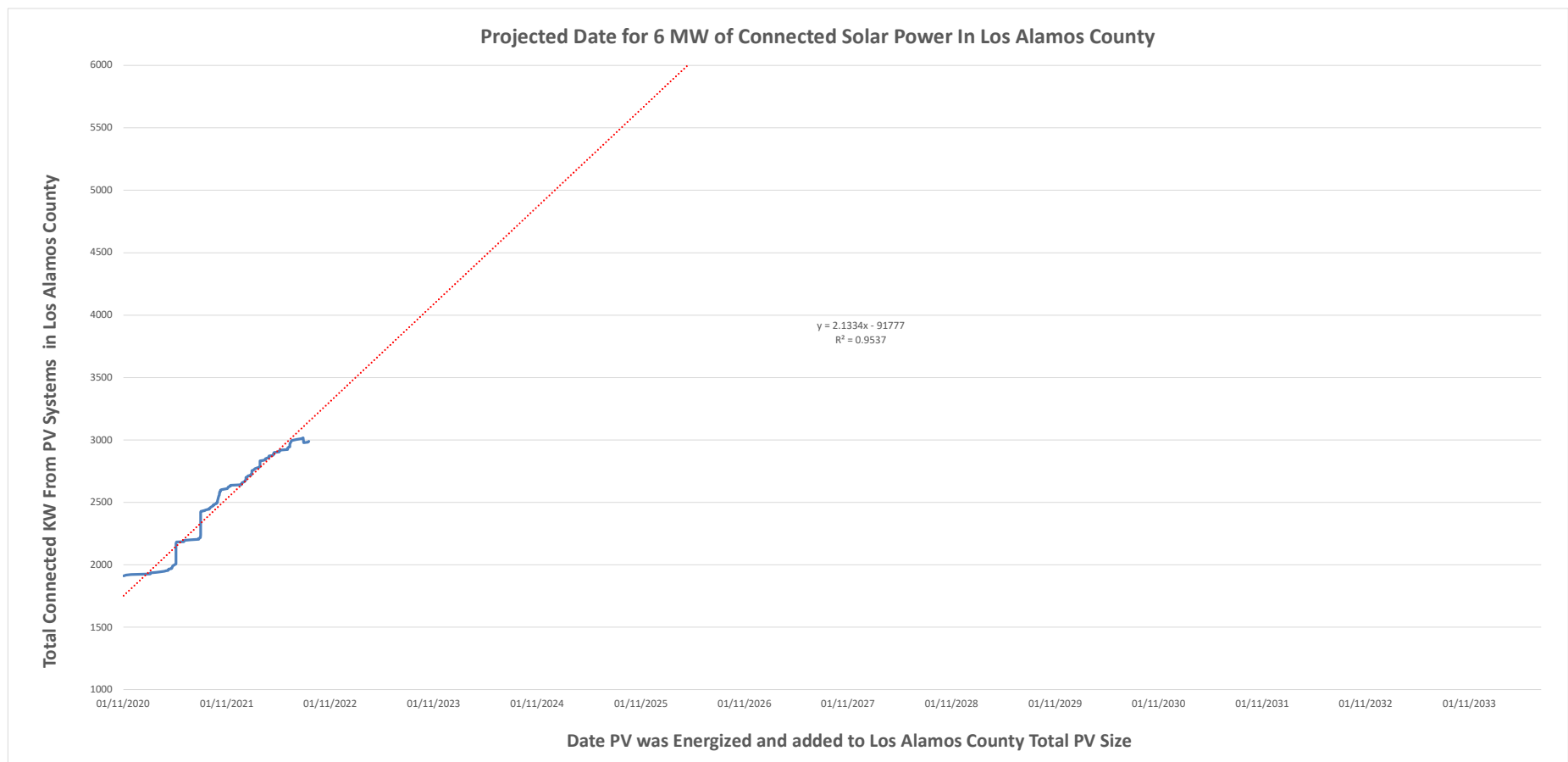


STATUS REPORTS

ELECTRIC RELIABILITY

PREPARED BY

Alan Horton
Associate Engineer



PV info:

