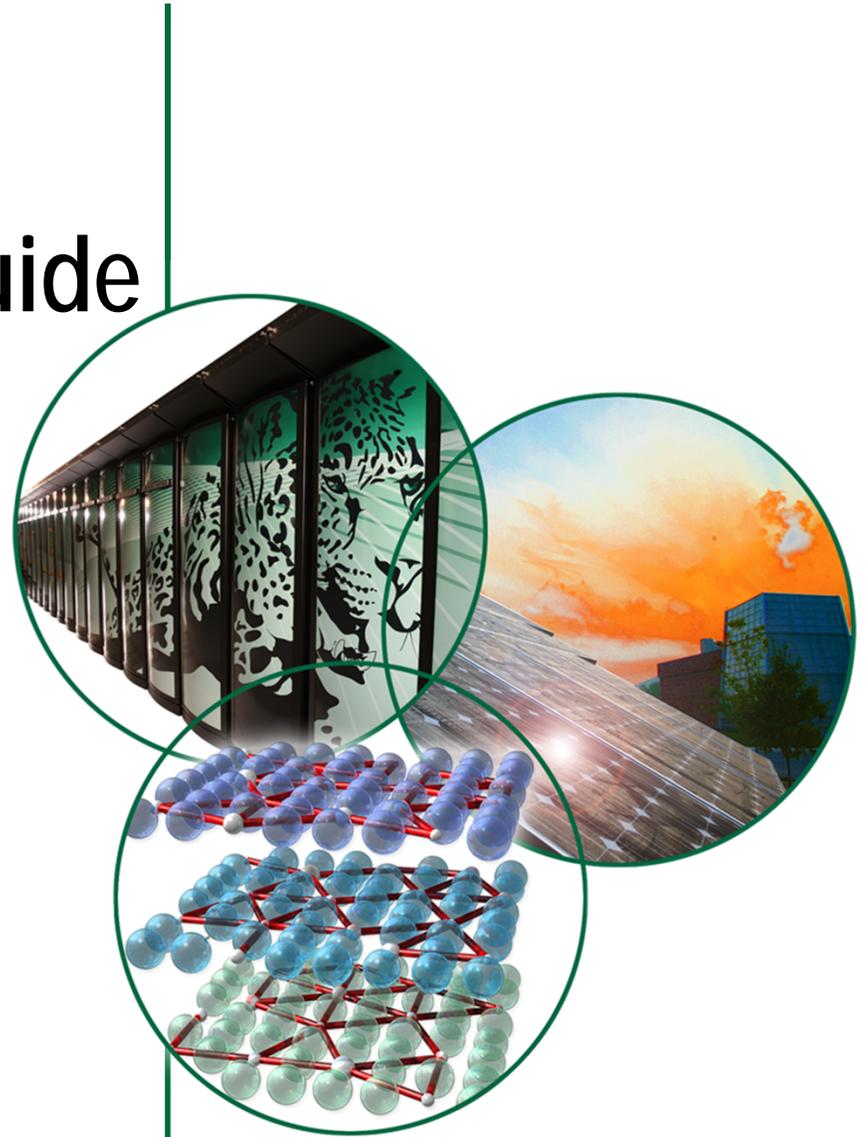


Accelerator Safety Guide Update Status and Planning

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Accelerator Safety Workshop
Tuesday Sept. 20, 2011



U.S. DEPARTMENT OF
ENERGY

 **OAK RIDGE NATIONAL LABORATORY**
MANAGED BY UT-BATTELLE FOR THE DEPARTMENT OF ENERGY

Guide Update – Motivation/Drivers

- Order 420.2C *Safety Of Accelerator Facilities* issued July 2011
 - Present Guide issued in 2005; specifically to address Order 420.2B
 - Significant differences between 420.2C and 420.2B makes Guide obsolete
 - 420.2C form and structure changed significantly
 - Some key drivers behind 420.2C revision:
 - Streamline to a minimum set of requirements for safe operations
 - Provide the essential definition of accelerator facilities
 - Provide clear roles and responsibilities
 - Ensure no duplication with other laws, orders, or requirements
 - 420.2C less specific (e.g. exemptions, procedures, training, etc.)
 - Changes in how potential for criticality is handled (equivalency vs. exclusion)
 - Guide To Address Details

Guide Update – Motivation/Drivers (Con't)

- REVCOM – Order Comment/Resolution Process
 - Several comments raised issues best addressed in Guide. Comment resolutions included commitments to address concerns in the Guide.
- Accelerator Community Landscape Has Evolved Since 2005
 - Evolution in technology, concepts, best practices, etc.
 - Changing emphasis areas (Conduct of Operations, Contractor Assurance Program, etc.)

