

Hazardous Energy Control Working Group

2017 Closing Summary

2017 HEC Workshop Participants

Ben Amodeo

Stephanie Collins

Richard Jensen

Jerald Kinz

Daryl Magers

Phillip Mar

Mark Mathews

Dave Mertz

Russ Moder

Mark Muir

James Parham

Gary Sanchez

Scott Semanision

Jonathan Sims

Eric Stromberg

Richard Waters

Rodney Wolf

* 9 different sites represented

HEC Goals and Priorities for Workshop

1. Complete Final Draft of LOTO Program Requirements Guide
2. Determine 2018 ES Month topic and develop materials
3. Develop Look Alike Equipment Best Practice Proposal

Working Group Schedule

Tuesday (AM)

- Brief new participants on objectives
- Provide background information regarding challenges
- Set timelines for deliverables
- Commit to groups and assign experienced HEC member responsible focusing team to meet deliverable requirements

Tues (PM) – Wednesday

- **Do the work**
- Teams present progress to HEC group for critique and questions
- Reconcile feedback into deliverables
- Submit summary input for presentation

LOTO Program Guide

LOCKOUT / TAGOUT

Program Requirements Guide

- The ESTG and subsequently the HEC group was tasked with reviewing and consolidating lockout and tagout regulatory requirements.
- Initially the task was to develop a skeleton LOTO procedure that complied with minimum regulatory requirements.
- The group modified the task to develop guidelines based on minimum regulatory requirements on which a compliant LOTO procedure/program could be built.

LOCKOUT / TAGOUT

Program Requirements Guide

- **The first day was spent reviewing the draft guidelines and comparing them to the identified requirements.**
- **Multiple comments were debated and discussed.**
- **Day two the group was presented with the incorporated comments and further discussion continued until consensus agreement was obtained. One final review is scheduled after the workshop due to a key member not being present.**

LOCKOUT / TAGOUT

Program Requirements Guide

- This guide was developed as an aid for DOE facilities to help ensure that their site Lockout and Tagout (LOTO) program meets the minimum regulatory requirements.
- The minimum requirements are based on the consensus opinion of the Hazardous Energy Control (HEC) subgroup of the Energy Facility Contractor Group – Electrical Safety Task Group (EFCOG-ESTG).

2018 Electrical Safety Month

May 2018 Electrical Safety Month

- **Considered Topic Options**

Lithium Ion Batteries – Planned for 2017

Select new topic based off HEC trends

- **Make a decision**

- **Determine the Audience**

- **Develop Materials appropriate for the audience**

Electrical Safety Month

Lithium Ion Battery Hazards



PRODUCTS

General audience Li-ion battery safety poster

General audience Li-ion battery safety brief slideshow

Electrical worker Li-ion battery safety brief slideshow

Look-Alike Equipment

Look-Alike Equipment

Areas for improvement

- Temporary labeling to reflect current equipment status (de-energized/energized)
- Equipment ID and highest voltage labels outside equipment access
- Barricades and signage following ANSI standards
- Use of Attendants
- Examples of proper barricades and signage – showing what “Good” looks like

Look-Alike Equipment

- **Group shared incidents and near misses that involved Look-Alike equipment**
- **Members shared what they were currently using or had used with their previous organizations that had positively or negatively impacted human performance and the outcome.**
- **Searched for examples of Look-Alike Equipment signs – found none. Generated our own examples of signs that could be used**
- **Used Hammer worker trainer rooms to stage equipment spaces showing how Signs and barricade tape would be used together to delineate Look-Alike equipment and which equipment workers should be working on and staying away from (Flagging) to assist in resolving Human Performance errors**

Look-Alike Equipment

- **Presented to Group**
- **Discussed methodology**
- **Listened to concerns and tried to stay away from language that meant something to one facility/site versus another**
- **Heavy discussion surrounding the use of signs on de-energized/equipment under maintenance – consistent with DOE Handbook on Human Performance**

Continuing Work:

LOTO Program Requirements Guide:

- Completion and posting of the guideline to the EFCOG website is expected after a focused review by the ESTG executive committee.
- Posting is tentatively scheduled for the end of September 2017.

ESM: Battery Materials developed

- Would assist with developing additional material to reverse negative LOTO trends – once needs are more defined – shouldn't wait until next May to address.

Look-Alike Equipment BPP – draft completed, may need more refinement and examples of use.

- Submit to ESTG executive committee by September.

Questions?

Two Habits That Work

