

Glossary of Terms Used in PSO's Forestry Plan

District

- PSO's electrical distribution operations are organized into three large, geographical areas: The Tulsa District encompasses the entire Tulsa metropolitan area plus PSO's service areas in eastern and northern Oklahoma.
- The McAlester District includes the City of McAlester and all of PSO's service area in southeastern Oklahoma.
- The Lawton District includes the City of Lawton and all of PSO's service area in western and southwestern Oklahoma.

Substation

The substations on PSO's distribution system receive high-voltage energy from PSO's transmission system and reduce the voltage to distribution "feeder" levels. The "feeder" lines extend from the substation to smaller "lateral" lines that supply energy to residential neighborhoods.

Location

This describes where the substation is physically located, often given as the intersection of two streets.

Circuit

This is the "name" or designation that PSO has used to label and identify an individual electrical circuit. A "circuit" consists of the feeder line that extends from the substation and all of the lateral lines that extend from the feeder line.

Voltage

This is the voltage level at which the electrical distribution circuit operates. Most PSO distribution circuits operate at 13kV (13,000 volts). Some circuits operate at 4kV and a few, peculiar only to McAlester operate at 25kV.

Total Miles

This is the total length of the circuit (the length of the feeder line and all of the lateral lines combined).

Type

Designates whether the particular circuit is in an urban, suburban or rural setting.

Inaccessible Miles

This is the line mileage of a circuit that cannot be reached by bucket trucks for vegetation management, line maintenance or power restoration. Inaccessible sections must be reached on foot through customers' yards, and the trees and utility poles must be climbed manually. Manually performed work takes more time and can require coordination with the property owner for access.

Accessible Miles

This is the mileage of a circuit that can be accessed by bucket trucks.

Note: PSO uses the outage history of the circuits to determine the priority with which they will be placed on PSO's Forestry Plan. To determine priority, PSO looks at the Pocket Outages, Feeder SAIFI, Tree SAIFI, and then uses a Weighting method. Following is an explanation of each of these measures.

Pocket Outages (A) & (B)

Along the entire length of an electrical distribution circuit there sometimes are small groups of customers, or pockets, that experience a greater number of power outages than is typical for that circuit due to trees and/or other causes. We call these "pocket outages". The figure shown in the box is the number of outages experienced by customers in those "pockets" during the most recent 12-month period. The "A" designation is the number of pocket outages that occurred prior to PSO's vegetation management work. The "B" designation is the number of pocket outages occurring after the vegetation management work.

Feeder SAIFI (A) & (B)

This is the average number of power interruptions experienced by the PSO customers served by the circuit due to all causes over the previous 12 months. SAIFI, which is pronounced "Safe-ey", is an abbreviation of "System Average Interruption Frequency Index." The lower the SAIFI number, the fewer the outages. The "A" designation represents pre-vegetation management performance; the "B" designation is for post-vegetation management performance. SAIFI is measured on a rolling 12-month basis.

Tree SAIFI (A) & (B)

This is average number of interruptions caused only by trees experienced by customers on the circuit over the previous 12 months. The lower the Tree SAIFI number, the fewer the tree-related power outages have occurred. The "A" designation represents pre-vegetation management performance; the "B" designation is for post-vegetation management performance. SAIFI is measured on a rolling 12-month basis.

Weighting (A) & (B)

The data for Pocket Outages, Feeder SAIFI and Tree SAIFI are added together to identify the *weighting* of the circuit. Those circuits with the highest weighting for an area receive priority to be next in line for maintenance. The “A” and “B” designations indicate the weighting pre- and post-maintenance.