Guide Update – Motivation/Drivers

- Several Topics in Order 420.2C Not Addressed In 2005 Guide Examples:
 - Equivalency Statement (420.2B used “exclusions”)
 - New Accelerator Safety Program Items
 - Roles and Responsibilities
 - Listing of Exempt Facilities
 - Contractor Assurance
 - Configuration Management
 - Approvals - more specific (e.g. 1 Rem/ERPG-2 approval authority trigger)
 - Several definitions introduced

Process – Build on Success of Order 420.2C Revision

- Collaborative process established to support revision of 420.2C
- Representatives from DOE-SC HQ, DOE Field Offices, and Contractors from various labs participated:
 - ANL
 - JLAB
 - LBL
 - INL
 - LANL
 - ORNL
 - FERMI
 - BNL
 - SLAC
 - SANDIA
- Regular conference calls (Weekly/Bi-Weekly)
- Writing Workshop – roll up sleeves, work together (very productive)
- Community Input – Accelerator Safety Workshop

Status - Progress

- Nov 2010, Guide “kick-off” meeting held in Chicago
 - Representatives from DOE-SC HQ, DOE Chicago, BNL, Berkley and ONRL
 - Strawman Outline drafted – Basic structure unchanged; changes in detailed structure
 - Draft Schedule and Milestones Assembled
 - Strategy for Task/Writing Groups proposed
- July 2011, Order 420.2C Issued
- Summer 2011 - Series of Conference Calls Held to Mature Draft Outline
- September 22 – ASW Breakout Sessions to Discuss Draft Outline Structure and Content

Status – Some Concepts

- Address Order 420.2C requirements
- Integrate new definitions consistent with Order 420.2C
- Address REVCOM Comments as appropriate
- Propose to address additional topics believed to be of value to community – consistent with 2005 Guide approach.
 - Implementation of COO
 - Safety systems unique to accelerators (e.g. access control)
 - Experimental Activities
- Tailored Approach – retain concept, weave throughout, emphasize – be sensitive that Guide might be viewed as audit tool.

Draft Guide Outline – Forward

- “This document is an aid to understanding and meeting the requirements of DOE O 420.2B, Safety of Accelerator Facilities (7/23/04). It **does not impose requirements** beyond those stated in that Order or any other DOE Order. An accelerator safety program may not need to fully implement all sections of this guidance to satisfy the requirements of DOE O 420.2B; **a tailored approach, based on the complexity of the accelerator facility, can be used** when applying this document. The Guidance is **not intended as an audit/assessment tool** and should not be used as such without prior agreement between the contractor and DOE.”

Status – Draft Outline

- Guide Outline Parsed Into Logical Sections for Writing Teams
 - Introduction – Don Cossairt and Dennis Parzyck
 - Pre-Operations – David Freeman
 - Operations – Ed Lessard
 - Post Operations – Doug Paul
- Writing Teams
 - Seek to balance each team with DOE and Contractor representatives from both single purpose and multipurpose laboratories

Strawman Schedule Overview

- November 17, 2010 – Guide “kick-off” meeting held in Chicago
- July 22, 2011 – Order 420.2C Issued
- July to Present – Weekly/Bi-Weekly Conference Calls
- September 2011- Draft Guide Update Outline Proposed
- September 20 to 22, 2011 – Gather Community Input; ASW Breakouts Sessions
- March 2012 (?) – Writing Workshop
- Fall 2012 – Near Final Draft (ASW 2012)

Draft Guide Outline – Thursday Breakouts

- David – present overview of Draft Guide Outline (Word Version)

- Briefly review content in session

