

CSSG Meeting
31Aug – 01Sep16
DOE Germantown, MD

Present: David Hayes, Kevin Kimball, Bob Wilson, Tom McLaughlin, Jim Morman, Jerry Hicks, Mickey Brady-Raap, David Erickson, Jerry McKamy, Mike Dunn, Angela Chambers, Ryan Eul (1SEP16)

Welcome

David Erickson/Jerry McKamy

2015-02: DOE-STD-3007 Revision

Kevin Kimball

A rough draft has been provided to the EFCOG and CSCT groups. ~120 comments received so far, and Monday/Tuesday revised based on those comments. The comments were sorted to address the most controversial first. Some statements expanding on the standards were added, a 'good' comment was to just quote the standard. Definitions for 'unlikely' and 'credible' were removed to not confuse with the SB standard. However, credible is going back in to resolve some other inconsistencies.

Appendix B is elevation of controls to DSA. Appendix C addresses evaluation of Design Basis Events, and allows dismissal of 'smart' NPH events. Beyond 'design basis' is considered not credible, therefore no evaluation necessary.

Could add a discussion of hierarchy to fight a fire in the NPH appendix. May be counter to STD-1066, but that is for the future to resolve.

(from validation discussion) Add MCNP/SCALE acceptability text into STD-3007 revision.

2015-04 DOE-STD-1020

Kevin Kimball

Section 2.2.2.9 has been added. Points to 420.1C and then says dose is only impact criteria. However, points to Table 2.1 and that added a Facility Worker column that indicates NDC-3 for > 100 rem TED, etc. Based on significant discussion this was removed, however, the understanding is that it is back in, as a footnote.

'Final' should be in RevCom today. Will work with Pranab, etc. to remove that portion of the footnote.

Need to get CSSG engaged in DOE-STD-1066

Action: *Hicks/Brady-Raap - Tasking: Identify all of the road blocks to success, based on the regulatory conundrums. Then present to the NNSA CTA/CSO/CDNS (higher level)*

management) and EM? (include 1066, 1020, 1027, CFR830, etc.) Needs to have a systems view to keep the inconsistencies out. Present a cogent/coherent picture that leads to no stockpile because we can't build new, and old will not (can't) last.

2016-01 NCSP Hands-On

Bob Wilson/Jerry Hicks

~300 recommendations, 90% editorial, and have been addressed (via slide changes and improved consistency). Lectures went well, Catherine did a very good job of explaining what went into an evaluation. Need to consider spending more time on rigor for the process analysis. Associated workshops went smoother, but still need some improvement.

Had some CSOs (vs CSEs) in the class, and they seemed to struggle. More appropriate for the one week course. Did pass, but needed extra help.

Considering there is a wait list (lead time) it is odd that there are still 'so many' cancellations. Still some problems with access to the DAF.

No specific need for CSSG to review changes at this time. Expectation is that all recommendations will be dispositioned by August next year.

Next is for the CSSG to look at the 1-week (managers) class. Do we need to investigate a CSO focused class, or CSO/Operators? Develop from Managers? Past experience is that operators appreciated the 'hands-on' aspect at Pajarito. Ron Kneif helped develop a class for Rocky, might still be available.

Action: *Wilson - Develop a new tasking for CSO/Operators class*

Should we develop a Tasking to perform a content review of the 1-week? Give the team time to address any applicable recommendations from the 2-week into the 1-week. Then review content of both in a year after all have been addressed.

Hands on at different sites: The LLNL TACs could be used, and really 'only' needs a CAT-1 facility to make it work. NCSP Funding should not be an issue - more funding is on the books, and some big dollar items are being completed.

2016-03 Review of WTP

Bob Wilson

CSSG visited in 2008, reviewed preliminary evaluation, and found many 'holes'. Another Tasking in 2009 to look at Tank Farms, and also a new look at WTP based on new information (e.g. presumption that fissile and poison were always collocated). A separate Team was appointed by the Secretary to address the issues that were causing much consternation.

Identified that heavy particulates could preferentially separate at the bottom of the PJMs, potentially causing a CS problem. Recommended that this issue be tested to see what really happened. Final was presented to the contractor as a recommendation vs a requirement by the field office. Instead of testing, utilized hydrodynamics experts to identify the 'worst case' configuration.

Overall the safety basis is pretty good. However, the heavy particulate is still an issue.

Report is in draft and should be available for CSSG and factual accuracy review in 1-2 weeks.

Consider recommendation to get exemption to use ANS-8.10 among other considerations.

2015-03 AA Handbook

Tom McLaughlin

Recently placed into RevCom(?), and appears that it aligns well with input provided by the CSSG several months ago.

A 'new' question is that much of the information was in the body and has been moved to an appendix - should it actually be in the body?

2016-04 Natural Phenomena and ANS

Tom McLaughlin

CS protects the worker by 1) preventing and 2) removing the people if the unlikely occurs. There is no technical need to prevent if no people present.

Can't use the process analysis requirement to ignore the cost vs the risk.

Does ANS-2.26 need to be included in this mix? No, the focus of this Tasking is on ANS-8, a separate, or revision would be necessary first. It may fit as another identified 'issue'.

