



Energy Delivery

**PROCEDURES &  
GUIDELINES**

*for*

***Worker's  
Protection  
Assurance***

Revised – January 2019

Missouri

Approved By: Mark C. Birk

Signed:

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1/24/2019

Revised: January 2019

## WPA & Procedures for Its Use

### Objective

Explain the five types of Worker's Protection Assurance (WPA) and Standard Procedures for requesting, obtaining, and releasing of WPA for Energy Delivery. This booklet is the authority on the procedures for WPA and supersedes all previous documentation on WPA.

### Definition of WPA

Worker's Protection Assurance is an operating authority's assurance to a qualified Worker or Supervisor that a given piece of equipment will be held in a required status in order for that person to safely perform their duties on that specific equipment.

### Purpose of WPA

The primary purpose of WPA is safety of personnel.

The conditions when WPA is required are:

- A. When working on or with equipment that must be isolated from known electrical energy sources before it is safe to work.
- B. When working on or with equipment tied into known electrical energy sources that must be in the operating control of the person who will work on the equipment.
- C. When working on new or inactive equipment intended to be connected to a known electrical energy source, or to other equipment that could be energized from any point, application for WPA must be made as soon as a connection into an electrical energy source is possible from any point.
- D. When working on energized high voltage conductors, or within dangerous proximity of such conductors, and when required by safe work practices. (This is applicable to the "Hazard" only.)

## **Operating Authority (Jurisdictional and Functional)**

These groups are delegated the authority and responsibility for the proper direction and coordination of system equipment operation. Operating Authorities are subject to equipment limitations such as equipment ratings, etc.

### **1. Jurisdictional Authority**

The Jurisdictional Authority is in charge of and responsible for directing and coordinating operation of system equipment. This includes complete authority of switching, voltage control, equipment loading, and any other activities pertinent to proper operation.

The Distribution Control Offices (DCO) shall have jurisdictional authority for all three-phase overhead backbone circuits, all underground circuits, and all two-phase and single-phase circuits which provide a connection or tie between circuits.

Jurisdictional authority shall belong to the crew in the field (hereafter referred to as "Truck Jurisdiction") when a Truck Hold Off is allowed.

### **2. Functional Authority**

The Functional Authority specifically performs or may direct another qualified person to perform detailed switching operations as authorized by the Jurisdictional Authority.

Only the Functional Authority may issue W.P.A. and order tags placed or removed.

In most cases, the Distribution System Operating Supervisor (DSOS) is both Jurisdictional and Functional Authority. In the case of Truck Jurisdiction, the crew in the field assumes Jurisdictional Authority and Functional Authority.

## Three-Way Communication

Issue clear and concise orders by stating the order, requiring the recipient of the order to repeat the information back correctly, and then acknowledge the response as correct; and if necessary, repeating the original statement to resolve any misunderstandings. This is commonly referred to as “**three-way communication**”

Three-way communication is critical to safe switching and successful WPA; due to its importance, the expectation is that three-way communication shall always be used.

### 1. Clear:

Orders issued by a Functional Authority must be **clear, concise, and complete**. In case of emergency, the recipient must be informed of the need for quick action.

### 2. Repeat Oral Orders:

All operating orders given over a remote communication device (i.e. radio, telephone, P.A., etc. – Radio is to be the primary device) shall be **repeated** by the recipient to the person issuing the order as a check against error.

Once this has been completed, the Functional authority giving the order shall acknowledge that the order is correct. The order is not valid until the Functional Authority acknowledges that the order is correct.

### 3. Switchman Record:

The employee receiving the orders shall record operating orders in the Switching Order Book, read the orders back, and receive acknowledgement to verify correctness before performing them.

In **Ameren Missouri** at the discretion of the DCO, the switchman may, in lieu of the Switching Order Book, use a Faxed or Printed Switching Order to read back, but verbal three way communication must be performed before any switching.

## **Operating Authority Responsibility**

It is the Operating Authority's responsibility to maintain the required equipment status and to notify personnel (by tagging or by oral communications) that WPA has been issued.

An Operating Authority may issue WPA only on equipment where that person exercises authority.

## **Qualified Worker/Supervisor Responsibility**

The Qualified Worker and/or Supervisor is responsible for maintaining strict observance of the WPA procedures and rules, plus keep the Operating Authority informed of all pertinent equipment, personnel, and protection information.

