

ACKNOWLEDGEMENT

I acknowledge receipt of the Company Lockout and Tag Out Procedure Manual and I agree to comply with the rules, practices and methods contained in this manual.

Signature _____

Dated _____



Purpose

This establishes **Southern Electric and Controls, LLC** policy for protecting employees who must do service or maintenance on machines or equipment and who could be injured by an unexpected start-up or release of hazardous energy. Service or maintenance includes erecting, installing, constructing, repairing, adjusting, inspecting, unjamming, setting up, trouble-shooting, testing, cleaning, and dismantling machines, equipment or processes.

This policy will ensure that machinery or equipment is stopped, isolated from all hazardous energy sources, and properly locked or tagged out.

Scope

This policy applies to all **Southern Electric and Controls, LLC** employees who may be exposed to hazardous energy during service or maintenance work. Uncontrolled energy includes potential, kinetic, flammable, chemical, electrical, and thermal sources.

Employer and employee responsibilities

Southern Electric and Controls, LLC is responsible for implementing and enforcing this policy.

All employees must comply with this policy.

Supervisors must enforce the use of lockout and tagout devices when employees do construction, service, or maintenance work and may be exposed to hazardous energy.

Employees who do construction, service, or maintenance work must follow the lockout/tagout procedures described in this policy.

Employees who work in areas where lockout/tagout procedures are used must understand the purpose of the procedures and are prohibited from attempting to restart machines or equipment that are locked or tagged out.

Lockout and tagout devices

Lockout and tagout devices must meet the following criteria to ensure that they are effective and not removed inadvertently:

- Lockout devices must work under the environmental conditions in which they are used. Tagout device warnings must remain legible even when they are used in wet, damp, or corrosive conditions.

- Lockout and tagout devices must be designated by color, shape, or size. Tagout devices must have a standardized print and warning format.
- Lockout devices and tagout devices must be strong enough that they can't be removed inadvertently. Tagout devices must be attached with a single-use, self-locking material such as a nylon cable tie.
- Any employee who sees a lockout or tagout device must be able to recognize who attached it and its purpose.
- Each lock must have a unique key or combination.

Energy-isolating devices are the primary means for protecting **Southern Electric and Controls, LLC** employees who service equipment and must be designed to accept a lockout device or work in construction environments where energized circuits must be deenergized. Energy isolating devices must clearly identify function.

Electrical energy sources. Lockout or tagout of electrical energy sources must occur at the circuit disconnect switch. Electrical control circuitry does not effectively isolate hazardous energy.

Exposure survey

Southern Electric and Controls, LLC will conduct a hazardous-energy survey to determine affected machines and equipment, types and magnitude of energy, and necessary service and maintenance tasks. Each task will be evaluated to determine if it must be accomplished with lockout or tagout procedures.

Energy control procedures

Basic rules for using lockout or tagout system procedures

- All energy sources to fixtures, equipment, circuits, and or machinery shall be locked out or tagged out to protect against accidental or inadvertent operation when such operation could cause injury to employees.
- Note that isolating a piece of equipment from its source may not eliminate all potential hazards. Stored energy may be present within the equipment or machinery.
- Do not attempt to operate any switch, valve or other energy isolation device when it is locked or tagged out.
- Never remove a lock or tag for another employee. Only the employee placing the lock or tag may remove it. If there is a need to remove another employee's lock or tag in an emergency, only the immediate supervisor may do so after making every effort to contact the owner of the tag.

Sequence to lock out or tag out

- The supervisor shall make a survey to locate and identify all isolating devices to be certain which switch(s), valve(s), or other energy-isolating devices apply to the equipment or circuit

to be locked or tagged out. More than one energy source (electrical, mechanical or others) may be involved.

- Verify the written energy control (shutdown/startup) procedure attached to the equipment or machinery, make necessary changes, supply the written procedure in the absence thereof, and send a copy of the procedure or changes to an existing procedure to the project manager for review.
- The supervisor shall notify all affected employees and site personnel that a lockout or tagout system is going to be utilized and the reason for that action. The superintendent shall know the type and magnitude of energy that the machine, energy or circuit utilizes and shall understand the hazards thereof.
- If the machine or equipment is operating, shut it down by the written energy control (shutdown) procedure attached to the equipment or machine (depress stop button, open toggle switch, etc).
- Operate the switch, valve or other energy-isolating device(s) to ensure that the equipment is isolated from its energy source(s). Stored energy (such as that in a spring, elevated machine members, rotating flywheels, hydraulic systems and air, gas, steam and water pressure, etc.) must be dissipated or restrained by methods such as repositioning, double blocking and bleeding down, etc.
- Lockout and/or tagout the energy-isolating devices with assigned individual lock(s) or tag(s). Tags shall indicate that the energy-isolated device(s) shall not be operated until after the removal of the tag.
- After ensuring that no personnel are exposed, and as a check on having disconnected the energy sources, operate the push button or other normal operating controls to make certain the equipment will not operate.
- Caution: Return operating control(s) to "neutral" or "off" position after the test.
- The equipment is now locked or tagged out.

