

NATIONAL SYNCHROTRON LIGHT SOURCE SAD RISK ASSESSMENT

APPENDIX 4

SYSTEM: Building 725 activities

SUBSYSTEM: Electrical systems

HAZARD: Electrical

HAZARD IMPACT:

Possible electrical shock from exposed conductors resulting in injury or loss of life to personnel; electrical faults damaging equipment that could impact operations

RISK ASSESSMENT PRIOR TO MITIGATION:

Consequence	<input type="checkbox"/> I High	<input checked="" type="checkbox"/> II Moderate	<input type="checkbox"/> III Low	<input type="checkbox"/> IV Routine
Probability	<input type="checkbox"/> A Frequent	<input type="checkbox"/> D Remote		
	<input checked="" type="checkbox"/> B Probable	<input type="checkbox"/> E Extremely Remote		
	<input type="checkbox"/> C Occasional	<input type="checkbox"/> F Impossible		
Risk Category	<input checked="" type="checkbox"/> I High	<input type="checkbox"/> II Moderate	<input type="checkbox"/> III Low	<input type="checkbox"/> IV Routine

MITIGATING FACTORS

- **The primary methods for protecting NSLS staff and users from electrical hazards (equipment using high electrical voltage and currents) are through electrical safety training (facility specific and BNL), design reviews and safety inspections.
- NSLS ESH PRM 1.2.0, Environmental, Safety and Health Inspections
- NSLS ESH PRM 1.3.6, NSLS Work Planning and Control Procedure
- NSLS ESH PRM 1.5.0, Electrical Safety
- NSLS ESH PRM 1.5.1, Lockout/Tagout Requirements
- NSLS ESH PRM 1.5.2, Standards For Use of Coaxial Cables and Connectors in Signal and High Voltage Systems by NSLS Users & Staff
- NSLS ESH PRM 1.5.3, Interlock Safety
- Engineering design reviews
- Operation of equipment at <50V where feasible
- Preventive maintenance by Plant Engineering and NSLS (MARTI database)
- Electrical improvement/upgrade programs

RISK ASSESSMENT FOLLOWING MITIGATION:

Consequence	<input type="checkbox"/> I High	<input checked="" type="checkbox"/> II Moderate	<input type="checkbox"/> III Low	<input type="checkbox"/> IV Routine
Probability	<input type="checkbox"/> A Frequent	<input checked="" type="checkbox"/> D Remote		
	<input type="checkbox"/> B Probable	<input type="checkbox"/> E Extremely Remote		
	<input type="checkbox"/> C Occasional	<input type="checkbox"/> F Impossible		
Risk Category	<input type="checkbox"/> I High	<input type="checkbox"/> II Moderate	<input checked="" type="checkbox"/> III Low	<input type="checkbox"/> IV Routine