

# 10CFR851 ELECTRICAL NTS SUBMISSIONS UPDATE

*ESH Coordinators Meeting  
January, 16, 2008  
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SHSD*



SIXTY YEARS  
OF DISCOVERY  
1947-2007

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**BROOKHAVEN**  
NATIONAL LABORATORY

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# Electrical NTS Submissions

- 1) **Working Space Around Electrical Equipment**
- 2) **Cable Tray Nonconformance Project Plan**
- 3) **Electrical Equipment Review (EEI Inspections)**

# Electrical NTS Submissions

## 1) Working Space around Electrical Equipment



# Electrical NTS Submissions

## 1) Working Space around Electrical Equipment - status

- **NSLS Complex, C-AD Complex and Plant Engineering for Balance of Plant have completed initial review**
  - ~ 14000 pieces of equipment reviewed
  - ~ 1800 pieces of equipment labeled:  
“**Danger - Removal of cover for examination, adjustment, servicing, or maintenance requires lockout/tagout of supply due to working space limitations**”
  
- **ATS and NTS closure requests submitted (on time)**
- **All new installations must meet Code**
- **Continued vigilance is necessary on Tier I inspections**

# Electrical NTS Submissions

## 2) Cable Tray Nonconformance



**Violations of all Articles  
Regarding Cable Trays,  
Conduit & Junction Boxes**

# Electrical NTS Submissions

## 2) Cable Tray Nonconformance - status

- **Project Plan being written (due January 31, 2008)**
  - Personnel from SHSD, NSLS, C-AD and Plant Engineering are working on the plan
  - Estimated 110 miles of cable tray throughout the site
  - Some of the issues - Structural, Cable overloading, Fire loading , Improper Utilities in Trays, Abandoned Cable
  
- ❖ **Let's keep our co-workers safe and get the word out – Only qualified personnel (i.e. electrically trained Plant Engineering staff and their supervision) should be planning/overseeing work or working in cable trays**



# Electrical NTS Submissions

## 3) Electrical Equipment Review (EEI) - status

- Due date to review high hazard equipment is 6/30/08
- Due date to complete all equipment review is 9/30/09
- NSLS and C-AD inspections continue
- **SHSD is conducting scheduled reviews for Balance of Plant**
- **We should start looking for un-reviewed high hazard equipment on Tier I inspections**

# Electrical NTS Submissions

## 3) Electrical Equipment Review (EEI) – status (cont)

- What are we finding?



Housekeeping?

# Electrical NTS Submissions

## 3) Electrical Equipment Review (EEI) – status (cont)

- What are we finding?



# Electrical NTS Submissions

## 3) Electrical Equipment Review (EEI) – status (cont)

- What are we finding?
  - A high percentage of equipment is acceptable as per the EEI program, however the following has been noted:
    - Equipment with ungrounded cases
    - Test crates and racks with openings that expose 110V AC
    - Equipment with no protective device
    - Unlabeled protective device (fuse)
    - LTA strain relief on cables
    - Damaged 110V power cables

# Electrical NTS Submissions

## 3) Electrical Equipment Review (EEI) – status (cont)

- Let's get the word out – Don't use equipment without checking for damage and first considering electrical safety
- Purchase NRTL listed equipment when available
  - It is a requirement to purchase NRTL listed equipment when it is available

# Questions?