Restoring machines or equipment to normal production operations

- After servicing and or maintenance is completed and the fixture, equipment or machinery is ready for normal operation, check the area around the fixture, equipment or machinery to ensure that no one is exposed.
- After all tools have been removed from the fixture, equipment or machinery, guards have been reinstalled and employees are in the clear, remove all lockout or tagout devices. Notify all affected persons that the lockout or tagout has been removed. Operate the energy isolating devices to restore energy to the fixture, equipment or machinery following the written energy control (startup) procedure.

Procedure involving more than one person

- In the preceding steps, if more than one employee is required to work on the equipment or machinery, each shall place his/her own personal lockout device and/or tagout device on the energy isolating device(s). When an energy isolating device cannot accept multiple locks and tags, a multiple lockout or tagout device (box or hasp) may be used.

- If lockout is used, a single lock may be used to lock out the machine or equipment with the key being placed in a lockout box or cabinet which allows the use of multiple locks to secure it. Each employee will then use his/her own lock to secure the box or cabinet. As each person no longer needs to maintain his or her lockout protection, that person will remove his/her lock from the box or cabinet.
- When work must continue over a shift change, the supervisor or lead foreman must ensure that all associates are aware of which locks are to be replaced or left in place. All employees in the oncoming shift must be informed of the lockout/tagout conditions.

Special lockout/tagout situations

Energized testing

When an energy-isolating device is locked or tagged and it is necessary to test or position equipment, do the following:

1. Remove unnecessary tools and materials.
2. Ensure that all other employees are out of the area.
3. Remove locks or tags from energy isolating devices.
4. Proceed with test.
5. Deenergize equipment and lockout or tagout energy-isolating devices.
6. Operate equipment controls to verify that the equipment is de-energized.

Contract service and maintenance

Southern Electric and Controls, LLC and contractors must be aware of their respective lockout/tagout procedures before the contractor does onsite work. **Southern Electric and Controls, LLC** employees must understand and comply with the contractor's energy-control procedures.

Alternative methods

When lockout or tagout is *not* used for tasks that are routine, repetitive, and integral to the production process, or prohibits the completion of those tasks, then an alternative method must be used to control hazardous energy.

Selection of an alternative control method must be based on a risk assessment of the machine, equipment, or process. The risk assessment must consider existing safeguards provided with the machine, equipment or process that may need to be removed or modified to perform a given task.

For example, when control circuits are used as part of the safeguarding system, the system must be designed to ensure protection as effective as a mechanical disconnect switch or master shut-off valve. A control-reliable dual channel hardwired circuit of industrially-rated components that satisfies the design features as specified in ANSI B11.19, with a safety relay or safety PLC to ensure integrity and performance of the safeguarding system, must be used.

Under all circumstances, the individual must have exclusive personal control over the means to maintain the state of the control circuit in a protective mode.

Training

Employees who may be exposed to hazardous energy will receive training before assignment to ensure that they understand **Southern Electric and Controls, LLC** energy-control policy and have skills to apply, use, and remove energy controls. The training will include the requirements of 1910.147 and the following:

- Affected employees will be trained in the purpose and use of energy-control procedures.
- Authorized employees will be trained to recognize hazardous energy sources, the type and magnitude of energy in the workplace, the methods and means necessary for isolating and controlling energy, and the means to verify that the energy is controlled.
- Employees whose jobs are in areas where energy-control procedures are used will be trained about the procedures and the prohibition against starting machines or re-energizing circuits that are locked or tagged out.
- Employees will be retrained annually to ensure they understand energy-control policy and procedures.
- Authorized and affected employees will be retrained whenever their job assignments change, energy-control procedures change, equipment or work processes present new hazards, or when they don't follow energy-control procedures.

Current training records will be maintained for each authorized and affected employee including the employee's name and the training date.