



WORLD TRADE CENTER ELECTRICAL WORK AND ACCESS PERMIT POLICY



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Effective upon energization of the World Trade Interim Center Power Distribution Center (Interim PDC), an Entry and Electrical Work Permit Policy will be established for contractors to work on Port Authority operated Power Distribution equipment, within the PA maintained electrical rooms and enclosures, or on equipment which may affect the operation of the Power Distribution equipment. These rooms currently* include (See North Temporary Access floor plan):

- East and West Interim Power Distribution Centers (290` Level)
- East and West Spot Network Rooms (290` Level)
- Emergency Distribution Room (290` Level)
- Electrical Closet (290` Level)

*Additional rooms and equipment will be added as construction proceeds. The permit will be required to access Port Authority operated areas, equipment, manholes and enclosures containing 277v to 13,000V.

Purpose of Policy:

The electrical work permit is an important tool for documenting the electrical hazards and controls associated with a specific task, and providing authorization to perform the work. This permit will apply to all contractors and subcontractors working within the World Trade Center Site. NFPA 70E's Standard for Electrical Safety in the Workplace requires this permit for all work performed on energized equipment. Port Authority requires the permit for work on energized and de-energized equipment; which provides the following benefits:

- *Access Control* - Controlling contractor access to secure power distribution areas will ensure that we are aware of all work that is being performed on the WTC electrical system, prevent unmonitored "tapping" into the WTC electrical system, and to ensure that no unauthorized personnel have access to the electrical system.
- *Electrical Safety* - Issuing a permit will allow us to ensure that all necessary safety measures are in place. This includes the proper locking out and tagging out of necessary electrical equipment, the use of personal protective equipment (PPE), and verifying that the equipment is safe and clear of personnel prior to re-energization. This ensures the safety of the contractor, Port Authority personnel, and the equipment.
- *Record Retention* - This policy will allow us to have a record of who presently has access to certain areas and it would be possible to review past permits to aid in investigating a situation.

Permit Procedure:

- 1) All permit requests shall be submitted to the Port Authority Electrical Operations Manager (EOM). All Requests must be written and presented in person, during normal working hours of 8:00am – 4:00pm, at least 72 hours before the start of work.

The requestor shall fill out the *World Trade Center Electrical Work and Access Permit Request* form which includes the following information:

- Project number and description
 - Requesting Agency's name
 - Responsible contact person's name and number
 - Description of location and circuits affected
 - Description of task
 - The start/finish date (Maximum of 30 days)
 - List of equipment/circuits to be isolated and grounded (if necessary)
- 2) The request will be reviewed for background information of the job or task, the hazards and precautions to be taken. The EOM will verify with WTCC or stakeholder that the job or task is approved.
 - 3) For **"Access Only"** permits which do not require the isolating and grounding of any equipment, the EOM/HTO (Port Authority High Tension Operator) will meet with the contractor in person, ensure that all safety precautions and PPE are present, and both parties will sign the "Start of Job" section of Part 5 of the *World Trade Center Electrical Work and Access Permit Request* (see page 8). This shall serve as the Access Permit. One copy of the signed permit shall be kept by the respective contractor on site at all times during the job; the other copy will be kept by the HTO and the third copy will be posted on a Notification Bulletin Board.
 - 4) After all work pertaining to the Access Permit is completed both parties will sign the "Completion of Job" section of Part 5 of the *World Trade Center Electrical Work and Access Permit Request* indicating the site has been properly cleared. An inspection of the area will be made to ensure that no unauthorized work was performed, no equipment was damaged, and that the area is clear of debris.
 - 5) For **Electrical Work Permits** (see page 9) requiring the isolating and grounding of equipment, the job shall adhere to the Port Authority High Tension Administrative and Safety Rules. All necessary work to de-energize, isolate, tag, and ground the feeders and equipment, the erection of approved protective barriers, and the demarcation of the work area shall be performed under the direction/supervision of the HTO and shall be recorded on Part 3 of the Port Authority Electrical Work Permit. The HTO shall make certain that the appropriate protective equipment is used or work by personnel engaged in the de-energizing, isolating, and grounding of such feeders and equipment.
 - 6) An original and three copies of each Electrical Work Permit shall be filled out for the following distribution:
 - a. The original for the High Tension Notification Bulletin Board
 - b. One copy for the Requesting Agency
 - c. One copy for the High Tension Operator