Any WPA issued to a Qualified Worker and/or Supervisor does not take the place of the employees own safe work practice, nor does it relieve the employee of the responsibility of making the prescribed tests to determine if safe working conditions exist.

## **Grounds**

Installation of grounds is a Safe Work Practice and is separate from WPA. Grounds shall be placed in accordance with local safe work practices and the utility's safety policies. The Functional Authority shall check with field personnel to verify that all grounds have been removed prior to re-energizing energy sources.

### **MISSOURI ONLY**

**NOTE:** In the course of preparing a circuit for WPA, when grounds are placed by order of the DSOS the switchman does not require WPA to place the grounds. Grounds shall still be placed in accordance with local safe work practices and the utility's safety policies.

### **ILLINOIS ONLY**

**NOTE:** Test, Ground, and Report are still to be followed.

## **Functional Authority's Hold-Off**

### **A. Definition**

A Hold-Off (symbolized by a Hold-Off tag) is an order of a Functional Authority that the position of the disconnecting device or isolating devices, which it is intended to cover, must be held open. The position of the device must not be changed under any circumstances unless ordered or approved by the Functional Authority and then only if the Hold-Off tag is first ordered removed.

### **B. Use of Hold-Off**

When a Functional Authority has a Hold-Off tag placed on a control or isolating device, the Operating Authority for whom the Hold-Off tag was placed is said to have a Hold-Off on that device.

The presence of a Hold-Off tag on a control or isolating device does not assure the observer the equipment with which it is associated with is completely isolated. It indicates only that the unit of equipment in question has been opened and will not be operated.

## **C. Establishing Hold-Off**

After equipment has been electrically opened such that no electrical connection exists that can pass current or voltage between the equipment's terminals, and all such isolating or control points have been tagged with Hold-Off tags, only then the Operating Authority for whom the tags were placed is said to have a Hold-Off on the equipment. A Hold Off tag shall be physically placed in close proximity to the isolating or control point to which the Hold Off is issued.

A Functional Authority may order Hold-Off tags placed for that Functional Authority or for another Operating Authority, depending upon who will issue worker's protection. If more than one Functional Authority will issue protection on equipment requiring a Hold-Off tag at a particular location, then as many tags shall be placed as there are Functional Authorities issuing such protection.

**NOTE 1:** Hold-Offs are used when issuing a Clearance, Restraint, or Out-of-Service — as defined in later sections of this booklet.

**NOTE 2:** On equipment that is capable of establishing a visual open, the visual open shall be fully opened and visually verified before placing a Hold-Off.

### **Examples for Hold-Offs:**

A 12kV Interruption is opened and is showing green semaphores. The integral disconnect switch is opened for a visible open. The Interruption can then have a Hold-Off tag placed.

A gang operated 34kV disconnect switch is opened. The troubleman verifies all three phases are open and no connection exists between the blade and jaw side of the switch and the operating handle is securely locked in the open position. The switch can then have Hold-Off tag placed.

## D. Use of the Truck Hold-Off

1. A Truck Hold-Off tag is designed for use on in-service portions of the Distribution System (15KV and below). Once a crew is assigned an outage order number they assume Jurisdictional and Functional Authority by placing a Truck Hold Off Tag. The outage order must identify a specific isolating point. A Truck Hold Off tag shall only be used beyond this isolating point in the following circumstances:
  - a. For overhead portions of single-phase or multi-phase radial taps having only one isolation point (i.e. taps that do not tie between feeders). For example: lifting jumpers, opening fuses, opening switches.
  - b. For **Ameren Missouri** ONLY: Underground portions of single-phase or multi-phase radial taps having only one isolation point (i.e. taps that do not tie between feeders) can also use Truck Hold-Offs . For example: lifting jumpers, opening fuses, opening switches, pulling elbows.
  - c. Multi-phase isolation points shall have all phases isolated.
  - d. Overhead transformer, transformer bank
  - e. Truck hold off for a fused capacitor bank does not require an outage order.
2. The "Truck Hold Off" tag shall have the following information written on its face:
  - a. Outage Order to which the crew is assigned
  - b. Crew number if applicable
  - c. Name and phone number of the employee responsible for the clearance
  - d. Date and time the clearance was obtained

No additional documentation other than that specified above shall be required.

3. A Truck Hold Off tag shall be physically placed in close proximity to the isolating or control point to which the Truck Hold Off is issued.

NOTE 1: Truck Hold-Off shall **NOT** be used in substations.

