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Plant Operations

Activity Safety and Clearance Tags

1.0 Purpose To provide a method to evaluate the integrity of the administrative procedures used to ensure the safety of personnel and plant equipment, when work on mechanical or electrical components is undertaken during normal operations or maintenance.

2.0 Scope This guideline has been developed for use in the review and surveillance of the procedures and implementing activities applied to control the release of equipment for maintenance, repair, calibration, inspection or testing, and subsequent return to service. This guideline applies to activities associated with the issuance, placement, removal, and independent verification of tags. This guideline does not apply to temporary bypasses, jumpers and lifted leads or other modification controls.

References

1. ANSI/ANS 3.2, "Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants."
2. INPO Good Practice OP-203, "Procedures for the Protection of Employees Working on Electrical and Mechanical Components."
3. INPO Good Practice OP-204, "Conduct of Operations."
4. INPO Good Practice MA-301, "Plant Material Deficiency Program."

3.0 Guidelines

3.1 In preparation for and during the conduct of this surveillance

- Obtain and review implementing procedures, instructions, and drawings governing this activity.
- Prepare a guide or checklist using the selected items from this guideline.
- Review past surveys, audits, surveillances, and other evaluations/assessments.
- Ensure that checklists include, where applicable, actual observations of performance, general plant conditions, radiological work practices, housekeeping, work document controls and use, and safety practices.

Note: Refer to Chapter 1 for specific details on the attributes listed above.

3.2 Clearance Requests

- A. Either select a component removal from service request for review or observe the process of preparing such a request to verify the following:
 1. Request initiated by an authorized individual.
 2. The unit and component to be removed from service are clearly identified.

3. The work to be undertaken is briefly described, known hazards identified, and estimated start/finish times stated.
 4. Parallel system components are not inadvertently removed from service.
 5. Listing of tags and component status requirements for isolation of component to be worked on.
 6. Grounding requirements.
 7. Radiation work permit requirements.
 8. Date of request.
 9. Identification by shift supervisor or foreman of technical specification requirements, limiting conditions for operation, etc.
- B. Verify that individuals authorized to request clearances have received formal training in current procedures.

3.3 Clearances

- A. Observe the preparation of a clearance sheet to verify the following:
1. Isolation and tagging clearance is authorized by a shift supervisor or foreman.
 2. Isolation sequencing is specified where appropriate.
 3. Clearance sheets and associated tags have unique traceable numbers.
 4. Tags clearly identify the unit, component, required status of the component, and name of individual holding clearance.
 5. Grounding requirements are specified and the unique number of grounding discs issued are recorded including the date and time of issue and the name of the person to whom the discs were issued.
 6. Independent verifications are specified for safety-related structures, systems, and components.
- B. Observe the performance of isolation and tagging activities to verify the following:
1. Isolation and tagging is performed by qualified operations personnel.
 2. Performed in accordance with mandated sequences and equipment aligned as specified.
 3. Tags are visually affixed to components and to control points and do not obstruct instrumentation or controls.
 4. Tags on components having multiple clearances have consistent equipment status requirements and identify all clearance holders.
 5. Placement of tags and equipment status is checked by clearance holders.

6. Independent verification is performed on structures, systems, and components classified as safety-related.
7. Grounding devices are placed by qualified electrical representatives in accordance with the clearances to all phases.
8. Spaces in clearance disc cabinets are marked with clearance number and equipment identity.

C. Review records to confirm the following:

1. That persons authorized to request clearances, operations performing isolation and tagging activities, and independent verification activities have received formal training as appropriate.
2. Regular checks to confirm that outstanding clearance sheets are consistent with the clearance index are performed.
3. Regular audits of tags are conducted to verify that tags are placed in accordance with the clearance sheet are legible and equipment correctly aligned.
4. Tags do not exceed time limits.

3.4 Restoration to Service

- A. Observe the performance of a restoration to service activity to verify the following:
1. Person holding the clearance verifies that all work and testing is complete.
 2. Person holding grounds clearances removes all grounds and returns all disks.
 3. Shift supervisor/foreman determines that equipment is ready for return to service as appropriate.
 4. Shift supervisor/foreman prepares instructions for restoration to normal configuration including sequencing and alignments.
 5. Determination for equipment readiness for return to service and instructions for restoration to normal configuration for structures, systems, and components classified as safety-related are independently verified by qualified personnel.
 6. Restoration and tag removal is performed by qualified operations staff and for safety-related structures systems and components is independently verified correct.

4.0 Other Guidelines for Consideration

- 4.1 See Chapter 1, "General Quality Surveillance Guidance."
- 4.2 See Chapter 13, (as applicable.)
- 4.3 See Chapter 15, (as applicable.)