

# **MINNESOTA STATE UNIVERSITY MOORHEAD**

## **Environmental Health and Safety**

### **Arc Flash Protection Program**

#### **Purpose:**

It is the goal of Minnesota State University Moorhead to control the arc flash hazard which occurs during the maintenance of electrical building components throughout campus. Standard operating procedures will eliminate or control arc flash events to reduce the hazard to employees.

To reduce the potential for arc flash occurrences, the following standard operating procedures will be applied:

- De-energize all circuits before performing any maintenance on them
- Ensure that all possible sources of supply are found and open disconnecting devices for each source
- Apply lockout/tagout devices in accordance with the Minnesota State University Moorhead Lockout/Tagout Procedures
- Test voltage on each conductor to verify that it is de-energized
- Apply grounding devices where stored energy or induced voltage could exist or where de-energized conductors could contact live parts

If it is necessary to work on energized equipment, the following procedures will be applied:

- Establish boundaries keeping those not involved with the work ten feet away
- Use insulated tools
- Consider using insulated floor mats
- Wear safety glasses
- Wear insulated gloves
- Wear leather work shoe/boot
- Wear appropriate arc flash protection
  - a. Voltages 60-120 – standard cotton work shirt and Indura pants
  - b. Voltages 120-600 – Category 2 Indura arc flash coat over standard uniform, low voltage gloves, hard hat with arc flash shield and ear plugs
  - c. Voltages above 600 – Category 4 Indura arc flash coat, pants, high voltage gloves, Indura hood, and ear plugs

Examples of procedures which require the use of arc flash protective gear include:

- Miscellaneous equipment covers removal or installation
- Cable trough or tray cover removal or installation
- Working on energized parts including voltage testing
- Removal of bolted covers to expose bare energized parts
- Work on control circuits with energized conductors carrying greater than 120 volts

- Voltage testing
- Insertion or removal of circuit breakers from cubicles

Reviewed and updated September 2022