NOTE 2: In **Ameren Illinois**, Truck Hold-Off shall not be used on underground line sections.



NOTE 3: When clearances are obtained utilizing truck jurisdiction, all work must be performed under an Outage order.

NOTE 4: The person holding the Truck Hold Off must remain in the general area of the job, and must release the Truck Hold Off at the end of the workday. No other type of WPA can be issued on that section of line, cable, or piece of equipment while the Truck Hold Off is in effect.

NOTE 5: On underground sections, the person holding the Truck Hold Off must verify on a circuit map that the cable does not tie to another source and physically check the last section of cable to verify the cable does not tie to another source.

NOTE 6: Only a Clearance can be issued under a Truck Hold Off, if an Out of Service or Restraint is needed then a Hold Off issued from Functional Authority must be obtained.

NOTE 7: Truck Hold Offs cannot be used under a Local Control.

### **Multiple Crews**

If two or more crews are working independently on the same lines or equipment, each crew shall independently comply with the requirements listed above, including each hanging their own "Truck Hold Off" tags. Lines shall not be re-energized until all tags have been removed and all clearances released.

### **Examples for Truck Hold Off:**

The Crew is working on a single phase radial tap that has overhead and underground sections. No part of the tap ties to other feeders.

The Crew is working on an overhead or underground section. The Crew is working beyond an isolating point (example: recloser, sectionalizer, open loop, pulled elbows, or fused switch).

Crew has truck jurisdiction.

In **Ameren Missouri:** Follow Procedure 2 for Requesting and Obtaining WPA on page 22 to obtain the clearance.

In **Ameren Illinois:** Procedure 1 for Requesting and Obtaining WPA on page 21 to obtain the clearance.

The Crew is working on a multi-phase overhead radial tap that does not tie between feeders. The Crew is working beyond fused switches on an overhead section of the line.

Crew has truck jurisdiction.

Follow Procedure 2 for Requesting and Obtaining WPA on page 22 to

obtain the clearance.

Three-phase overhead transformer with fused switches, Crew is replacing the transformer.

Crew has truck jurisdiction.

Follow Procedure 2 for Requesting and Obtaining WPA on page 22 to obtain the clearance.

The crew needs to replace a capacitor in a capacitor bank.

Crew has truck jurisdiction.

Follow Procedure 2 for Requesting and Obtaining WPA on page 22 to obtain the clearance.

A Crew is working on a multi-phase overhead radial tap that does not tie between feeders. The Crew is working beyond reclosers on an overhead section of the line. Crew must lift the jumpers to the reclosers.

Crew has truck jurisdiction.

Follow Procedure 2 for Requesting and Obtaining WPA on page 22 to obtain the clearance.

The Crew is working on a multi-phase underground radial tap that does not tie to any other source. The Crew is working beyond fused switches or pulled elbows on a section of the line.

Crew has truck jurisdiction.

In **Ameren Missouri**: Follow Procedure 2 for Requesting and Obtaining WPA on page 22 to obtain the clearance.

In **Ameren Illinois**: Procedure 1 for Requesting and Obtaining WPA on page 21 to obtain the clearance.

The Crew is working on an underground loop tap that ties to another source. The Crew is working beyond fused switches on a section of the line.

Crew cannot get truck jurisdiction. DCO still has jurisdiction.

They must follow Procedure 1 for Requesting and Obtaining WPA on page 21 to obtain the clearance.

## **E. Use of the Racking Hold-Off Tag**

1. The Racking Hold-Off tag is specifically used for circuit breakers that can be racked off the bus. These types of circuit breakers are typically found in metal clad switchgear.
2. While the regular Hold-Off tag states "DO NOT OPERATE"; the Racking Hold Off tag states "DO NOT RACK THE CIRCUIT BREAKER ONTO THE BUS".
3. The Racking Hold-Off tag will be placed on circuit breaker control switch, and will allow the circuit breaker to be closed and opened (with permission from the DSOS) for testing or maintenance, as long as the circuit breaker is not racked onto the bus. The circuit breaker can be racked out of the cubicle, or be racked into the test position, but it cannot be racked onto the bus. The isolation for which the Hold Off is issued is the isolation created by having the breaker racked off the bus.
4. If a Hold-Off tag is required for a metal clad switchgear type circuit breaker that can be racked off the bus, the DSOS, and the switching orders, will state that a Racking Hold Off tag shall be placed. The Racking Hold Off tag will be the normal tag used for these types of breakers; however, if the DSOS wants additional assurance the circuit breaker will not be opened or closed, even in the test position, then a Hold-Off tag will be used on the racked off breaker.

