

SCG-SH-0201

# Southern Company Generation LOTO Awareness Training

Non-Listed Worker

SHIPS # 023102

# Scope

This procedure applies to all persons (employees and contractors) working on machines or equipment under the control and operation of Southern Company generation facilities.



# External Personnel

When external maintenance or servicing personnel (Contractor) will be engaged in activities covered by the scope of this procedure, the authorized representatives of the Company and the outside employer shall provide and coordinate their respective lockout or tagout procedures.

Outside employers shall demonstrate to the facility's management that an effective system of accountability using locks for personnel. Prior to the start of work, Company management shall review and approve the system.



# External Personnel

It is the responsibility of Contractor to train its Representatives in the requirements of Purchaser's LOTO procedure and to document this training.

Southern Company LOTO Awareness Training is available under "Safety Orientation Requirements for Generation Contractors" at the following link:

<http://southerncompany.com/about-us/suppliers/requirements-plant-access.cshtml>.



# What is a LOTO?

**Lockout Tagout (LOTO)** is a safety procedure used to ensure dangerous machines are properly shut off and not able to be started up until the completion of maintenance or servicing work. It requires hazardous energy sources to be "isolated and rendered inoperative" before work is started on the equipment in question.



# Definitions

- **Energy Isolating Device** – A device that physically prevents the transmission or release of energy, including but not limited to the following:
  - manually operated electrical circuit breaker
  - disconnect switch
  - manually operated switch
  - line valve
  - block
  - any similar device used to block or isolate energy
- **Hasp** – A device that allows energy isolating devices to be locked with multiple locks.
- **Isolate** – Removal of all sources of energy from the equipment to be worked on.



# Definitions

- **Tagout Device** – Prominent warning device, such as a tag and a means of attachment, which can be securely fastened to an energy isolating device in accordance with an established procedure, to indicate that the energy isolating device and the equipment being controlled cannot be operated until the tagout device is removed.



# Lockout Device

- Device that utilizes a positive means such as a lock and key, to hold an energy isolating device in the safe position and prevent the energizing of a machine or equipment. Southern Company Generation approved lockout devices are as follows:





# Lockout Devices



## Isolation locks

Red in color, used to secure or isolate field equipment on isolation devices.

- Keyed in groups (lock sets)
- Used to secure/isolate equipment
- Always secured with an attached tagout device



## Operating area locks

Orange in color, used for designated operating area continuity; ensures equipment has been isolated per the LOTO record.

- Always the first lock on and last lock off to ensure continuity of the active LOTO and the position of isolation devices have not been altered.
- No other lock shall be placed on the master lockbox without an operating area lock previously installed.



# Lockout Devices



## Individual locks

Blue in color assigned to individuals for their personal protection while performing work under a LOTO.

- Keyed in groups (lock sets)
- Each worker has 5 locks and 1 key
- Emergency key held by Plant Manager or Designee
- Can lock on any LOTO with DOA permission
- Contains employee name and contact number



## Coordinator locks

Green in color, used by various departments to coordinate multiple work crews, ensure continuity and integrity of active LOTO, and protection of personnel not on the authorized list.

- Requires an attached LOTO information tag and:
  1. Hasp on Master lockbox (red)or
  2. Satellite lockbox (yellow)



# Lockout Devices



## Satellite lock

Yellow in color, used to maintain continuity while a satellite lockbox is in use.

- Placed on Master Lockbox
- Assigned to a corresponding satellite lockbox.
- Indicates Satellite Lockbox in use
- Requires an attached LOTO information tag



## Non-listed/visitor lock

Brown in color, used for non-listed workers to perform service or maintenance under the protection of a LOTO.

- Issued by DOA (1 lock and 1 key)
- Requires LOTO Awareness Training annually
- Can only lock behind a coordinator (Green Lock)
- Requires an attached LOTO information tag

*\*Non-listed/visitor locks are issued for temporary use at the discretion of plant management.*





## Contractor locks

Silver, gray, or black in color, used for non-listed workers to enable them to perform service or maintenance under the protection of a LOTO.