- d. One copy for the PA Representative (if applicable)
- 7) The Requesting Agency prior to starting work and permitting any workers within the work area covered by the permit, shall assure itself by physical inspection that the following conditions have been met:
 - a. All equipment has been isolated by opening, locking, and tagging all disconnecting devices through which equipment could be energized.
 - b. The feeder cable has been identified, properly grounded and cut, if the feeder is to be worked on.
 - c. All equipment which has exposed conductors within the work area is grounded if de-energized or provided with a protective barrier approved by the HTO if energized.
 - d. The work area has been identified with approved markers.
 - e. Parts 1 thru 3 of all copies of the Electrical Work Permit have been completed and all workers working within the work area have "signed on" (initialed) part 4A of the Requesting Agency's copy of the Electrical Work Permit. The only workers permitted in the work area are those who have "signed in."
 - f. The work area shall be protected against access by unauthorized persons.
- 8) After work has started, no further additions or alterations shall be made to Parts 1 thru 3 of the Electrical Work Permit and no work other than that detailed in Part 2 shall be performed within the work area unless covered by another Electrical Work Permit.
- 9) After all work pertaining to the Electrical Work Permit is completed, the Requesting Agency shall have all the workers "sign off" on part 4A and the Permit shall be returned to the HTO. Part 4B shall then be completed on the original copy of the Electrical Work Permit (the Notification Bulletin Board copy) indicating the site has been properly cleared. This is the final copy kept by the facility.
- 10) After completion of part 4B, preparation for re-energizing the equipment under the direct supervision of the HTO may begin. No switching will take place on any part of any feeder; however, until the Notification Bulletin Board and Electrical Work Permit log have been checked by HTO to assure that no uncompleted work permits (Parts 1 to 4) pertaining to work on this feeder in the area of work are on file. Immediately prior to re-energizing the feeder a physical determination shall be made to assure that all areas associated with the feeder covered in uncompleted work permits are clear.
- 11) The EOM shall file the Notification Bulletin Board copy of the Electrical Work Permit in the Operating Order file.
- 12) The use of numbered keys, tags, and grounds, shall be used throughout, along with all other requirements described in the *Port Authority High Tension Administrative and Safety Rules*. Numbers of same shall be recorded on the Operating Order and all removed tags pertaining to any particular job shall be retained in the Operating Order file until feeder is back in service.



Room Access:

Under no circumstances will keys be issued to the contractor. The contractor shall arrange access and schedule with WTCC staff or facility maintenance electricians. Modifications to locks and doors (duct taped latches, chocking of door, etc) is strictly prohibited and will result in a termination of the permit and work. Doors must remain closed at all times.



Typical sign posted on PA operated electrical rooms required permit access.

Duration of Permit Related Work:

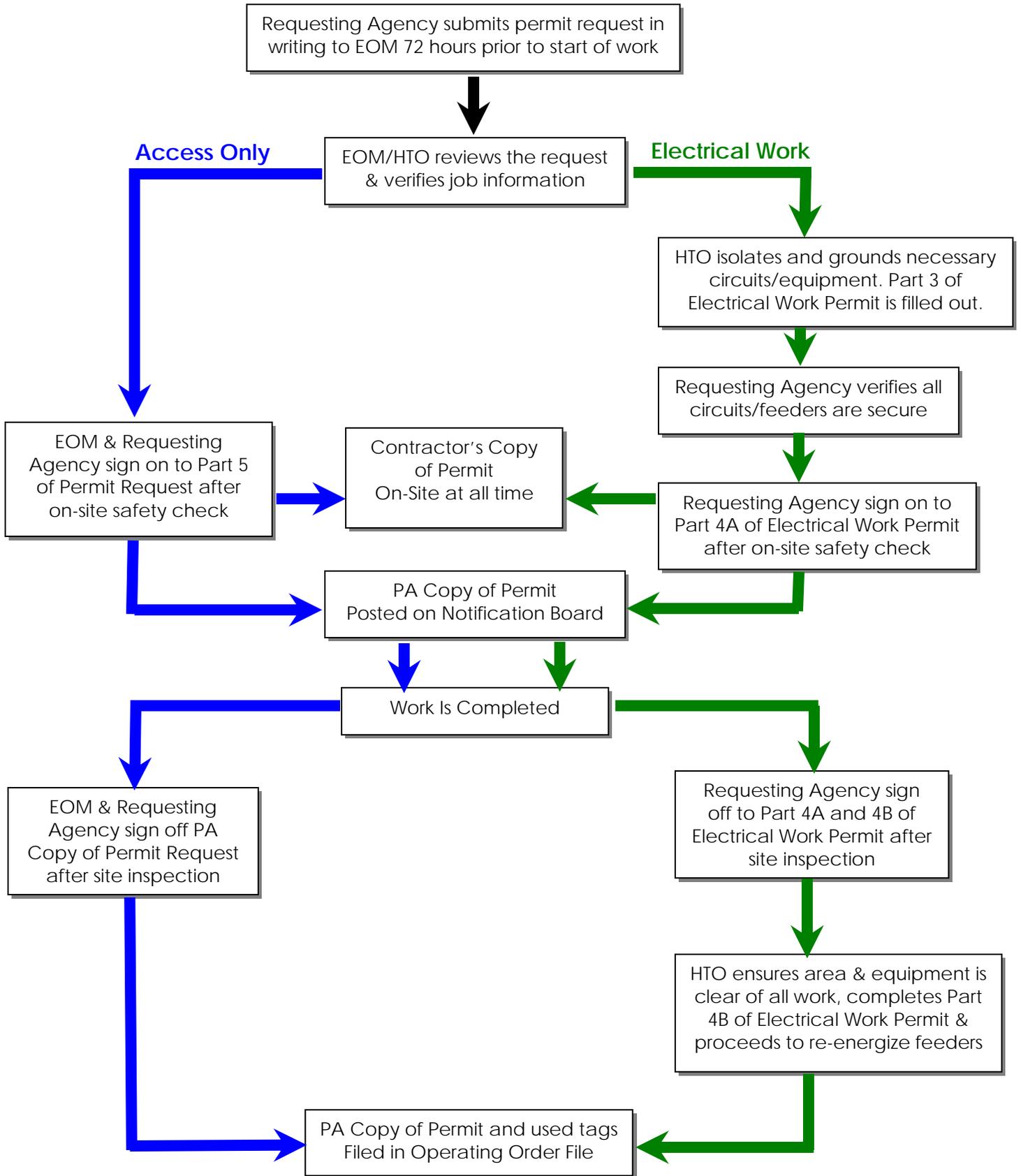
The duration of work related to the Electrical Work and Access Permits shall not exceed thirty (30) days. "Access Only" permits shall be voided at completion of job or thirty (30) days after start of job. A new "Access Only" permit will need to be issued if work proceeds after thirty (30) days. Permit required Electrical Work in excess of the maximum duration will be allowed only upon approval from the HTO or EOM.