## **Five Types of Worker's Protection Assurance:**

1. **Clearance** - A "Clearance" issued on the Functional Authority's Hold-Off is an assurance to the person issued that the equipment it covers has been properly isolated from all known electrical energy sources, Hold-Off tags are placed, and that this isolation will be maintained while the "Clearance" is in effect. Test voltage may not be applied under a clearance, with one exception, see note 4 below. It is issued to a qualified worker or supervisor requiring protection in the course of their work and covers any number of persons working under his/her direction. The person holding the "Clearance" must remain in the general area of the job, and must release the "Clearance" at the end of the workday.

NOTE 1: Grounds are not automatically installed as part of WPA.

NOTE 2: The use of a multi-meter and other similar equipment can be used under a Clearance.

NOTE 3: Substation relay and control wiring, including CT circuits is outside of the Jurisdictional Authority covered in this policy.

NOTE 4: The use of a Phase ID Buzzer using a rated battery voltage of 9V DC or less, is allowed to be used under a Clearance or Out of Service for the only purpose of identifying phases on UG cables. Prior to use of the Phase ID Buzzer a qualified worker or supervisor must verify that no other crews or personnel are working on or near any cables that are to be Phase ID.

### **Examples for Clearance:**

Clearances are generally issued on a section of line, cable, or piece of equipment for a period of eight hours or less. Jobs of longer duration may be arranged ahead of time, or if unforeseen, a call to the DSOS that more time will be required, will suffice. A Clearance is issued on a day-to-day basis and all grounds are to be removed and the Clearance released at the end of the day. Multiple Clearances may be issued on one section of line, cable, or piece of equipment but all must be released prior to restoring service. An "Out of Service" is the only other WPA that may be issued simultaneously on the same equipment for which a Clearance has been issued.

The Crew is working on an underground **lateral** that taps off of a single phase overhead radial tap that does tie between feeders.

DCO has jurisdictional authority.

Follow Procedure 1 for Requesting and Obtaining WPA on page 21 to obtain the Clearance.

Wire down on a multi-phase overhead backbone, Crew working between solid blade disconnect switches.

DCO has jurisdictional authority.

Follow Procedure 1 for Requesting and Obtaining WPA on page 21 to obtain the Clearance.

A multi-phase or single phase underground loop is protected by fused switches. Crew is working on conductor between transformers.

DCO has jurisdictional authority.

Follow Procedure 1 for Requesting and Obtaining WPA on page 21 to obtain the Clearance.

2. **Out of Service** - The "Out of Service" issued on the Functional Authority's Hold Off is an assurance to the person issued that the equipment it covers has been properly isolated from all known electrical energy sources, Hold-Off tags placed, and that this isolation will be maintained while the "Out of Service" is in effect. Test voltage may not be applied under an Out of Service, with one exception, see note 4 under Clearance. The "Out of Service" differs from the "Clearance" only in that the person holding the "Out of Service" need not stay on the job site or release it at end of day.

Persons working on a job covered by an "Out of Service" must be under the supervision of the person to whom the "Out of Service" was issued. These persons do not need to obtain worker's protection assurances individually. However, if a person not assigned to the supervision of the person to whom the "Out of Service" was issued is also required to work on the equipment, that person shall obtain an "Out of Service" or a "Clearance" on this equipment from the Functional Authority.

#### ILLINOIS ONLY

Note 1: Field and contractor employees cannot work under an Out of Service held by the DCO. They must pick up a Clearance to be able to perform work on a cable, line or equipment the DCO holds an Out of Service on.

Note 2: Anytime an Out of Service is being held by the DCO; field or contractor employees are expected to pick up a Clearance to perform work on a cable, line or equipment. An exception can be authorized by the DCO. (An example would be a Major Storm Event).

#### **Examples for Out of Service:**

"Out of Service" is issued when a section of line, cable, or piece of equipment is de-energized and operating requirements will permit an extended outage. Multiple "Clearances" and multiple "Out of Services" may be issued for one section of line, cable, or piece of equipment while an "Out of Service" is in effect, but no other WPA can be issued.

A section of a 34.5 kV sub transmission line will need to be out for an extended period of time for maintenance.  
DCO has jurisdictional authority.  
Follow Procedure 1 for Requesting and Obtaining WPA on page 21 to obtain the Out of Service.