NUMBER OF CUSTOMERS	335
TOTAL KW	3340.52
CONNECTED KW	3039.76
Connected Residential KW	1356.47
Connected Commercial KW	1683.29
KW Pending	300.76

**Prepared by Alan Horton
Associate Engineer L.A.C.U.**

							Customers	Combined		
							Affected	Customer		
Date	Call Rcd.	Circuit	Cause	Start Time	End Time	Duration	(Meters)	Outage	Total Outage	Running
								Durations	H:M:S	SAID
11/8/2020	Utilities	WR1	OH Failure	9:35	13:40	4:05	1	4:05:00	4:05:00	0:00:02
11/23/2020	Utilities	WR1	Weather	18:30	20:00	1:30	528	792:00:00	796:05:00	0:05:17
11/23/2020	Utilities	WR1	Weather	20:00	20:50	0:50	1586	1321:40:00	2117:45:00	0:14:03
11/23/2020	Utilities	13	Weather	18:30	21:30	3:00	4	12:00:00	2129:45:00	0:14:08
11/27/2020	Utilities	WR1	URD Failure	1:29	4:15	2:46	20	55:20:00	2185:05:00	0:14:30
12/19/2020	Utilities	14	URD Failure	17:00	18:10	1:10	1	1:10:00	2186:15:00	0:14:30
12/27/2020	Utilities	15	UNKNOWN	1:00	2:30	1:30	20	30:00:00	2216:15:00	0:14:42
1/15/2021	Utilities	13	UNKNOWN	13:20	14:15	0:55	36	33:00:00	2249:15:00	0:14:55
2/2/2021	Utilities	15	ANIMAL	6:30	7:15	0:45	200	150:00:00	2399:15:00	0:15:55
2/4/2021	Utilities	16	URD Failure	0:00	5:00	5:00	69	345:00:00	2744:15:00	0:18:12
2/5/2021	Utilites	EA-4	OH Failure	21:45	22:30	0:45	10	7:30:00	2751:45:00	0:18:15
2/25/2021	Utilites	14	URD Failure	8:30	11:30	3:00	1	3:00:00	2754:45:00	0:18:16
4/21/2021	Utilites	14	ANIMAL	21:23	22:38	1:15	539	673:45:00	3428:30:00	0:22:45
5/16/2021	Utilites	WR1	UNKNOWN	10:30	12:00	1:30	5	7:30:00	3436:00:00	0:22:48
5/18/2021	Utilites	14	URD Failure	16:00	19:00	3:00	2	6:00:00	3442:00:00	0:22:50
5/22/2021	Utilites	EA-4	Weather	19:30	20:30	1:00	30	30:00:00	3472:00:00	0:23:02
5/26/2021	Utilites	16	URD Failure	16:45	22:20	5:35	100	558:20:00	4030:20:00	0:26:44
5/27/2021	Utilites	WR1	Weather	14:15	15:38	1:23	1586	2193:58:00	6224:18:00	0:41:17
6/5/2021	Utilites	15	ANIMAL	23:30	0:00	0:30	270	135:00:00	6359:18:00	0:42:11
6/5/2021	Utilites	15	ANIMAL	0:00	0:30	0:30	270	135:00:00	6494:18:00	0:43:05
6/17/2021	Utilites	16	URD Failure	18:35	21:30	2:55	3	8:45:00	6503:03:00	0:43:08
6/17/2021	Utilites	WR1	URD Failure	23:45	0:00	0:15	50	12:30:00	6515:33:00	0:43:13
6/17/2021	Utilites	WR1	URD Failure	0:00	2:30	2:30	50	125:00:00	6640:33:00	0:44:03
7/6/2021	Utilites	WR2	Unknown	10:45	11:45	1:00	25	25:00:00	6665:33:00	0:44:13
7/10/2021	Utilites	WR1	TREE	22:30	0:00	1:30	10	15:00:00	6680:33:00	0:44:19
7/10/2021	Utilites	14	Unknown	11:30	15:00	14:30	3	43:30:00	6724:03:00	0:44:36
7/17/2021	Utilites	WR2	Unknown	12:30	14:30	2:00	16	32:00:00	6756:03:00	0:44:49
7/18/2021	Utilites	13	URD Failure	22:30	0:00	1:30	13	19:30:00	6775:33:00	0:44:57
7/19/2021	Utilites	13	URD Failure	0:00	5:00	5:00	13	65:00:00	6840:33:00	0:45:23
7/22/2021	Utilites	13	URD Failure	18:30	19:10	0:40	5	3:20:00	6843:53:00	0:45:24
7/30/2021	Utilites	WR1	OH Failure	16:50	19:15	2:25	1586	3832:50:00	10676:43:00	1:10:49
8/25/2021	Utilites	WR1	URD Failure	16:30	18:30	2:00	20	40:00:00	10716:43:00	1:11:05
9/26/2021	Utilites	14	URD Failure	4:45	11:00	6:15	5	31:15:00	10747:58:00	1:11:18
9/29/2021	Utilites	16	TREE	19:45	23:40	3:55	5	19:35:00	10767:33:00	1:11:26
10/2/2021	Utilites	14	UNKNOWN	23:30	0:00	0:30	539	269:30:00	11037:03:00	1:13:13
10/2/2021	Utilities	14	UNKNOWN	0:00	1:00	1:00	539	539:00:00	11576:03:00	1:16:47
10/6/2021	Utilites	16	URD Failure	9:00	12:30	3:30	41	143:30:00	11719:33:00	1:17:44
10/13/2021	Utilites	16	URD Failure	17:00	21:00	4:00	50	200:00:00	11919:33:00	1:19:04
10/18/2021	Utilites	16	URD Failure	10:20	11:20	1:00	55	55:00:00	11974:33:00	1:19:26
10/19/2021	Utilites	14	URD Failure	2:23	6:00	3:37	19	68:43:00	12043:16:00	1:19:53

