

# PRINCETON PLASMA PHYSICS LABORATORY

#### **ES&H DIRECTIVES**



### ES&HD 5008 SECTION 2, CHAPTER 16 References

Date: 07/23/02 Revision 5 Page 1 of 4 Approved

#### **CHAPTER 16** REFERENCES

NOTE: All references below may not be current editions. A copy of the referenced material may be found in C-Site, Mod VI, either in the ES&H Library, designated "-LIB" or in Room 116 designated "-116."

# A. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) -116

ANSI C2	National Electrical Safety Code (NESC)
ANSI C39.5	Safety Requirements for Electrical and Electronic Instrumentation.
ANSI C84.1	Voltage Ratings (60 Hertz) for Electrical Power Systems and Equipment.
ANSI Z87.1	American National Standard for Occupational and Educational Eye and Face Protection
ANSI Z89.2	Protective Headware for Industrial Workers
ANSI Z535.2	Environmental and Facility Safety Signs
ANSI Z535.3	Criteria for Safety Symbols
ANSI Z535.4	Product Safety Signs and Labels
ANSI Z535.5	Accident Prevention Tags (for Temporary Hazards)

#### B. AMERICAN SOCIETY FOR TESTING MATERIALS (ASTM) -116

ASTM Specification D178	Standard Specification for Rubber Insulating
	Matting
ASTM Specification F855	Standard Specifications for Temporary Grounding
•	Systems to be used on De-Energized Electric
	Power Lines and Equipment
ASTM Specification F1236	Guide for Visual Inspection of Electrical Protective
•	Rubber Products '
ASTM Specification F1506	Standard Specification for Protective Wearing
•	Apparel for Use by Electrical Workers when
	Exposed to Momentary Electric Arc and Related
	Thermal Hazards
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C. CABLE INSTALLATION MANUAL -116 (Published by the Anaconda Co., Wire and Cable Div.)

# D. CODE OF FEDERAL REGULATIONS (CFR) -LIB

Title 29, Part 1910 and Part 1926 Occupational Safety and Health Standards (OSHA)

### E. FACTORY MUTUAL ENGINEERING CORPORATION (FMEC) -LIB

Loss Prevention Data Sheet 5-4/14-8

**Transformers** 

Loss Prevention Data Sheet 5-19/14-21 Switchgear and Circuit Breakers Loss Prevention TAB 5-20/14-22 Recommendations for Electrical Testing

Loss Prevention Data Sheet 5-27/14-27 Programmable Controllers
Loss Prevention Data Sheet 5-31/14-5 Cables and Bus Bars

#### F. INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE) -116

IEEE Standard 80 Guide to Safety in Substation Grounding
IEEE Standard 100 Dictionary of Electrical and Electronic Terms

IEEE Standard 142 Recommended Practice for Grounding of Industrial and

**Commercial Power Systems** 

IEEE Standard 446 Recommended Practice for Emergency and Standby

Power Systems for Industrial and Commercial

**Applications** 

IEEE Standard 510 Recommended Practices for Safety in High-Voltage and

**High-Power Testing** 

IEEE Transactions Vol. PAS-102, No. 5, May 1983 (82-SM-476-0) - A Range of Body Impedance Values for Low-Voltage, Low-Source Impedance Systems of 60 Hz - by M.S. Hammam

#### G. INSULATED CABLE ENGINEERS ASSOCIATION (ICEA) -116

Publication No. P-32-382 Short-Circuit Characteristics of Insulated Cables

#### H. INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC) -116

Pub. 479-1 Effects of current passing through the human body
Pub. 900 Hand tools for live working (sic) up to 1000 V ac and 1500 V dc
Pub. 903 Specifications for gloves and mitts of insulating material for live
working (sic)

#### I. INTERNATIONAL ELECTRICAL TESTING ASSOCIATION (NETA) -116

ATS Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems

MTS Maintenance Testing Specifications for Electrical Power Distribution Equipment and Systems