A section of looped underground cable has failed. The faulted cable was isolated and customers restored.  
DCO may issue an Out-of-Service on the failed section of cable.

The Crew is installing a new piece of equipment or section of line/cable. When the new equipment or line/cable can be electrically connected to the system (by any means) the Crew must notify the DCO and release the equipment for WPA.

DCO will issue an Out of Service on the isolating device until the equipment or line/cable is ready to be released for service.

3. **Restraint** - The "Restraint" issued on the Functional Authority's Hold Off is an assurance to the person issued that the equipment it covers has been properly isolated from all known electrical energy sources. It differs from a Clearance in that the person to whom it is issued may apply test voltage to the equipment and no other form of WPA, including another Restraint, may be issued to any other crew on the equipment covered by the Restraint. The person holding the "Restraint" must remain in the general area of the job, and must release the "Restraint" at the end of the workday.

NOTE: Grounds may be installed and removed under a Restraint.

**Examples for Restraint:**

Power factoring, Transformer turns ratio testing, high potting, fault locating, and proof testing are examples of jobs requiring a "Restraint". Only one "Restraint" may be issued on one section of line, cable, or piece of equipment and no other WPA may be issued while a "Restraint" is in effect. Additional maintenance, testing, or repair work may be performed under the direction of the person holding the "Restraint".

A substation crew needs to apply test voltage to a regulator.  
DCO has jurisdictional authority.  
Follow Procedure 1 for Requesting and Obtaining WPA on page 21 to obtain the Restraint.

A substation crew needs to ductor a breaker.  
DCO has jurisdictional authority.  
Follow Procedure 1 for Requesting and Obtaining WPA on page 21 to obtain the Restraint.

A Crew needs to apply test voltage to a section of underground cable for fault locating.  
DCO has jurisdictional authority.  
Follow Procedure 1 for Requesting and Obtaining WPA on page 21 to obtain the Restraint.

NOTE: The Crew can also make repairs to the cable under the Restraint.



A metal-clad switchgear type circuit breaker at a substation is racked off the bus to perform maintenance which includes high voltage testing. The circuit breaker will need to be operated but not racked onto the bus to perform the maintenance.

DCO has jurisdictional authority.

Follow Procedure 1 for Requesting and Obtaining WPA on page 21 to obtain the Restraint.

NOTE: A Racking Hold Off tag will be used.

A crew needs to check for shorts and grounds on an underground circuit. A restraint is not needed. The DCO has jurisdictional authority. No WPA is needed for this when testing under orders from the DCO.

4. **Local Control** - The "Local Control" issued by the Functional Authority permits a person to operate or direct the operation of a section of circuit or piece of equipment. This also gives the qualified worker the assurance that no operations will be performed on the section of circuit or equipment covered by the "Local Control" unless requested or personally approved by them. A "Local Control" permits the energizing or de-energizing of lines or equipment from Normal Source Voltage. The person holding the "Local Control" must remain in the general area of the job, and must release the "Local Control" at the end of the workday. No other WPA can be issued on that section of line, cable, or piece of equipment while a "Local Control" is in effect.

**NOTE 1:** If additional WPA is required (e.g. clearance, restraint, out of service, etc.), a crew will turn in their Local Control and shall obtain the proper WPA for the work required. This will ensure additional protection by communicating to others the specific status of equipment.

**NOTE 2:** In **Ameren Missouri** ONLY, Local Control is permitted for testing UG cable with a Mark V, phasemate, or UCT (underground cable tester).

**NOTE 3:** Local Control is NOT permitted for thumping cable.

**NOTE 4:** Grounds shall not be installed under a Local Control.

**NOTE 5:** Hold-off tags cannot be placed or removed under a Local Control, unless ordered by the proper functional authority; as only the proper functional authority can order Hold-off tags placed or removed.

**Examples for Local Control:**

A "Local Control" is issued on a new section of line, new cable, or new piece of equipment when it is necessary for the qualified workers to do switching in order to place that equipment in service. It is also used to trouble shoot and isolate a faulted or damaged portion of a circuit.

A "Local Control" transfers the control of responsibility for the safe operation of the section of line, cable, or equipment from the DSOS to the person issued the "Local Control".

