

General Order 174

Rules for Electric Utility Substations

(Adopted October 25, 2012 by Decision 12-10-029)

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).

Facilities subject to the California Independent System Operator's operational control and/or subject to FERC reliability standards and 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 1st of each year, each Operator shall transmit to the Utilities Safety and Reliability Branch (USRB) 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 1st of each year, each Operator shall transmit to the CPSD a report summarizing completed and past due Inspections for the prior calendar year.