- Contractor owned/provided
- Shall **not** be manufactured by American Lock
- Shall display worker name, company, and contact number
- Always placed behind a coordinator lock (green)

# Definitions

**LOTO Information Tag** – Tag that identifies the responsible person using a lockout device. Each tag is secured via the lock shackle and, at a minimum, contains the worker's name and contact number.

**LOTO INFORMATION TAG**

NAME: Non-Listed/Visitor Name

CONTACT #: Non-Listed/Visitor Contact Info

COMPANY: Non-Listed/Visitor Company Name

*Check if Applicable*

**LOTO COORDINATOR**

Breach Party Grounds Installed (TPG's) Quantity: \_\_\_\_\_

**SATELLITE BOX**

Maintenance Release

**NON-LISTED/VISITOR**

Alternate Accountability Responsible Person

5-6795 Rev 12/11



# Definitions

**Lockbox** – Box with multiple locking points in which the key(s) to the group lockout device(s) are placed and secured by authorized employees. Lockboxes are:

- Master lockboxes (Red)
- Satellite lockboxes (Yellow)



# Definitions

**Master Lockbox** – Red lockbox in which key(s) to red isolation locks are placed and secured by an operating area lock (orange).

- LOTO holders secure locks (individual (blue)/coordinator (green)) to hold the LOTO for service or maintenance activity.
- The original LOTO documentation (LOTO records, LOTO test records, etc.) is attached to the master lockbox (red).



# Master Lockbox

LOTO Coordinator  
(*Green Lock*)

Non-Listed/Visitor  
(*Brown Lock*)



Operations Lock  
(*Orange Lock*)

LOTO Holder  
(*Blue Lock*)

Satellite Box  
(*Yellow Lock*)





**Satellite Lockbox** – Yellow lockbox that is an extension of the master lockbox (red).

- Located remotely in an area that provides convenient access for workers.
- A satellite lock (yellow) will be used in conjunction with the satellite box and is secured to the master lockbox; the associated key is secured in the satellite box with coordinator locks.
- A copy of the LOTO documentation (LOTO records, LOTO test records, etc.) is attached to the satellite lockbox.



# Satellite Lockbox



Contractor Lock  
(Silver/Gray/Black Lock)

LOTO Coordinator  
(Green Lock)



# Definitions

**Temporary Protective Grounds (TPG)** – Devices installed by a qualified person for the purpose of grounding electrical equipment previously energized at a voltage greater than 600 V.

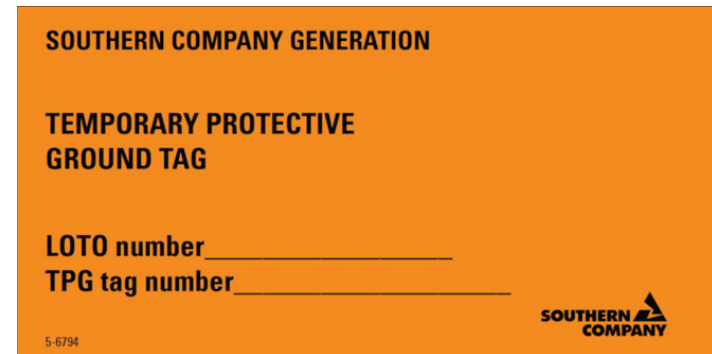


# Definitions

**Temporary Protective Grounds (TPG) Tags** – Tags affixed to grounds to control the installation and removal of the grounds.



When grounds are installed by Plant Authorized Employees, the tags are red in color and issued as part of the isolation record.



When grounds are installed by a third party, the tags are orange in color.



**Authorized Employee** – Person whose duties include the lockout or tagout of machines or equipment to perform servicing or maintenance on that machine or equipment. Authorized employees are identified on the plant authorized list.

