

# **General Order 174**

## **Rules for Electric Utility Substations**

**(Adopted October 25, 2012 by Decision 12-10-029)**  
**(Modified July 11, 2024, by Resolution ESRB-11)**

### **Section I**

#### **General Provisions**

#### **10 Purpose**

The purpose of these rules is to formulate, for the State of California, uniform requirements for substation inspection programs, the application of which will promote the safety of workers and the public and enable adequacy of service.

#### **11 Applicability**

This General Order applies to electric utilities subject to the jurisdiction of the California Public Utilities Commission (Commission).

Customer Substations are exempt from this General Order.

#### **12 General**

These rules are not intended as complete specifications, but embody only minimum requirements that will promote safety and enable adequacy of service.

Substations shall be designed, constructed and maintained for their intended use, regard being given to the conditions under which they are to be operated, to promote the safety of workers and the public and enable adequacy of service.

Design, construction and maintenance should be performed in accordance with accepted good practices for the given local conditions known at the time by those responsible.

### **13 Saving Clause**

The Commission reserves the right to change any of the provisions of these rules in specific cases when, in the Commission's opinion, public interest would be served by so doing.

Compliance with these rules is not intended to relieve an electric utility from other statutory requirements not specifically covered by these rules.

## **Section II Definitions/Acronyms**

**20 Discrepancy:** a noteworthy anomaly, material or structural deficiency.

**21 Inspection:** a basic evaluation, generally performed using visual and auditory senses, but which could be conducted by other means.

**22 Inspection Plan Summary:** a paper or electronic document that summarizes an Operator's Inspection Program.

**23 Operator:** an electric utility subject to this General Order.

**24 Substation:** An assemblage of equipment, (e.g., switches, circuit breakers, buses, and transformers), under the control of qualified persons, through which electric energy is passed for the purpose of switching or modifying its characteristics.

**24.1 Customer Substation:** a Substation that functions as the main source of electric power supply for a single customer, including those that provide feed through for additional customers.

## **Section III Inspection Programs**

### **30 General**

30.1 Each Operator shall establish, update as needed, and follow an Inspection Program. At a minimum, this Program shall specify for each piece of equipment and system listed in Rule 32.1:

- Inspection activities
- Frequency of Inspections
- Record keeping and retention

30.2 Inspections shall be performed by persons who, by reason of training, experience and instruction, are qualified to perform the task.

### **31 Frequency**

31.1 Substations shall be inspected as frequently as necessary.

- Time intervals or other bases shall be specified in the Inspection Program.

### **32 Facilities**

32.1 Facilities subject to Inspection shall include, but are not limited to:

- Batteries
- Buses
- Support Structures
- Capacitor Banks
- Circuit Breakers
- Fire Detection and Suppression System (Where applicable)
- Grounding System
- Insulators/Bushing/Arrestors
- Perimeter Fences and Gates
- Transformers
- Reactors
- Voltage Regulators

### **33 Records**

33.1 Electronic or hard copy records of completed Inspections shall include, at a minimum:

- Inspector name or identification
- Inspection date
- Brief description of identified discrepancies
- Condition rating (where applicable)
- Scheduled date of corrective action (where applicable)

33.2 Electronic or hard copy records of completed Inspections shall be retained for not less than five (5) years.

## **Section IV Reporting**

### **40 Annual Filings**

40.1 No later than July 1<sup>st</sup> of each year, each Operator shall transmit to the Safety and Enforcement Division (SED), or its successor, an Inspection Program Summary.

Changes to the Inspection Program shall be reflected in the Inspection Program Summary, including the effective date of the change. Should no changes occur since the previous filing, the Operator shall transmit written correspondence confirming that no changes were made to the Program.

40.2 No later than July 1<sup>st</sup> of each year, each Operator shall transmit to the Safety and Enforcement Division (SED), or its successor, a report summarizing completed and past due Inspections for the prior calendar year.