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 & Royal Crest</u>	<u>Running SAIDI Circuit WR1</u>	<u>Running SAIDI Circuit WR2</u>	<u>Monthly SAIDI</u>		<u>Monthly Customer Minutes out of service</u>	<u>WEATHER SAIDI</u>
							0:00:09 0:29:58 0:50:00					
0:00:26												0:05:15 0:08:46 0:00:05
	0:00:08						0:02:06		NOV	0:14:30	2185:05:00	
		0:00:58							DEC	0:00:12	31:10:00	
0:01:12									JAN	0:00:13	33:00:00	
		0:04:48										
			0:11:14									
	0:00:20 1:15:00					0:02:44			FEB APR	0:03:21 0:04:28	505:30:00 673:45:00	
	0:00:40						0:00:17					
						0:10:55						0:00:12
			0:18:11						MAY	0:18:33	2795:48:00	
		0:04:19 0:04:19					1:23:00					0:14:33
		0:00:17										
							0:00:28 0:04:44		JUN	0:02:46	416:15:00	
							0:00:34	0:01:34				
	0:04:51						0:02:00					
0:00:42 0:02:21 0:00:07												
							3:59:18 0:02:30		JUL AUG	0:26:46 0:00:16	4036:10:00 40:00:00	
	0:03:29								SEP	0:00:20	50:50:00	
	0:30:00 1:00:00		0:00:38									
			0:04:40 0:06:31 0:01:47									
	0:07:39								OCT	0:08:28	1275:43:00	
0:04:49 1655	3:02:06 539	0:14:24 1875	0:43:20 1842	0:00:00 209	0:00:00 213	0:13:38 165	6:55:04 1586	0:01:34 961	Total	1:19:53		0:28:51

Twelve Month History	October 2021	
Total # Accounts	9045	
Total # Interruptions	40	
Sum Customer Interruption Durations	12043:16:00	hours:min:sec
# Customers Interrupted	8325.0	
SAIFI (APPA AVG. = 1.0)	0.92	int./cust.
SAIDI (APPA AVG. = 1:00)	1.19	hours:min
CAIDI	1.26	hours:min/INT
ASAI	99.9994%	% available

- **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)

