

Los Alamos County
Department of Public Utilities

Electric Distribution
Reliability

December 7, 2022

Stephen Marez

Deputy Utility Manager
Electric Distribution (Acting)

Twelve Month History	November 2022	
Total # Accounts	9045	
Total # Interruptions	45	
Sum Customer Interruption Durations	33181:52:00	hours:min
# Customers Interrupted	19963	
SAIFI (APPA AVG. = 1.0)	2.21	int./cust.
SAIDI (APPA AVG. = 1:00)	3:40	hours:min
CAIDI	1.39	hours:min/INT
ASAI	99.9983%	% 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**

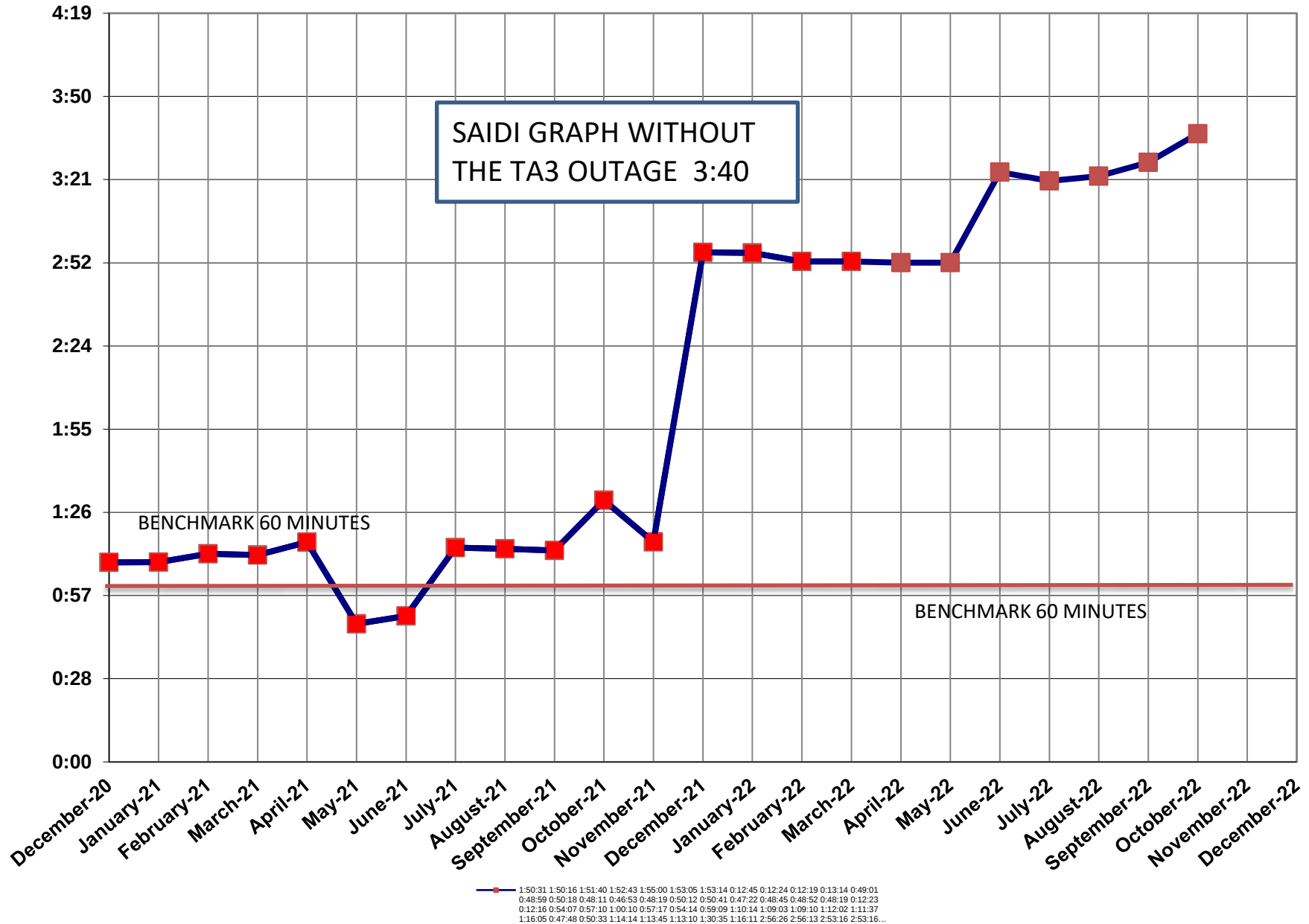
A measure of the average service availability (Per unit)