- **LOTO Coordinator** – An authorized employee who may request LOTO and/or coordinate work on equipment or systems held by LOTO for non-listed workers.



**Non-listed Worker** – Person performing maintenance or servicing under the direction of a LOTO coordinator and who is not included on the facility's authorized list. These individuals may be unfamiliar with the equipment or lack the necessary experience or training to individually hold LOTO.

- Examples of Non-listed workers include:
  - » Transmission Employees
  - » T&PS Employees
  - » Corporate Support Employees
  - » Contractors



## Non-listed Worker Accountability

- **Individual accountability** – By securing directly to an approved Southern Company LOTO device with the permission of the LOTO coordinator.



*Individual  
Contractor Locks*



*Individual  
Non-listed/Visitor Locks*

## Non-listed Worker Accountability

- **Alternate accountability** – By having a contractor responsible person specified by the outside employer who tracks and communicates with all non-listed individuals who intend to work on the facility's equipment. This person could be a contractor superintendent, crew foreman, project coordinator, or any other responsible individual associated with the group.



*Contractor Responsible Person*



# LOTO Process



# Isolation



## Equipment Isolation





## Active LOTO

# Individual Holders



## **LOTO Holder** *(Plant Authorized Employees)*



# LOTO Coordinator



## **LOTO Coordinator** *(Non-listed worker point of contact)*



# LOTO Coordination

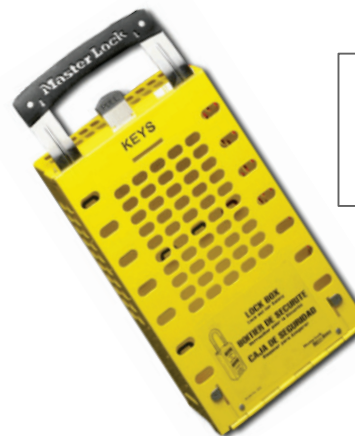


## LOTO INFORMATION TAG

NAME: \_\_\_\_\_  
CONTACT #: \_\_\_\_\_  
COMPANY: \_\_\_\_\_  
Check if Applicable  
**LOTO COORDINATOR**  
 3rd Party Grounds Installer (TPGI) Quantity: \_\_\_\_\_  
**SATELLITE BOX**  
 Maintenance Release  
**NON LISTED VISITOR**  
 Alternate Accountability Responsible Person  
5-879 Rev 12/2018