A Crew needs to replace a regulator. The DCO may issue a **Local Control** to get the regulator on neutral, bypass switches closed and load and source switches open. The Crew will release their **Local Control** and DCO shall order Hold Off tags placed on the open switches. Then the DCO will issue the required WPA on the regulator. DCO has jurisdictional authority.  
Follow Procedure 1 for Requesting and Obtaining WPA on page 21 to obtain the Local Control.

Overhead line switch needs to be operated following repair, replacement, or maintenance and will energize or de-energize a section of line. The DCO will issue a **Local Control** on the piece of equipment or section to be operated.  
DCO has jurisdictional authority.  
Follow Procedure 1 for Requesting and Obtaining WPA on page 21 to obtain the Local Control.

A substation start-up supervisor has a local control in a substation where some switches also have hold-off tags on them. The supervisor cannot order switches with hold-off tags to be operated or remove the hold-off tags without first contacting the DCO and receiving orders to remove the hold-off tags.

Example for Ameren Missouri Only:

A troubleman needs to isolate a faulted section of URD cable. The troubleman receives a Local Control from the DCO and is ordered to place hold-off tags on the isolation points of the faulted section. The troubleman may use a Mark V or UCT to determine the faulted section and restore unfaulced cable sections. Once the faulted section is determined and isolated, the troubleman may open and hold-off the isolation points. The troubleman must then call the DCO with the locations of the hold-off tags.

5. **Hazard** - The "Hazard" is an assurance to the person issued that the circuit it covers shall not be reclosed after it has automatically opened and that the DSOS has contacted all persons who have been issued Hazards and determined life or property will not be endangered by reclosing. A "Hazard" is not a guarantee that equipment will be de-energized upon contact. Fault currents must be sufficient to cause operation of circuit breaker. The person holding the "Hazard" must remain in the general area of the job, and must release the "Hazard" at the end of the workday. No other WPA can be issued on that section of line, cable, or piece of equipment while the "Hazard" is in effect. A Hazard tag shall be physically placed in close proximity of the reclosing disabled switch/button of the equipment to which the Hazard is issued.

**Examples for Hazard:**

A "Hazard" is issued to qualified workers who are working in close proximity to a section of lines, cable, or piece of equipment that cannot be de-energized—for example installing or removing conductors over energized lines in excess of 600 volts. When placed in the "Hazard" (manual, non-reclosing or hot-line tag/hazard) position, the automatic reclose is disabled, and it shall not be restored until the qualified workers have released their "Hazard" to the DSOS. Should the feeder trip for any reason, the feeder will not be reclosed until the DSOS contacts the individual holding the "Hazard" and assures himself that no contact has been made and the crew is in the clear.

**GENERAL NOTE ON WPA**

**NOTE:** All WPA, other than the "Out of Service", must be released upon completion of the job or before leaving the job site.

**WPA does not relieve the person of the responsibility of making prescribed tests and observations to assure that the equipment is safe to work upon.**

## **Procedure for Requesting and Obtaining WPA**

### **Procedure 1: DCO Jurisdictional Authority**

Where the DCO offices have jurisdictional authority, the following procedure shall be followed:

- A. When given a job and **prior** to calling and making a request for switching/WPA with the DCO, the Responsible Person shall check the job site and all necessary drawings (area pages, feeder maps, and substation one-line diagrams) to determine:
  1. What equipment or circuit is needed? If a section of a circuit is needed, it must be identified by all termination points (switch numbers, pad numbers, company/customer substations, etc.).
  2. What type of WPA is needed and person to receive WPA?
  3. What date, time, and approximate duration will I need this WPA?
  4. What type of work am I going to perform and at what specific location?
  5. Since grounds may be necessary for the completion of the job, even though they are not part of the WPA, they shall be discussed — who will install them, and where they will be installed.
- B. A qualified (designated) employee shall make a request of the DSOS to have the particular section of line or equipment de-energized (minimum 48 hours in advance for non-emergency work). The request must include the information outlined above. The qualified (designated) employee becomes the employee in charge and is the Responsible Person for the WPA.

When calling the DSOS the qualified (designated) employee shall identify themselves, the type of WPA required, and the circuit or equipment they need.
- C. Where necessary, the DSOS shall coordinate the issuance of hold off and hazard tags on all breakers, reclosers, switches, jumpers, taps and other means through which known sources of electrical energy may be supplied to the particular lines and equipment to be requested for WPA. The disconnecting means shall be rendered inoperable where possible.
- D. When calling the DSOS to obtain WPA both parties shall use Three-Way Communication:

1. Log the DSOS's name. The DSOS shall describe the type of WPA to be issued and section of line or equipment involved. This shall include all switch numbers, substation names, circuits, and any pertinent location information that is associated with the WPA to be issued.

