

# **STATUS REPORTS**

## **ELECTRIC RELIABILITY**

# Los Alamos County Utilities



## Electric Distribution Reliability

September 18, 2019

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| <b>Twelve Month History</b>                | <b>AUGUST 2019</b> |                      |
|--------------------------------------------|--------------------|----------------------|
| <b>Total # Accounts</b>                    | <b>9045</b>        |                      |
| <b>Total # Interruptions</b>               | <b>32</b>          |                      |
| <b>Sum Customer Interruption Durations</b> | <b>7284:58:00</b>  | <b>hours:min:sec</b> |
| <b># Customers Interrupted</b>             | <b>3569</b>        |                      |
| <b>SAIFI (APPA AVG. = 1.0)</b>             | <b>.39</b>         | <b>int./cust.</b>    |
| <b>SAIDI (APPA AVG. = 1:00)</b>            | <b>00:48</b>       | <b>hours:min</b>     |
| <b>CAIDI</b>                               | <b>2:03</b>        | <b>hours:min/INT</b> |
| <b>ASAI</b>                                | <b>99.9996%</b>    | <b>% available</b>   |

- **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  
1:00:00 = APPA BENCHMARK SAIDI