or

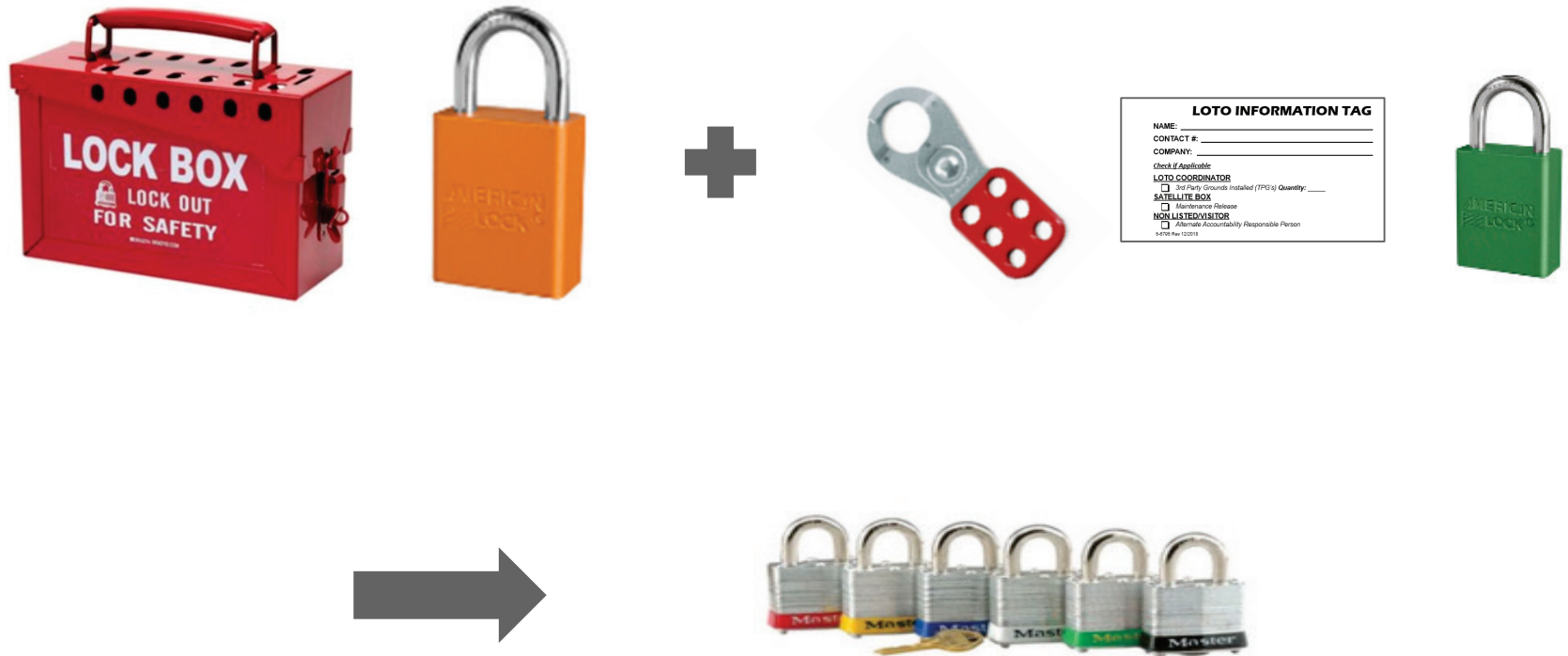


## LOTO INFORMATION TAG

NAME: \_\_\_\_\_  
CONTACT #: \_\_\_\_\_  
COMPANY: \_\_\_\_\_  
Check if Applicable  
**LOTO COORDINATOR**  
 3rd Party Grounds Installer (TPGI) Quantity: \_\_\_\_\_  
**SATELLITE BOX**  
 Maintenance Release  
**NON LISTED VISITOR**  
 Alternate Accountability Responsible Person  
5-879 Rev 12/2018



# Individual Accountability (HASP)



# Individual Accountability (Satellite Boxes)

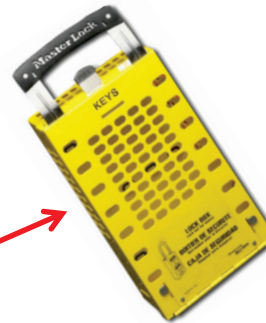
- Designated Operating Area



**Yellow  
Lock #1**

LOTO INFORMATION TAG	
NAME:	_____
CONTACT #:	_____
COMPANY:	_____
Check if Applicable:	
LOTO COORDINATOR	<input type="checkbox"/> 3rd Party Grounds Installed (TPG) Quantity: _____
SATELLITE BOX	<input type="checkbox"/> Maintenance Release
NON LISTED VISITOR	<input type="checkbox"/> Alternate Accountability Responsible Person
6-1916 Rev 12/2016	

- Satellite Location  
(Maintenance Shop, Coordinator Trailer, etc.)