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

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

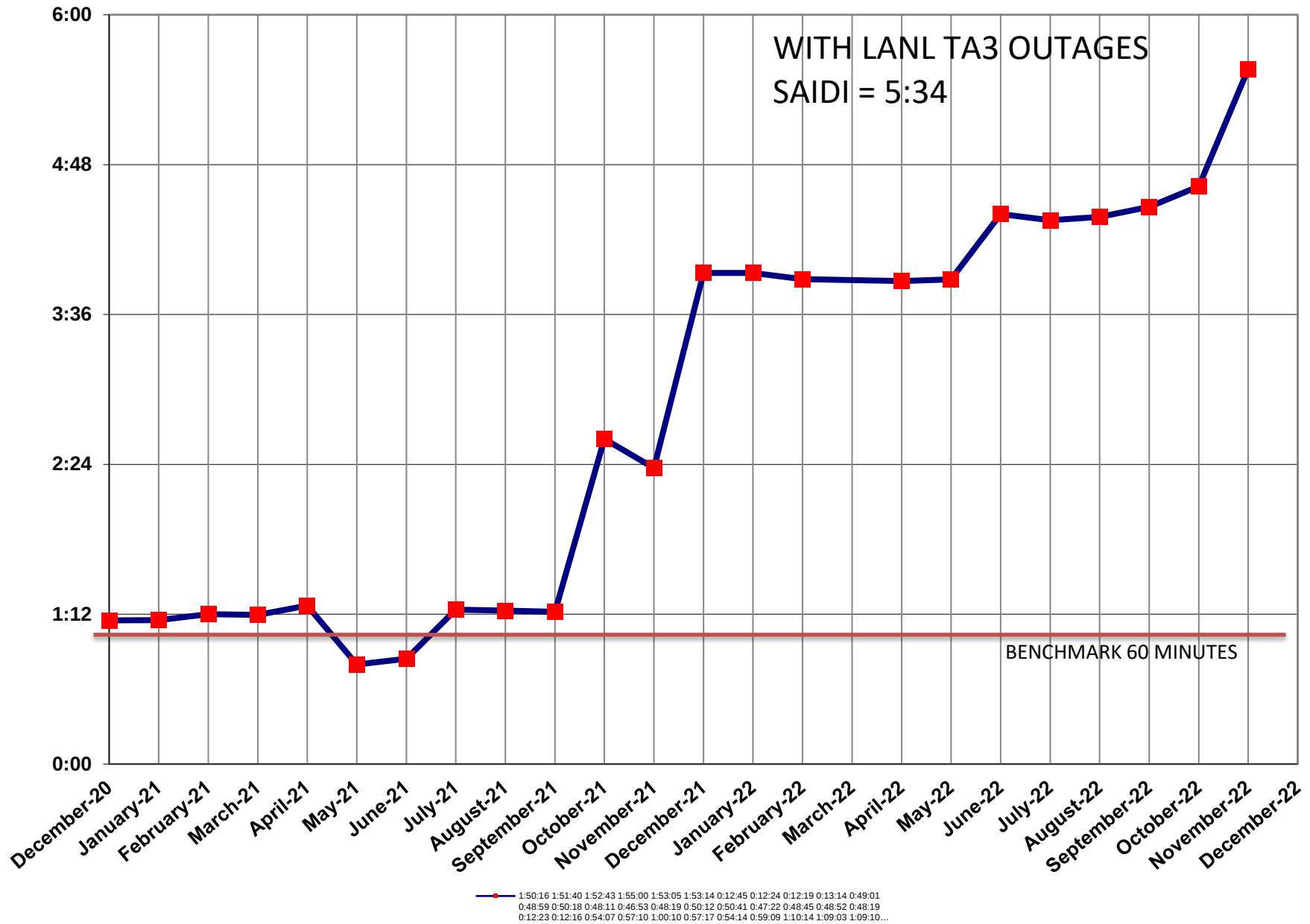
[illegible]

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

WITH LANL TA3 OUTAGES
SAIDI = 5:34



CONNECTED DISTRIBUTED GENERATION SOLAR - KW

3486 KW DC

