

# Working Group #3 – Subcontract Work

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Objectives (1 and 2 combined)

- 1 Electrical Safety Compliance Resource web site
  - a) Universal web-based tool for effective work planning
  - b) Build and Share Best Practices Collection for 851 Compliance
- 2 Proposal for Code and Standard updates to become the norm

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# EFCOG Working Group #3

## Objective 1.a

Universal web-based tool for  
effective work planning

# Work Planning and Hazard Control Tool

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- This tool is for demonstration purposes, it is not vetted for use by DOE contractors.
- <http://apps.ctc.com/eseafe-pro/>

# Strategy for 1.a

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- Identify a DOE or M&O host
- Obtain the source code/platform for the DOD tool
- Identify an EFCOG team to load desired material and validate functionality
- Beta test resource at select sites, revise if needed
- Prepare for full release – “press release” to sites, with POCs (AHJ or delegate) etc.
- Garner high level support and visibility through execution of Objective 2 using the Lab Management Council, PSOs and other executive level communications
- Long term management proposed as a NNSA “Corporate Behavior” activity.

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# EFCOG Working Group #3

## Objective 1.b

Build and Share Best Practices  
Collection for 851 Compliance

# Vision of Objective 1.b

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Compilation of tools, techniques and processes to utilize for continuous improvement of 851 compliant electrical (both M&O and Subcontracted) work

- Simple, “grab and go” type tools to aid ESOs, work planners, project planners and oversight personnel responsible for safe execution of electrical work
- The “go to site” for electrical work

# Vision of Objective 1.b cont.

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## Examples

- Corporate (DOE Complex) bin
  - Severity Index Tool
  - Handbook
  - Safety Practices (supply and location of AEDs)
- Training Resources for Subs and others
- General Tools for work execution
  - Smart Card (cheat sheet from JHA for field use)
  - Hazard class specific “cheat sheets” (class-specific guide or checklist for work scoping and planning)
- Subcontract management tools
  - Training verification and validation tools
    - WSHP, LOTO, DOPs
  - Previous site/DOE experience of work provider
  - Equipment (Tools and PPE) validation for scope of work

# Strategy for Achieving 1.b

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- Subgroup 3 will build the initial collection, host on same web site with the tool
- Tools and other articles can be submitted to the subgroup, periodic updates
- Subgroup will revisit and review use of the tool each year at the EFCOG committee meeting
- All items will be provided with a short description and credits to the site/contractor that developed the item
- Options for hosting this document server:
  - NTC – NNSA has a large IT contingency in ABQ and NTC already hosts the online training and reciprocity database
  - One of the NNSA labs, under the guise of the “corporate behavior incentive fee activities”
  - Other suggestions??



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# EFCOG Working Group #3

## Objective 2

Proposal for Code and Standard updates to become the norm

# Vision of Objective 2

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- All DOE sites are implementing either the latest versions of NEC and 70E, or one revision back
- Web based tool(s) available for use by all M&O and subcontract work providers
  - Implement and build on best practices already in place.
  - Streamline 851 compliance for consistently high performance
- Establish a basis for continuous improvement and a model for other 851/WSHP segments
  - Decision paper to Lab Management Council and DOE PSO's.

# Road Map of Electrical Safety Requirements in 851

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- 10 CFR 851 (2006)
  - NFPA 70 – 2005 (currently at 2014 – 2017 in process)
  - NFPA 70E – 2004 (currently at 2015 – 2018 in process)
    - 70E-2009 requires revision of maintenance program to include overcurrent devices, 70B is a guide
    - 70E-2015 adds further standards as guides
  - 29 CFR 1910 (S) (operations)
  - 29 CFR 1926 (K) (construction)
- DOE G 440.1-1B (2011)
  - DOE HDBK-1092-2004 (superseded by 2013)
  - Each DOE prime contract WSHP

# GOAL – Drive Consistent and Efficient 70 E

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- Current DOE status of 70 E compliance
  - 2004 – 8 sites: SRS, SLAC, ORP, PNNL, ANL, BNL, ORNL (partially on 2012), FNAL
  - 2009 – 4 sites: JLAB, RL, INL, LLNL
    - JLAB =>2012
  - 2012 – 6 sites: NREL, PORTS, PTX, SNL, LBNL, PPPL
    - NREL, PTX, LBNL, PPPL, LLNL => 2015
  - 2015 – 5 sites in process (above)

# GOAL – Provide existing data and business cases for efficient 70 E revision adoption

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- Gather completed impact analyses from all sites on all revisions after 2004
- Maintenance Program Status relative to 70E?
  - Who does / does NOT have a documented maintenance program that is faithfully executed
  - Who is using or transitioning to 70B (Current Version – 2016)
  - ?? TBD for the Winter 2016/17 meeting
- Complex-wide metrics should be considered for this and other key program effectiveness.

# Strategy for 2

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- ***Include in next DOE Electrical Safety Handbook revision, a recommendation to update code and standard revisions at all sites as timely as possible, but no more than one revision back from the most recently released version.***
- ***EFCOG leadership and DOE to garner high level support through NNSA/DOE and Office of Science federal and M&O staff engaged in EFCOG.***

# Focus on 2017

- ***Investigate the DTI/NTC as an accreditation mechanism for outside NFPA70E training***
- ***Develop an implementation plan to stand up DOE HDBK Appendix D (Hazard Analysis) tool on NTI***
  - ***Translate 'hazard' categories to 'risk' categories***
  - ***Translate the risk categories into Work Authorization Levels (this should ultimately translate to the assumed liability on behalf of the subcontractor)***
- ***\*Consider\* standing up a LOTO program (again, hosted by the NTC) that Subcontractors - especially those who deal frequently with the National Labs – could adopt***