#### J. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA) -116

NEMA Standard ICS 1 General Standards for Industrial Control and Systems NEMA Standard ST 20 Dry-Type Transformers for General Applications

### K. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) -LIB

NFPA 70 National Electrical Code (NEC)

NFPA 70E Standard for Electrical Safety Requirements for Employee

Workplaces

NFPA 70HB National Electrical Code Handbook NFPA 70B Electrical Equipment Maintenance

NFPA 77	Static Electricity
NFPA 79	Electrical Standard for Industrial Machinery
NFPA 101	Life Safety Code
NFPA 780	Lightning Protection Code

# L. NATIONAL SAFETY COUNCIL (NSC) -116

OS&H Textbooks	MORT Safety Assurance Systems
Data Sheet I 598	Flexible Insulating Protective Equipment for Electrical Workers
Data Sheet I 670	Working Alone in R&D Laboratories

# M. ORDERS OF THE US DEPARTMENT OF ENERGY (DOE) -LIB

The change dates of the Orders listed below are the dates that were current prior to release of Revision 4 of ES&HD 5008, Section 2.0.

	98 DOE Handbook- Electrical Safety
DOE 1300.2A	Department Of Energy Technical Standards Program, 5/19/92
DOE 232.1A	Occurrence Reporting and Processing of Operations Information, 7/21/97
DOE 5480.19	Conduct of Operations Requirements for DOE Facilities, 5/18/92
DOE 5480.20A	Personnel Selection, Qualification, and Training Requirements,
DOE 0400.207	11/15/94
DOE 5480.21	Unreviewed Safety Questions, 12/24/91
DOE 5480.22	Technical Safety Requirements, 9/15/92
DOE 420.1	Facility Safety, 10/24/96
DOE 440.1	Worker Protection Management For Doe Federal And Contractor
	Employees, 10/21/96
DOE 5481.1B	Safety Analysis and Review System, 9/23/86
DOE 6430.1A	General Design Criteria Manual, 4/6/89
DOE/ID-10600	Electrical Safety Guidelines 9/01/93
DOE/TIC-11603	Nonreactor Nuclear Facilities: Standards and Criteria Guide,
	Brynda Guide Rev. 1
DOE-EV-0051/1	Electrical Safety Criteria for Research and Development
	Activities

# N. PRINCETON PLASMA PHYSICS LABORATORY (PPPL) -LIB

ES-COMP-003	Personnel Safety Interlock System Design Standard
ES-ELEC-004	Electrical Construction Specification for Installations Operated at
	600 Volts and Below
ENG-011	Interlock Key Control
ENG-028	Penetration Cutting / Drilling
ESH 001	Use of Safety, Accident Prevention, and Equipment Tags
ESH 002	Facility Safety Signs
ESH-014	National Environmental Policy Act (NEPA) Review System.
ESH 016	Control of Hazardous Energy Sources Via Lockout/Tagout of
	Energy Isolation Devices
GEN-006	Occurrence Reporting and Processing of Operations Information
PPPL-O-027	Line Management Safety Organization
PPPL-P-046	Cable Tagging and Removal

PPPL-STD-001 Programmable Logic Controller (PLC) Qualification/Application

Standards TFTR

PM.505 Work Rules for Class C & D Energized Electric Circuits -

6/12/91-FED

OP-AD-100 Instructions and Requirements for Writing, Reviewing and

Approving PPPL Procedures –PPPL Document Control Center

#### O. OMITTED

# P. UNDERWRITERS LABORATORIES, INC. (UL) -116

UL Standard 96A	Installation Requirements for Lightning Protection Systems
UL Standard 467	Grounding and Bonding Equipment
UL Standard 1063	Machine-Tool Wire and CablesUL Standard 1244 - Electrical
	and Electronic Measuring and Testing Equipment
UL Standard 1244	Electrical and Electronic Measuring and Testing Equipment