



# Status of STD 1189

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HS-21

November 6, 2007

# Top Level Concerns

- Feedback from top level DOE reviewing organizations:
  - Science will non concurr
  - NE issue of applicability of 1189 to facilities to be licensed by NRC
  - EM, satisfied with resolution of comments, but may join CNS concerns
  - NNSA/CDNS, general statement of concerns
  - CNS, general statement of concerns (joined CDNS)
- DNFSB still in review

# Office of Science

- Concern with costs to DOE for implementation of 1189
  - Availability of competent staff to review 1189 submittals (CSDR, PSDR, PDSA) and budgeting for that staff. Need to assure DOE management recognizes and provides resources to field offices
- Overconservatism in Appendix A safety classification criteria for collocated workers
  - 100 rem at 100 m will drive costs up
  - Need for more discussion of relief from initial conservative design positions of conceptual design
- Type B containers and preliminary hazard categorization at conceptual design vs. STD-1027
  - 1189 says do not depend on Type B's to reduce MAR for HC at conceptual design stage
  - 1027 says Type B's can be used to reduce MAR for preliminary HC

# Nuclear Energy

- INL is adamant that 1189 should not be applied to facilities to be licensed by NRC
- Those facilities might be designed and constructed under O 413.3A, which will require 1189
- Current draft says DOE and NRC should work together to establish an appropriate set of safety standards (ref. App. A-D) and assure they are consistent with NRC licensing requirements
- 1189 safety integration process thought to be useful and protective of DOE investment
- NRC licensing requirements for non reactor nuclear facilities are not as evolved as for reactor facilities
- Final NE position on this issue not yet clear

# CNS and CDNS/NNSA

- Unclear requirements and guidance for DOE staff and ambiguity in fed (hq and field) and contractor roles and responsibilities
  - What is required of whom and when
  - Acceptance guidance and criteria
- Use of should, must, may throughout 1189 is confusing
- Incomplete regulatory basis
  - O 413.3A, its CRD and 413.3-X guides
  - Updates for related DOE guides and standards
- “Lacks tangible lessons learned from past mistakes”
  - OECM-sponsored Root Cause meeting, 10/27
  - Appears that most root cause findings are project management related, maybe not amenable to 1189 fix
- Risk and Opportunities content of 1189

# Formation of Special 1189 Task Group

- Define current project/safety system in use
- Define the 1189 system for project/safety integration
- Map 1189 to project management requirements
- Examine one or two pilots
  - Define issues that need resolution
  - Define solutions
    - Improvements to 1189
    - Open items for O 413.3A and its guides

# Team Membership

## DOE HQ and Field

- Tim Arcano, CNS
- Pat Cahalane, CDNS
- Andy De La Paz, LSO
- Roland Frenck, NA
- Guy Girard, ID
- Jim Goss, YSO
- Darrell Huff, NE
- Carol Sohn, SC
- Ruben Sanchez, OECM

## 1189 Writing Team

- Dick Englehart, HSS
- Brad Evans, PNL
- Mike Grigsby, CH2M Hill Hanford
- Bob Lowrie, WSMS
- Rich Salizzoni, WSRC
- Andrew Vincent, WSRC
- Ken Keith, Y-12

## Observers/Backup

- Teresa Robbins, YSO
- Scott Cannon, NNSA OR
- Bill Van-Pelt, WSRC
- Steve Stokes, DNFSB

# DNFSB Staff Review (preliminary indications)

- 1189 provides adequate requirements and guidance for the integration of safety in design
- Need a list of associated Orders, Standards, and Guides that need revision because of 1189, and a resource loaded schedule for development
- Need a list of items that O 413.3A or other guides and standards need to handle (out of scope for 1189), e.g., Design Requirements Document, Design Authority, Design Agent
- 1189 specific issues
  - Seismic – SDC 2 Limit State guidance
  - ARFs and Appendix A (bounding vs. reasonably conservative)
  - Appendix B chemical classification (mandatory vs. guidance)

# Updates for Guides and Standards

- DOE G 420.1-1, *Nonreactor Nuclear Safety Design Criteria and Explosive Safety Guide* for use with DOE O 420.1 Facility Safety
- DOE G 420.1-2, *Guide for the Mitigation of Natural Phenomena Hazards for DOE Nuclear Facilities and Nonnuclear Facilities*
- DOE G 421-1-2, *Implementation Guide for Use in Developing Documented Safety Analyses to Meet Subpart B of 10 CFR 830*
- DOE-STD-1020, *Natural Phenomena Hazards Design and Evaluation Criteria for Department of Energy Facilities*
- DOE-STD-1021, *Natural Phenomena Hazards Performance Categorization Guidelines for Structures, Systems, and Components*
- DOE-STD-3009, *Preparation Guide for U.S. Department of Energy Nonreactor Nuclear Facility Safety Analysis*
- DOE-STD-1104, *Review and Approval of Nuclear Facility Safety Basis Documents*

# OECM Guides Status

- Drafts received for 7 guides
- Guides with important 1189 intersections
  - Managing Design and Construction
  - Tailoring\*
  - Risk Management
  - Project Execution Plan\*
  - Integrated Project Team

\* received, and reference 1189