EFCOG BEST PRACTICE #180

Best Practice Title: Lockout Tagout Applicability to Physical Separation

Facility: DOE Complex

Point of Contact:
Gregory Christensen, Phone: (208)526-5380, email: gregory.christensen@inl.gov
Michael D Hicks, Phone: (208)526-3724, email: HICKSMD@id.doe.gov
Richard Caumissar, Phone: 806-477-6706 email: richard.caummisar@npo.doe.gov

Brief Description of Best Practice: Physical Separation is achieved when the conductors have been unterminated and removed at the source of energy (i.e., disconnect switch, panel board, junction box, etc.) and tools and/or materials are required to re-terminate the equipment.

Why the best practice was used: The applicability of Lockout Tagout to equipment that has been physically separated from a source or energy needed clarification.

What are the benefits of the best practice: This Best Practice will clarify applicability of Lockout Tagout to equipment that has been physically separated from a source of energy.

What problems/issues were associated with the best practice: No consistent guidance applied to complex.

How the success of the Best Practice was measured: Success will be measured by the use of this Best Practice into DOE complex operating procedures.

Description of process experience using the Best Practice: N/A

LOCKOUT TAGOUT APPLICABILITY

TO PHYSICAL SEPARATION

Problem: The applicability of Lockout Tagout to equipment that has been physically separated from a source or energy needs to be clarified.

Definition: Physical Separation is achieved when the conductors have been unterminated and removed at the source of energy (i.e., disconnect switch, panel board, junction box, etc.) and tools and/or materials are required to re-terminate the equipment (see Condition 1 below). This does not include opening of disconnect switches, circuit breakers or removal of fuses.

Note: Physical Separation should be identified by tags or configuration management documentation.

Condition 1

Condition 1: LOTO does not apply when the conductors are unterminated from the source(s) of energy (supply side). To meet the intent for Condition 1, entire removal of the conductor or removal of a section of the conductor such that the conductor cannot be re-terminated is required.

Examples for Condition 1:

1. LOTO is not required for new construction until the equipment under construction is terminated to a source of energy.
2. LOTO is not required for demolition activities after physical separation is achieved.

Condition 2

Condition 2: LOTO does apply when conductors are unterminated from the equipment (load side).

Example for Condition 2:

3. LOTO is required for maintenance activities (i.e., replacement of motors or other electrical equipment, etc.) Physical Separation for maintenance activities shall not be a substitute for LOTO.