



## ENERGIZED ELECTRICAL WORK PERMIT

\*\*\*Return completed and approved form to EH&S for recordkeeping\*\*\*

### SECTION I Work Order # \_\_\_\_\_

Extended Duration: <input type="checkbox"/>	One time use only: <input type="checkbox"/>	Date Start: _____	Expiration Date: _____
Building: _____	Room/Area: _____	Job Supervisor: _____	
Description of work to be done:			
Description of circuit/equipment to be worked on:			
Justification for why equipment cannot be de-energized:			

### SECTION II

#### Results of Shock Risk Assessment

Shock Hazard Maximum Voltage \_\_\_\_\_ (for ANY exposed conductor/part in the work area)      Glove Voltage Rating \_\_\_\_\_ (Inspect and air test gloves before use and check certification date)

Shock Hazard Approach Boundaries for Alternating-Current (AC) Systems (See Table 5 in the Electrical Work Safety Program for DC info)			
Nominal System Voltage, Phase to Phase*	Limited Approach Boundary		Restricted Approach Boundary; Includes Inadvertent Movement Adder
	Exposed Movable Conductor **	Fixed □Circuit Part	
Less than 50V	Not specified	Not specified	Not specified
50 to 150V	10 ft. 0 in	3 ft. 6 in	Avoid contact
151 to 750V	10 ft. 0 in	3 ft. 6 in	1 ft. 0 in
751 to 15kV	10 ft. 0 in	5 ft. 0 in	2 ft. 2 in

\* For single phase systems above 250V, select the range that is equal to the maximum phase-to-ground voltage multiplied by 1.732.

\*\* Exposed movable conductors describes a condition in which the distance between the conductor and a person is not under the control of the person. The term is normally applied to overhead line conductors supported by poles.

Limited Approach Boundary \_\_\_\_\_ ft.      Restricted Approach Boundary \_\_\_\_\_ ft.

### SECTION III

#### Required PPE

PPE Category (circle):    1    2    3    4      Flash Protection Boundary \_\_\_\_\_ ft.

*Check boxes below to confirm the required items have been obtained and will be used during the live electrical work. Non-melting undergarments are always required. PPE listed below assumes that entire body will be within the arc protection boundary. If this is not the case, arc-rated PPE must cover the parts of the body within the arc protection boundary. Safety glasses and hearing protectors are always required when conducting live electrical work.*

Required for PPE Category 1 (minimum arc rating for PPE: 4 cal/cm<sup>2</sup>)

Hard hat    Safety glasses    Hearing protection    Heavy-duty leather gloves    Rated footwear  
[AND]

Arc-rated shirt (long sleeve) and pants [OR]    Arc-rated coverall  
[AND]

Arc-rated face shield [OR]    Arc flash suit hood

Required for **PPE Category 2** (minimum arc rating for PPE: 8 cal/cm<sup>2</sup>)

- Hard hat  Safety glasses  Hearing protection  Heavy-duty leather gloves  Rated footwear
- [AND]
- Arc-rated shirt (long sleeve) and pants [OR]  Arc-rated coverall
- [AND]
- Arc-rated face shield and arc-rated balaclava [OR]  Arc-rated flash suit hood

Required for **PPE Category 3** (minimum arc rating for PPE: 25 cal/cm<sup>2</sup>)

- Hard hat  Safety glasses/goggles  Hearing protection  Arc-rated gloves  Rated footwear
- [AND]
- Arc-rated shirt (long sleeve) and pants [OR]  Arc-rated coverall [OR]  Arc-rated flash suit (jacket/pants/hood)

Required for **PPE Category 4** (minimum arc rating for PPE: 40 cal/cm<sup>2</sup>)

***STOP! THINK! RE-EVALUATE FEASIBILITY OF LOCKOUT.***

- Hard hat  Safety glasses/goggles  Hearing protection  Arc-rated gloves  Rated footwear
- [AND]
- Arc-rated shirt (long sleeve) and pants [OR]  Arc-rated coverall [OR]  Arc-rated flash suit (jacket/pants/hood)

**LIVE ELECTRICAL WORK MAY NOT PROCEED IF THE INCIDENT ENERGY IS >40 cal/cm<sup>2</sup> OR PPE CATEGORY IS >4!**

#### SECTION IV

##### Mandatory Requirements for All Permits (check off when completed)

- Necessary insulated/voltage-rated tools, covers, shields, and testing equipment is available.
- Attendant worker must be able to cut off all power sources in the event of an emergency and have emergency communication equipment (i.e., radio, cell phone). Attendant worker is not permitted to assist in electrical work.
- All workers, including Attendant, must be appropriately trained, qualified, and have full knowledge of equipment.
- Set up barriers (caution tape/barricades) at the limited approach or arc flash boundary (whichever is farther out).
- Remove all metal apparel that may cross restricted approach boundary or otherwise present an electrical contact hazard (rings, watches, necklaces, metal frame glasses).
- Job briefing including discussion of any job specific hazards (describe hazards below):

\_\_\_\_\_

\_\_\_\_\_

##### Additional Safety Requirements (check off when completed, if required for this work task)

- Non-conductive head wear (i.e., Class E hard hat), required if there is a potential for head contact at any voltage.
- Check here if any additional information is added to this work permit such as special requirements, procedures, or written work plans (examples include lockout procedures for adjacent equipment and confined space entry permits).

#### SECTION V

##### Approvals to Perform the Work while Electrically Energized

***This permit is not approved unless signed by the employees conducting the work and their supervisor. Signature of workers verifies that they are a properly trained Qualified Person who is informed of all relevant hazards***

_____ Supervisor	_____ Attendant
_____ Worker	_____ Worker
_____ Worker	_____ Worker
_____ Worker	_____ Worker