

Fermilab

ELECTRICAL HAZARD ANALYSIS / WORK PERMIT

For Selected Work Activities on the AC Power Distribution System or Electrical Utilization Equipment

JOB NAME & LOCATION: _____

EFFECTIVE DATES OF PERMIT: Start: _____ End: _____

WORK TO BE PERFORMED BY: _____

QUALIFIED PERSON IN CHARGE: _____ PHONE: _____

Does the Work Involve Diagnostic Energized Work? Yes _____ No _____ (Includes LOTO Verification)

Does the Work Involve Manipulative Energized Work? Yes _____ No _____ (Justification Required)

Is an Inspection Required After Work is Completed? Yes _____ No _____ (Reqd. for New AC Pwr. Installs)

If the Work Activity Involves Manipulative Energized Work, State the Justification Here.

DESCRIPTION OF WORK:

ASSOCIATED HAZARDS:

HAZARD MITIGATION: Indicate Hazard/Risk Category (0, 1, 2, 2*, 3 or 4): _____

SHOCK PROTECTION BOUNDARIES for ENERGIZED WORK

from NFPA 70E Table 130.2(C) for Fixed Circuit Parts and Article 130.3(A). Indicate if Otherwise.

For 120/208 VAC: **Shock Protection: Limited Approach: 3' 6". Restricted & Prohibited Approach: Avoid Contact**

For 480/277 VAC: **Shock Protection: Limited Approach: 3' 6". Restricted Approach: 1 Ft. Prohibited Approach: 1"**

Class _____ Voltage-Rated Gloves and Leather Protectors Required for Subject Work Activity

ARC-FLASH PROTECTION BOUNDARY and REQUIRED PPE for ENERGIZED WORK

PPE Requirements for Shock & Arc Flash Protection are Fully Described in NFPA 70E, Article 130.7. Indicate if Otherwise.
Clothing Must be Non-Melting or Untreated Natural Fiber, Unless Specified as Flame-Resistant (FR).

The Fermilab Default Flash Protection Boundary is 4 Feet (as Qualified by Article 130.3(A) at 100 kA Cycles)

If Calculated, Indicate Flash Protection Boundary: _____ feet and/or inches

If Calculated, Indicate Incident Energy Level for Arc Flash Protection: _____ cal/cm²

- HRC 0** Long-Sleeve Cotton Shirt, Long Cotton Pants, Safety Glasses, Hearing Protection, Leather Gloves (0 to 1.2 cal/cm²)
- HRC 1** FR Coverall, Safety Glasses, Hard Hat, Arc-rated Face Shield, Hearing Protection, Leather Protectors or Gloves, Leather Work Shoes (>1.2 to 4 cal/cm²)
- HRC 2** Cotton Clothing under FR Coverall, Safety Glasses, Hard Hat, Arc-Rated Face Shield, Hearing Protection, Leather Protectors or Gloves, Leather Work Shoes (>4 to 8 cal/cm²)
- HRC 2*** Cotton Clothing under FR Coverall, Safety Glasses, Hard Hat, Double-Layer Switching Hood, Hearing Protection, Leather Protectors or Gloves, Leather Work Shoes (>4 to 8 cal/cm²)
- HRC 3** Cotton Clothing under 2 FR Coveralls (25 cal/cm²), Safety Glasses, Hard Hat, Hard Hat Liner, Flash Suit Hood, Hearing Protection, Leather Protectors or Gloves, Leather Work Shoes (>8 to 25 cal/cm²)
- HRC 4** Cotton Clothing under Multilayer FR Flash Suit Jacket and Pants (40 cal/cm²), Safety Glasses, Hard Hat, Hard Hat Liner, Flash Suit Hood, Hearing Protection, Leather Protectors or Gloves, Leather Work Shoes (>25 to 40 cal/cm²)

PREPARED BY: _____

Date: _____

APPROVED BY: _____

Date: _____

ADDITIONAL APPROVALS FOR MANIPULATIVE ENERGIZED WORK

Approval of D/S Electrical Coordinator _____

Approval of Area Division/Section Head _____

Approval of Fermilab Directorate _____

Job Briefing Signature Sheet

Person(s) Conducting Briefing: _____ **Date:** _____

Personnel Present at the Job Briefing will Sign Below, thereby Indicating their Understanding of the Scope of Work and Associated Hazard Mitigation Requirements.

<u>Print Name</u>	<u>Fermi ID #</u>	<u>Div/Sec or Company</u>	<u>Signature</u>
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