If any information does not correspond with the section of line or equipment that is involved, question the DSOS until both parties agree the right section of line or piece of equipment is cleared.

2. After agreeing all corresponding information is correct, the DSOS will then issue you your WPA. After accepting the WPA, log the time in the Switching Book.

## **Procedure 2: Truck-Jurisdictional Authority**

Where the crew in the field has Truck-Jurisdiction, the procedure stipulated in **Procedure 1** above shall be followed, except that the qualified employee in charge shall take the place of the DSOS. A "Truck Hold Off" tag will be used in lieu of the Functional Authority's "Hold Off" tag. Once the "Truck Hold Off" tag is placed, the crew must issue themselves a Clearance.

**NOTE:** All other requirements regarding Clearances and Functional Authority's Hold Off as stipulated in the Operating Manual for the Ameren System remain applicable.

## **Releasing WPA**

When the portion of the job that has WPA issued is complete the responsible person shall:

- A. Notify all applicable personnel that the WPA is being released
- B. Verify that all affected workers are in the clear
- C. Verify that all installed grounds have been removed. Call the DSOS from the Job Site, three way communication shall be used.
  1. Identify yourself, type of WPA, the switching order number, the section of line or equipment you're releasing, indicate that affected workers are in the clear, and grounds have been removed.
  2. Give information concerning the circuit or equipment the DSOS will need, including any changes made. Such as:
    - a. What condition is the line or piece of equipment in now? (Open or closed switches, cut/spliced any conductor, etc.)
    - b. Will phasing be necessary?
    - c. Will WPA be needed again?
    - d. Any other pertinent information.
  3. The DSOS will read back the information you've given so you are satisfied that the DSOS has, in fact, understood all specific information.
  4. After all the above has been completed and both parties are in agreement, the DSOS will take back the WPA.

## **Failure to Pick Up or Release WPA**

When scheduled WPA is set up, it is set up for a specific time the crew will pick up the WPA. The DSOS will contact the appropriate field supervision to arrange for switching prior to the requested time of the WPA.

When scheduled WPA is set up, it is expected the crew will pick up the WPA in a timely manner. If the crew does not pick up the WPA in a timely manner, the DSOS will contact the Responsible Party who arranged the WPA; or if they are not available, their immediate Supervisor, and inform him/her that the DSOS intends to restore the circuit. The Foreman or Supervisor will contact the crew and tell them to call for their WPA; or, the Foreman will inform the DSOS that plans have changed, after which the DSOS will restore the circuit.

If at any time circumstances warrant, the DSOS can call the crew requesting them to release their WPA so the line or equipment can be restored.

With the exception of Out of Service WPA, the crew must release their WPA before leaving the jobsite. If the WPA is not released, it is the DSOS's responsibility to contact the crew. If the DSOS is unable to reach the crew, the Supervisor in charge will be called. The supervisor can release the WPA **only** after contacting a crew member or visiting the job site.



## **Energizing New Distribution Primary Facilities**

### **Underground Facilities**

Rules to apply when energizing new primary facilities on the Ameren Underground system.

The DCO (Functional Authority) will request field operations to adhere to the following protocol prior to energizing equipment.

1. Advance notice shall be given prior to energizing new equipment
2. A work request and one line diagram must be provided to the DCO.
3. All equipment that is being released for service shall be verified ready to be energized, including all cable splices and terminations.
4. Switching orders must be written and ordered or a Local Control issued by the DSOS

Following these procedures will insure safety, reliability, and quality customer service.

### **Overhead Facilities**

Rules to apply when energizing new primary facilities on the Ameren Overhead System 15kV and below.

The DCO (Functional Authority) will require field operations to adhere to the following protocol prior to energizing equipment.

1. Advance notice shall be given prior to energizing new equipment
2. A crew may tap an overhead circuit with verbal permission of the Functional Authority, or if required, switching orders may be written and ordered by the DSOS. The request must include the substation name, feeder number, and physical location of the tap.

Following these procedures will insure safety, reliability, and quality customer service.