LOTO INFORMATION TAG	
NAME:	_____
CONTACT #:	_____
COMPANY:	_____
Check if Applicable:	
LOTO COORDINATOR	<input type="checkbox"/> 3rd Party Grounds Installed (TPG) Quantity: _____
SATELLITE BOX	<input type="checkbox"/> Maintenance Release
NON LISTED VISITOR	<input type="checkbox"/> Alternate Accountability Responsible Person
6-1916 Rev 12/2016	



**Satellite  
Box #1**





# Alternate Accountability



# Temporary Protective Grounds (TPGs)

This following section provides guidance on standardizing installation of Temporary Protective Grounds (TPGs) installed by Transmission and other external personnel on plant controlled equipment. Specifically:

- Establishes a clear process for protecting workers installing TPGs.
- Establishes clear communication between Generation and Transmission during an overlapping Plant LOTO and switching order.
- Establishes clear communication between the LOTO Coordinator and non-listed personnel installing TPGs.
- Ensures safety of all personnel working under the protection of a Plant LOTO.
- Documents and tracks individuals or crews hanging TPGs.
- Ensures TPGs are tracked and returned prior to returning equipment to service position.



# Temporary Protective Grounds (TPGs)

## Performing work with TPGs

- LOTO Coordinator secures the master lockbox with a coordinator lock (green lock).

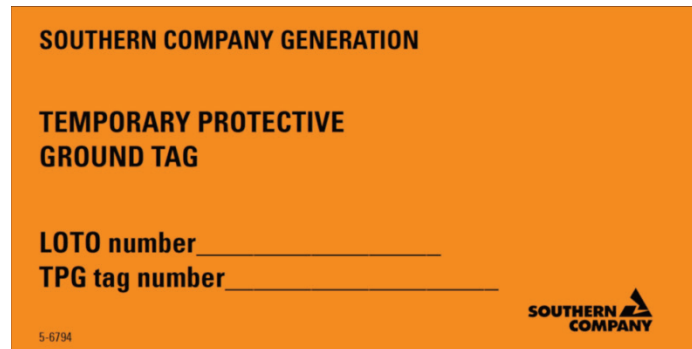


- LOTO Coordinator determines if third-party grounds are required.

# Temporary Protective Grounds (TPGs)

## Performing work with TPGs

- LOTO Coordinator obtains TPG tags (orange) from the operating area leader (OAL).



- OAL indicates (TKPro) the LOTO coordinator's name and time/date the tags were issued. The TPG Tag Tracking index remains in the electronic file as part of the LOTO documentation.
- OAL shall prepare the appropriate number of TPG tags (orange) by writing the associated LOTO and tag number on the tag(s) in ink.



# Temporary Protective Grounds (TPGs)

## Performing work with TPGs

- LOTO Coordinator performs a pre-job briefing with the third-party qualified person.
- Third-party qualified person secures lockbox (hasp or satellite as needed) behind the coordinator lock with a non-listed (Non-listed visitor or Contractor) lock.



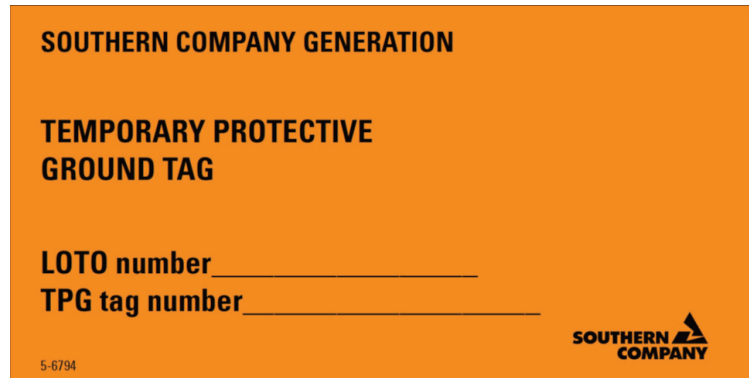
# Temporary Protective Grounds (TPGs)

## Performing work with TPGs

- Third-party qualified person performs walkdown with the LOTO coordinator and verifies the absence of energy.

*\*NOTE: Use device properly rated for voltage.*

- Third-party qualified person installs grounds and TPG tags (orange).



- Proceed with maintenance or servicing activity.

If you have any questions and unsure how to proceed or if concerns arise, **STOP!** and contact your LOTO Coordinator!





**QUESTIONS ?**