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

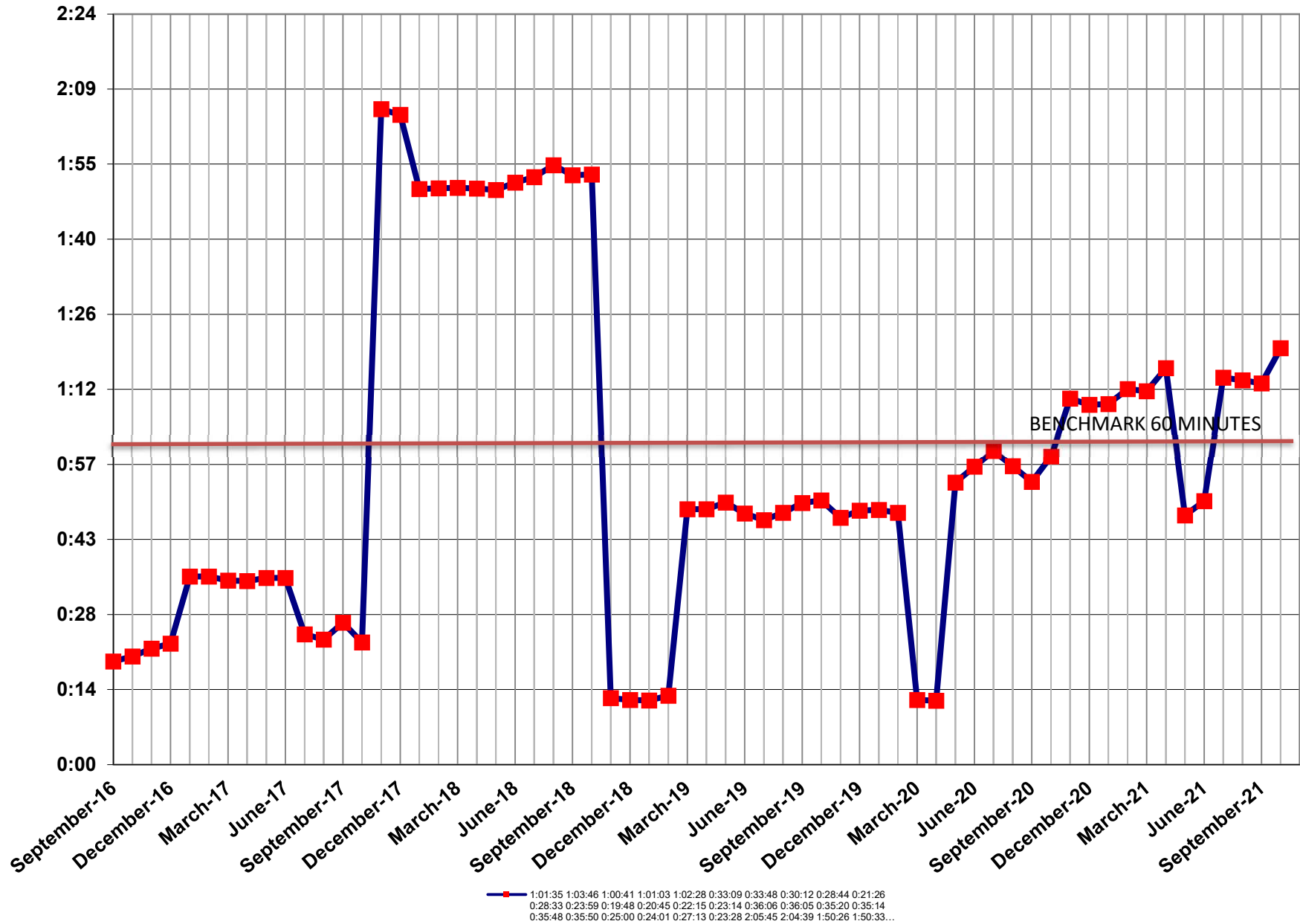
- **CAIDI – Customer Average Interruption Duration Index**
A measure of the average outage duration per customer (hours per interruption)

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

- **ASAI – Average System Availability Index**
A measure of the average service availability (Per unit)

$$\text{ASAI} = \frac{(\text{Service hours available})}{(\text{Customer demand hours})} = \frac{8760 - \text{SAIDI}}{8760}$$

EACH POINT IS A 12 MONTH SAIDI HISTORY
1:00 = APPA BENCHMARK SAIDI



EACH POINT IS A 12 MONTH SAIDI HISTORY
1:00 = APPA BENCHMARK SAIDI

