

STATUS REPORTS

ELECTRIC RELIABILITY

Los Alamos County Utilities

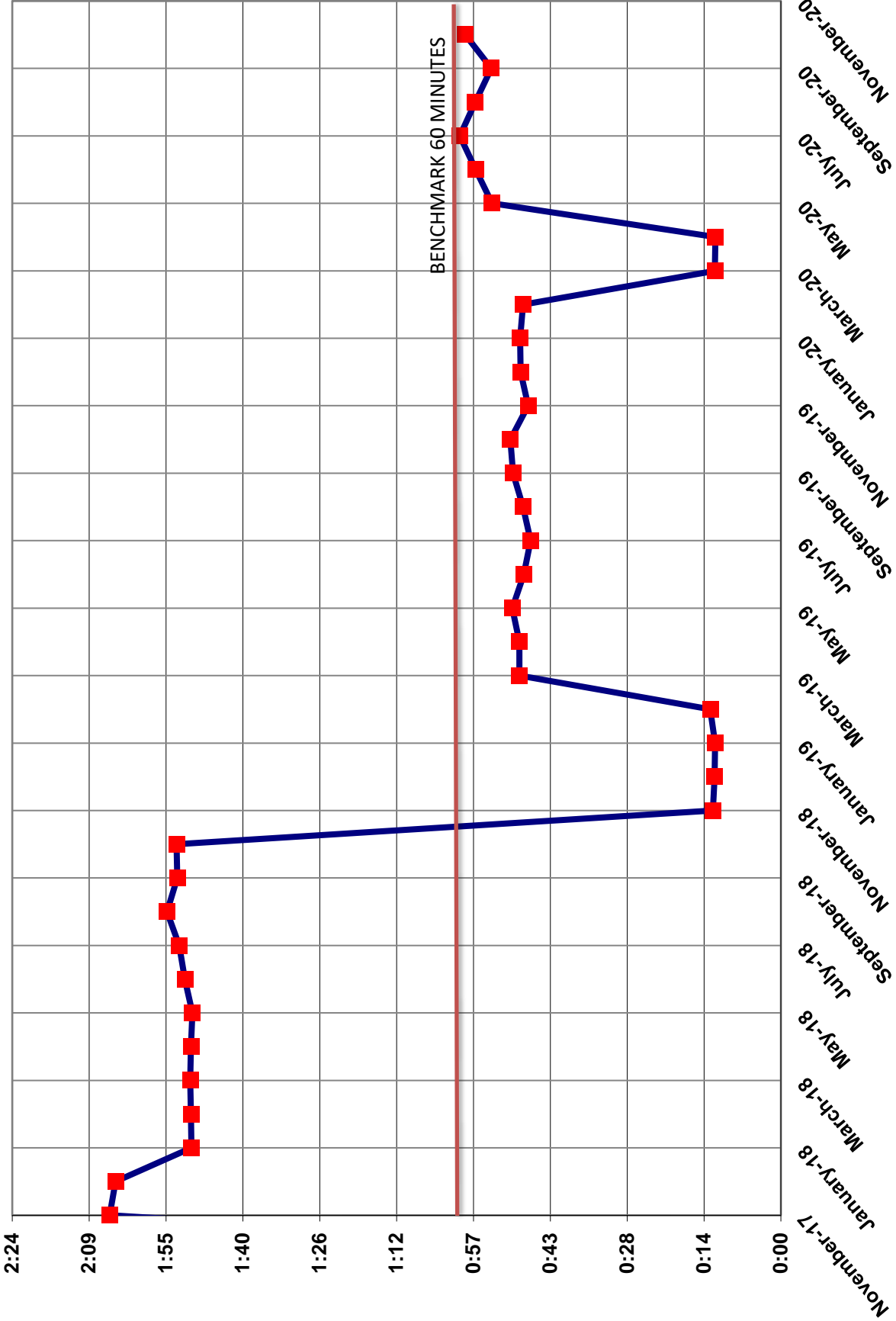


Electric Distribution Reliability

November 18, 2020

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Associate Engineer

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



Twelve Month History	OCT 2020	
Total # Accounts	9045	
Total # Interruptions	37	
Sum Customer Interruption Durations	8464:08:00	hours:min:sec
# Customers Interrupted	2899	
SAIFI (APPA AVG. = 1.0)	0.32	int./cust.
SAIDI (APPA AVG. = 1:00)	0:56	hours:min
CAIDI	2.55	hours:min/INT
ASAI	99.9996%	% 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)

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