FOR ADDITIONAL INFORMATION OR TO REQUEST ELECTRICAL
WORK AND ACCESS PERMITS PLEASE CONTACT:

Anthony De Lisa
Manager of Electrical Operations
World Trade Center Redevelopment
115 Broadway, 19th Floor
(212) 435-6459

Permit Regulations:

- The Electrical Work and Access Permits are subject to cancellation by the Port Authority immediately upon oral or written notification if, in the opinion of the Port Authority, such action is deemed justifiable for any reason.
- Neither Electrical Work and Access Permits nor any act or omission of the Port Authority shall be construed to impair the obligation of any person under or in connection with any agreement or contract with the Port Authority or in connection with the work performed.
- The Contractor shall observe and obey (and compel its officers, members, employees, sub-contractors, and other persons doing business with it to observe and obey) the present and future "Rules & Regulations" of the Port Authority.
- The Contractor shall not do or permit to be done any act or thing which will invalidate or conflict with any insurance policy covering any area which the contractor enters upon, and the contractor shall promptly observe, comply with and execute the provisions of any and all present future rules, regulations, requirements, order, and directions of any board or organization exercising or which may exercise functions which may pertain or apply to the operations of the Contractor hereunder.



ELECTRICAL WORK PERMIT PROCESS



ELECTRICAL WORK PERMIT

PA2497A / 10-07

Hand print in ink or type write original and three copies. DISTRIBUTE IN ACCORDANCE WITH HIGH TENSION ADMINISTRATIVE AND SAFETY RULES. SEE REVERSE SIDE.

1 PERMIT NUMBER FEEDER REQUESTING AGENCY

2 To: HIGH TENSION SYSTEM OPERATOR From: REQUESTING AGENCY Date: Time: AM PM

It is requested that all necessary equipment be isolated and grounded in order to perform the following work.

Requesting Agency Signature

3 To: REQUESTING AGENCY From: HIGH TENSION SYSTEM OPERATOR Date: Time: AM PM

In order to perform the work as requested in part 2 the equipment has been isolated and grounded as follows:

Table with columns: Equipment, Open, Racked Out, Locked Key No., Potential Transformer Fuses, TAG NUMBER, GROUND LOCATION, BARRIER INSTALLED. Large 'VOID' watermark is present across the table.

Cable Identified and Certified (Location)

Cable Spared (Location)

Neaby Live Equipment (Location)

High Tension System Operator (Signature) Requesting Agency The above work has been completed to my satisfaction. (Signature)

4A To: HIGH TENSION SYSTEM OPERATOR From: REQUESTING AGENCY Date: Time: AM PM

The following people, whose initials appear below, have read and understood this permit and will be the only people working in the area covered by this permit.

INITIALS table with columns ON/OFF for 14 people.

4B From: REQUESTING AGENCY Date: Time: AM PM

All people have been withdrawn from work site and signal off Part No. 4A. The work has been completed, tested, and inspected. The work area has been cleared. The Equipment may be re-energized except as noted below.

Requesting Agency (Signature) High Tension System Operator (Concluding Signature)