

KPSC Routine Electric Utility Inspection  
Page 1 of 4

**AEP – KENTUCKY  
OVERHEAD/UNDERGROUND CIRCUIT FACILITIES INSPECTION  
AND MAINTENANCE**

**Objective:** The objective of this program is to visually inspect all overhead and the external, above ground portions of underground facilities on a 2 year cycle to identify and correct deficiencies necessary for the safety of employees and the public under the conditions specified in the NESC and for system reliability.

**Activities Included in the Program for Overhead Facilities:** The program consists of a visual inspection of poles (including foreign owned poles with company owned attachments), conductors, and pole-mounted equipment (transformer, regulators, reclosers, capacitors, etc.) and related materials (insulators, brackets, terminations, cutouts, surge arresters, etc.) owned by the company. It includes inspection of foreign attachments (CATV, telephone, etc.) to the company's poles for any safety related electrical or mechanical defects. Electrical and mechanical defects observed will be identified and the information will be collected so appropriate corrective action can be taken. Driving or foot patrol inspections are conducted as appropriate looking for obvious defects such as loose down guys, broken grounds, cracked insulators, lightning arresters with blown isolators, deteriorated crossarms having inadequate strength, etc.

**Activities Included in the Program for Underground Facilities:** The program consists of an external, visual inspection of the above ground portion of underground systems including pad-mounted equipment (transformers, switches, primary metering enclosures, junction cabinets, etc.), pedestals and the underground associated components of primary riser poles. The program also includes the visual inspection of company owned outdoor lights and light poles fed from underground systems in URD developments and similar installations. The external inspection will be conducted to determine that the equipment is locked and secure and that there are no open appurtenances that might allow access to the interior of the equipment via soil erosion, cabinet or conduit deterioration or by other means such as vandalism. Oil filled equipment is also checked for any external leaks. Any defects observed that need attention will be identified and the information will be collected so appropriate corrective action can be taken.

**Inspection/Collection**

AEP personnel and contractors inspect and maintain overhead and underground facilities as a part of the 2 year cycle for the examination of distribution assets to identify defects and areas requiring attention. The Distribution Region and/or District/Areas identify the circuits to be included in the current year program based on inspection and operating history. Detail circuit maps are provided as needed by graphics personnel to be used for the inspection program which also allows for any field corrections to be documented for follow up. A listing of items to be checked as a part of this inspection is on the attached page 3.

KPSC Routine Electric Utility Inspection  
Page 2 of 4

**How The Program Fits Into Overall Operations and Maintenance Plans:**

This program is designed to proactively identify defects involving company owned overhead and above ground portions of underground facilities so that appropriate action can be taken to reduce the possibility of an accident or correct a condition that would adversely affect system operation. The corrective actions taken are to include necessary maintenance and replacement as a part of this program. If defects should be discovered that pose a safety risk, then timely corrective action by qualified personnel is required. In rare instances the inspector may be required to guard the site of a safety hazard until qualified personnel arrive to correct the hazard. Defects involving foreign owned facilities are to be reported to the owner for correction. However, in some situations action may be required on the company's part to correct a safety hazard involving foreign owned facilities.

**Maintenance**

Maintenance activities are identified during the inspection process and in some cases are done in conjunction with the inspection. Some of these type activities would include the replacement of property ownership tags or structure location tags, tightening of pole down guys, replacement of lock(s) for underground equipment, etc. Otherwise, the local area office schedules follow up work as appropriate.

**Records/Reporting**

Circuit inspection results are maintained at the Region/District/Area office. This documentation includes what if any follow up action was required and when the follow up action was completed.

KPSC Routine Electric Utility Inspection  
Page 3 of 4

## Kentucky PSC Inspections

In the interest of public safety, to limit our liability, and to comply with PSC requirements, a periodic and systematic inspection of all our facilities is necessary.

The following are the general guidelines for what to look for as a part of this inspection:

\* Condition of pole:

- Rotten
- Leaning or Washed out
- Burned
- Broken / split
- Other

\* Condition of crossarm and crossarm braces

- Broken / split
- Other

\* Pole ground intact

- Broken / missing ground wire molding
- Loose connections

\* Hardware damaged

- Lightning arrester
- Cutout
- Insulators

\* Guys and anchors

- Loose
- Damaged
- Need insulator / breaker / marker

\* Transformers / Other Equipment

- Unused
- Overloaded
- Leaking\Overhead\Underground
- Damaged\Paint Required
- Underground Riser Damaged
- Underground Xfmer Locked
- Underground Pedestal Locked
- Underground Penta bolt in place
- Underground Conductors exposed

KPSC Routine Electric Utility Inspection  
Page 4 of 4

\* Conductors

- Proper clearance
- Unused
- Damaged – broken strands
- Excessive splices
- Loose tie wire
- Coiled up service drop on pole (Note if energized or de-energized.)
  - Securely tied to clevis or other pole hardware?
  - Will this drop be needed in the next year?
  - Proper clearance
  - Ends of wire insulated

\* Attachments

- Clearance issues

\* Pole tags

- Damaged / missing

Report immediately any hazardous conditions that could endanger life or property, or cause an outage.