:04:42	1:04:20
4/22/2026	Utilities	ELK RIDGE	LANL Error	15:00	16:30:00	1:30:00	90	20	0:00:00	9697:37:00	1:04:54	1:04:20
5/8/2026	Utilities	13	URD Failure	21:32	22:36:00	1:04:00	64	4373	4664:32:00	14362:09:00	1:35:51	1:35:16
5/8/2026	Utilities	13	URD Failure	21:32	23:48:00	2:16:00	136	945	2142:00:00	16504:09:00	1:50:03	1:49:29
5/8/2026	Utilities	13	URD Failure	21:32	0:20:00	2:48:00	168	17	47:36:00	16551:45:00	1:50:22	1:49:48
5/8/2026	Utilities	13	URD Failure	21:32	1:02:00	4:30:00	270	305	1372:30:00	17924:15:00	1:59:28	1:58:54
5/8/2026	Utilities	13	URD Failure	21:32	2:38:00	6:00:00	360	102	612:00:00	18536:15:00	2:03:32	2:02:58
5/8/2026	Utilities	13	URD Failure	21:32	4:35:00	8:00:00	480	134	1072:00:00	19608:15:00	2:10:39	2:10:04
5/8/2026	Utilities	13	URD Failure	21:32	5:26:00	9:00:00	540	376	3384:00:00	22992:15:00	2:33:06	2:32:31
5/8/2026	Utilities	13	URD Failure	21:32	7:42:00	11:10:00	670	26	290:20:00	23282:35:00	2:35:01	2:34:27
5/25/2026	Utilities	EA4	Pole Fire	21:30	1:00:00	4:00:00	240	2	8:00:00	23290:35:00	2:35:04	2:34:30
6/20/2026	Utilities	14	URD Failure	11:30	17:30:00	6:00	360	50	300:00:00	23590:35:00	2:37:04	2:36:29
6/23/2026	Utilities	WR2	Bird	6:00	7:00:00	1:00	60	250	250:00:00	23840:35:00	2:38:43	2:38:09
7/3/2026	Utilities	WR2	Bird	10:00	12:00	2:00	120	23	46:00:00	23886:35:00	2:39:02	2:38:27
7/13/2026	Utilities	WR2	URD Failure	17:00	20:00	3:00	180	20	60:00:00	23946:35:00	2:39:25	2:38:51
7/16/2026	Utilities	EA4	URD Failure	20:30	7:30:00	11:00:00	660	25	275:00:00	24221:35:00	2:41:15	2:40:40
7/16/2026	Utilities	WR2	URD Failure	18:30	20:30	2:00	120	30	60:00:00	24281:35:00	2:41:39	2:41:04
7/26/2026	Utilities	14	URD Failure	9:45	13:20:00	3:35	215	60	215:00:00	24496:35:00	2:43:04	2:42:30

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>	
							7:14:53			
							0:47:24	1:00:00	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
			0:00:21			0:03:38			FEBRUARY	0:00:08
			0:00:52							
							0:04:18			
						0:08:36			MARCH	0:00:47
								0:00:37	April	0:00:04
						0:00:00				
2:49:06	8:39:15	2:29:16	2:31:56	22:19:06	21:53:57				May	1:30:10
1:17:39										
0:01:44										
0:49:45										
0:22:11										
0:38:52										
2:02:41										
0:10:32										
						0:02:55				
	0:33:24								June	0:03:39
								0:15:37		
								0:02:52	July	0:04:21
								0:03:45		
						1:40:00				
								0:03:45		
	0:23:56									
8:15:14	8:39:15	2:29:16	2:39:06	22:19:06	21:53:57	2:27:25	8:06:35	1:01:30	Total	
1655	539	1875	1842	209	213	165	1586	961	9045	
NUMBER OF CONSUMERS BY CIRCUIT										

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

SAIDI = STANDARD AVERAGE INTERRUPTION DURATION

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

