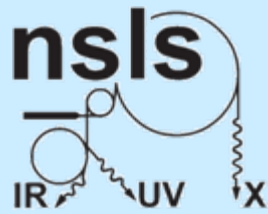
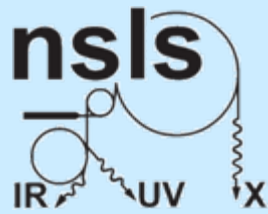


EEI Program for the NSLS



Electrical Equipment Inspection (EEI) Program

EEI Program for the NSLS

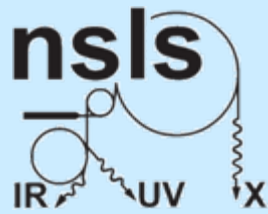


Program Goal

The goal of the program for review and approval of electrical equipment and installations is to ensure that approved equipment is free from reasonably foreseeable risk due to electrical hazards.

This goal can be met by the equipment being certified by a Nationally Recognized Testing Laboratory (NRTL) or further inspection through the EEI program. In either case, the equipment must be inventoried. The inspector will first look for the NRTL symbol and then proceed accordingly.

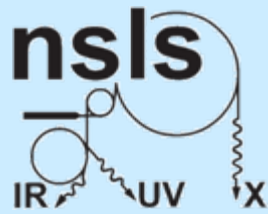
EEI Program for the NSLS



Implementation

- 1) The action Plan for BNL's Electrical Equipment Acceptance Program** dated December 28, 2004 by the Lab Electrical Safety Committee (LESC) outlines the program at the Lab level.
- 2) Review and Approval of Electrical Equipment and Installations (2005)** by the LESAC describes the implementation of the program at the Lab level.

EEI Program for the NSLS

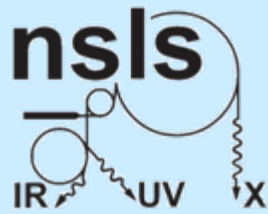


Implementation

For the NSLS, **EDP #000171** describes the implementation of the program at the NSLS.

Just to get an idea - There are over 20,000 pieces of equipment to inspect. The program is scheduled to be completed by September 2009

EEI Program for the NSLS



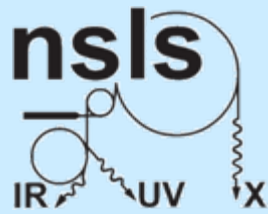
Participants in the program – Just about all of us

But the major participants are:

EEI's - Electrical Equipment Inspectors

Equipment Owners – Most of the rest of us

EEI Program for the NSLS

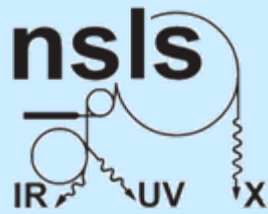


EEI's

EEI's are comprised from a cross-section of the department.

The qualifications for EEI's is a minimum of ten years combined schooling/experience with electrical/electronic system design and/or electrical system construction/installation/inspection/safety.

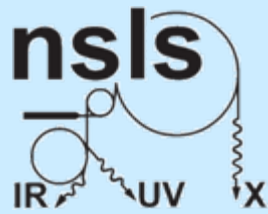
EEI Program for the NSLS



EEI Responsibilities

- 1) Help with the generation of equipment lists by aiding in the identification of equipment to be inspected.
- 2) Coordinate with equipment owners, inspect equipment, apply tags as specified by the LESC and complete an inspection form.
- 3) Deliver the completed documentation to the Design Room.

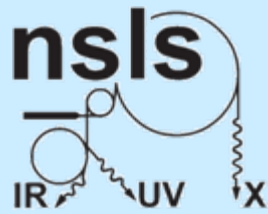
EEI Program for the NSLS



Equipment Owner Responsibilities

- 1) Ensure that all owned equipment is tagged by programs end.
- 2) With the help of the EEI's, create a list of equipment to be inspected.
- 3) Schedule and work in teams with the EEI's as the equipment is inspected and ensure it is tagged if the equipment passes inspection

EEI Program for the NSLS

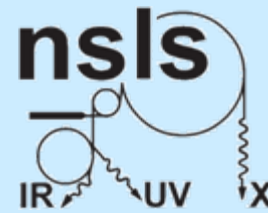


Equipment Owner Responsibilities

- 4) See to the modification/replacement of any equipment which fails inspection and schedule a re-inspection in a timely manner

- 5) Ensure that newly purchased and newly designed equipment is either NRTL labeled or EEI inspected and tagged

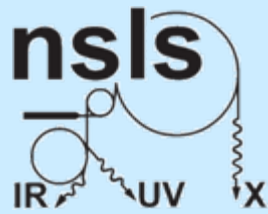
EEI Program for the NSLS



To make it easier for the Staff

- 1) We are working on a web page for general information.
- 2) We are working on a Web-based application to help in requesting inspections.
- 3) We are generating a checklist to be posted on a web page in an effort to minimize the effort needed to modify user equipment when it is brought onto the BNL site.

EEI Program for the NSLS

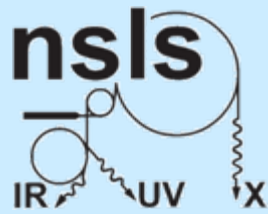


Minimum inspection components*

- 1) Equipment sufficiently enclosed to prevent accidental contact with energized parts.
- 2) Exposed metal parts bonded and grounded.
- 3) Over-current protection appropriate for intended use.

* Inspector uses professional experience to add other components when deemed necessary

EEI Program for the NSLS



Equipment included is anything which has above Range A voltages. These include:

- 1) designed in-house existing equipment
- 2) designed in-house future equipment built in-house
- 3) constructed by outside vendors
- 4) purchased existing equipment
- 5) future equipment to be purchased
- 6) user equipment brought to BNL from home institutions.
- 7) equipment built by users at BNL.