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Inspection Status of Non-Nationally Recognized Testing Laboratory Approved Electrical Equipment (Non-NRTL)

By Jim Lang
ESH Coordinator
Accelerator Systems Division
Advanced Photon Source
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A U.S. Department of Energy laboratory managed by UChicago Argonne, LLC

Background

- National Electrical Code (NEC) and Occupational Safety & Health
 Administration (OSHA) require use of electrical equipment that is either
 - Listed as being tested by a Nationally recognized Testing Laboratory (NRTL) such as underwriters Laboratory (UL) OR
 - Inspected or tested and approved by a Federal, State, or local authority
- DOE contractors are required by Federal Law (10 CFR 851 Worker Safety & Health Program) to follow OSHA and NEC requirements
- 10 CFR 851 was issued in February 2006
- DOE generally has given each contractor a 5 year period to achieve compliance with this specific requirement (Many DOE sites are already in compliance having started this knowing 10 CFR 851 was being developed)



Background (cont'd)

- Argonne's 5 year period began in June 2006
- DOE has agreed with Argonne delegating inspection/testing authority to trained Designated Electrical Equipment Inspectors (DEEIs)
- All electrical equipment in use that is not listed by a NRTL (i.e., non-NRTL) must be inspected by June 2011
- DOE Argonne Site Office became concerned with lack of progress in completing the non-NRTL item inspections resulting in the FY2008 Argonne Performance Measures including a goal to complete 30% of the inspections by the end of FY2008



- Scope: APS staff have identified slightly over 20,000 inventoried non-NRTL items
 - Need to inspect nearly 7,000 inventoried items during FY2008
 - APS has currently <10% inspections completed of inventoried non-NRTL items
 - Primary APS emphasis has been on inspecting non-NRTL equipment brought in by general users due to this being the largest APS safety concern
 - Transitory user equipment is not part of the APS inventory and inspections do not count towards goal
 - APS staff will continue to assist in inspection of transitory user equipment



- Process: Concentrate on inspecting inventories of APS identical items within AES and ASD
 - Permitted to sample 10% of an inventory of identical items and treat as having inspected all those items
 - Most of the APS inventory consists of batches of identical equipment
 - From now until July 1, 2008, focus will be on inspecting samples of identical APS equipment
 - XSD will continue inspections on XOR beam lines with the goal of completing inspections on 30% of the beamlines by end of FY2008
 - APS has sufficient number of DEEIs to perform the task, but may need to share DEEIs between APS divisions
 - Looking at incorporating DEEI inspection requests into the APS Work Request System



- After July 1: Inspections will expand beyond sampling of identical items
 - The process and results will be examined by APS management and lessons learned developed
 - Informational memos and subsequent kick off meetings will be prepared for non-APS beam lines
 - Additional DEEIs will be trained when the training is available
 - Non-APS beam lines will be encouraged to provide personnel for DEEI training, but APS will provide DEEI support to non-APS beamlines



■ Conclusion: APS has the requisite staff and a method to meet the 30% inspection goal. Non-APS beamlines will be more involved next year.