## **Planned Service Work when no WPA is needed**

A Crew needs to operate a regulator or LTC to insure correct operation. DCO has jurisdictional authority. Notify the DCO of your intentions, no WPA will be needed to perform this service. However, if the regulator or LTC does not operate correctly and will need to be switched out then follow Procedure 1 for Requesting and Obtaining WPA on page 21.

A Crew needs to perform a substation maintenance inspection. DCO has jurisdictional authority. Notify DCO of your intentions, no WPA will be needed to perform this service.

A crew needs to check for shorts and grounds on an underground circuit. The DCO has jurisdictional authority. No WPA is needed for this when testing under orders from the DCO. No other WPA shall be on the underground circuit.

## Notes



AMEREN-LOTO-HOLDOFF  
STOCK NO. 1601862

**⚠ DANGER**

CIRCUIT/EQUIP: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TAG PLACED BY: \_\_\_\_\_

DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

BY ORDER OF: \_\_\_\_\_

**HOLD OFF**

WFOCo



**⚠ DANGER**

**DO NOT OPERATE**

DO NOT REMOVE  
UNLESS ORDERED BY  
FUNCTIONAL AUTHORITY  
(SEE REVERSE SIDE)

**HOLD OFF**



FORM 1002 (REV)  
STOCK NO. 27-20-114

**DANGER**

CIRCUIT/EQUIP: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TAG PLACED BY: \_\_\_\_\_

DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

BY ORDER OF: \_\_\_\_\_

**RACKING  
HOLD OFF**



**DANGER**

**DO NOT RACK  
CIRCUIT BREAKER  
ONTO THE BUS**

DO NOT REMOVE  
UNLESS ORDERED BY  
FUNCTIONAL AUTHORITY  
(SEE REVERSE SIDE)

**RACKING  
HOLD OFF**

FORM 5122 (6/16)  
STOCK NO. 37-25-118



**DANGER**

OAS# \_\_\_\_\_  
CREW # \_\_\_\_\_

TAG PLACED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

**TRUCK  
HOLD OFF**



**DANGER**

**DO NOT  
OPERATE**

DO NOT REMOVE  
UNLESS ORDERED BY  
FUNCTIONAL AUTHORITY  
(SEE REVERSE SIDE)

**TRUCK  
HOLD OFF**




**DANGER**

**RECLOSING  
DISABLED**

DO NOT RECLOSE  
OR REMOVE THIS TAG  
UNLESS ORDERED BY  
FUNCTIONAL AUTHORITY  
(SEE REVERSE SIDE)

**HAZARD**



FORM 5126 (6/16)  
STOCK NO. 37-21-826

**DANGER**

CIRCUIT: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TAG PLACED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_ TIME: \_\_\_\_\_  
BY ORDER OF: \_\_\_\_\_

**HAZARD**

INFORMATION  
TAG

FORM 4155 REV. 2/98  
STOCK NO. 17-15-203

AmerenUE System

INFORMATION TAG

TAG PLACED

BY \_\_\_\_\_

DATE \_\_\_\_\_ TIME \_\_\_\_\_ A.M.  
P.M.

NOTE \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# WPA Quick Reference Guide



TYPE OF WPA	VOLTAGE APPLIED	TIME LIMITATION	LOCATION LIMITATION	TYPE OF TAGS	OTHER WPA ALLOWED
TRUCK CLEARANCE	NO KNOWN VOLTAGE	DURATION OF THE JOB	JOB SITE	TRUCK HOLD OFF	TRUCK CLEARANCE
CLEARANCE	NO KNOWN VOLTAGE	DURATION OF THE JOB	JOB SITE	HOLD OFF	CLEARANCE OUT OF SERVICE
OUT OF SERVICE	NO KNOWN VOLTAGE	NONE	NONE	HOLD OFF	CLEARANCE OUT OF SERVICE
LOCAL CONTROL	SOURCE VOLTAGE*	DURATION OF THE JOB	JOB SITE	N/A	NONE
RESTRAINT	TEST VOLTAGE**	DURATION OF THE JOB	JOB SITE	HOLD OFF	NONE
HAZARD	SOURCE VOLTAGE	DURATION OF THE JOB	JOB SITE	HAZARD	HAZARD

\*Ameren MO only: Local Control is permitted for testing UG cable with Mark V, Phase-mate, or Underground Cable Tester (UCT).

\*\* As long as no other WPA is issued, a Restraint is not needed for a Shorts and Grounds Test on UG cable. This test can be done under orders from the DCO, who has Jurisdictional Authority.