ANS-58.16 Safety Categorization...also includes 'criticality'. Appears to echo STD-3009.

Message to JM to send to ANS-8, NCSCC, NCSD that 2.26 (and 58.16) appears to extend beyond their purview.

Results of DNFSB Meeting

McKamy/Kimball/Eul

All NNSA/EM staff spoke (McKamy, Hann, Kimball, Wilson)
Board was far more interested in higher level than the specific questions asked. Contractor grading Red/Yellow/Green - yellows were discussed.

AC: Many different questions about what HQ was doing vs NNSA or EM.

KK: Much emphasis on HQ, such that NCSP was oversight. Including 'slots' on CSSG. LANL and SRS were focuses. LANL - 5 years to recover, but why five years. Similar to Y-12 needing 5-years to address. What is an adequate level of staffing? CSSG interaction with EM, and what does CSSG do for EM? Does EM use CSSG input? Appeared to be a thought that CSSG was oversight vs advisory. Concern about who knows what coming from HQ, based on who signed annual report. Questions on timeliness of data and adequacy of metrics to provide health of programs across the complex. Need to watch out for managing to compliance, vs where you want to perform.

JM: Metrics are of little value to HQ, as they are already addressed at the site level.

KK: Top 2 or 3 gaps across the enterprise?

JM: regulatory at cross odds.

KK: Visibility of maintenance on SSCs associated with NCS.

KK: Asked what should the DNFSB be looking at?

JM: Facilities with solution operations are highest risk. Much focus on SRS, and may be requesting NCSEs.

RE(next day): Tasked to write a paper annually to the Board to indicate what the Metrics are indicating. Another item is to identify a Board member to learn CS, and help them lead the other members. Mr. Hamilton is a possibility - he will be taking the 2 week course. Then bring him up on the history and what the DNFSB has done to help 'save' CS in the complex. Mr. Santos is concerned about what HQ is doing. Related to SRNS looking at admin control effectiveness reviews and involvement by DOE (local and HQ).

To teach the contractor how to learn is by DOE (NNSA/EM, etc.) not glossing over the issues, and not sending mixed signals (metrics, fee, etc.)
(CSSG needs to be more blunt - not so nice.)

Review of FY17 Budget:

All

ND is of prime importance. T&E is still behind, looks like FY18 is earliest to make changes, maybe add CSO type course. NSTEC costs are still pulling funds from other priorities/tasks. FY17 may have some NSTEC related cost savings due to potential changes in location/scope of bioassay program.

Be sensitive to perception that NCSP is 'fat'.

Looks like it would be useful for CSSG to do a better job of identifying priorities and why those are the priorities - need to utilize a backwards look to help justify.

Future Taskings

David Erickson/Kevin Kimball

Y-12 CAAS EA assessment and the internal “calibration” issues, proposed scope for tasking.

Y-12 has an ‘aging’ system, 7 years until improved (maybe longer due to current future funding profile). Areas of concern: 1) calibration (instrument error), 2) detection capability, 3) burst testing, 4) configuration control.

1) Push to apply ANS-67.04.01. However this applies to reactor instrumentation.

Understanding, based on this concept suggests that minimum accident of concern is the safety limit. Missing the understanding/purpose of the CAAS.

2) Can’t prove all variation in building configuration w/ testing. Assumes MAC is real event. Results in attempting to protect every building feature.

3) ANS-8.3, 4.4.4 ‘able to actuate alarm when exposed to maximum radiation expected.’ Difficult to adhere to for legacy systems when parts of legacy systems replaced.

4) Component changes difficult to track. Past records may not be available/adequate. Any SS system requires a robust configuration management system.

What’s the sense of the CSSG about the overall CAAS posture and practices of the Department (lots of continued churn among the CSCT)?

No DOE standard on siting, or capability, or applicable criteria. DOE does have standardized procurement systems for ‘generic’ items (roof, HVAC). Due to lack of economy of scale, probably not reasonable. What constitutes an ‘operable’ CAAS? Minimum accident vs maximum accident effects on the system. Support revision to ANS-8.3 - needs to be updated to account for current technology and accommodate installed (could use ‘code of record’ at sites.

SILENE has some benchmark data of systems alarming with shielding and minimum pulses. May need to request current draft report from ORNL. Should also pull that into CSSG document.

Scope of potential tasking is still TBD

Action: *Kimball - Draft a tasking related to CAAS to be provided in Oct/Nov (To support next F-t-F).*

Validation

All

What’s the sense of the CSSG relative to improved practices of validation and the initiatives we’ve just started to undertake?

It is a potentially useful tool. However, need to proceed with caution because it appears they are easily misused, due to the powerful capabilities.

How are subcritical validations utilized, what does subcritical do in calculation space.

Sensitivity/Uncertainty can be a powerful tool, providing significant insights.

Discuss possibilities for future Face-to-Face meetings: All
Both ANS and one of the NCSP (TPR [preferred] or BEM) - plan for three.
Action: Mikey to contact ANS about room for CSSG on Thu/Fri at Vegas meeting.
TPR - March 2017 at US space.

Continued involvement in CSSG? All
No one indicated leaving plans at this time. All Emeritus members, other than Davis Reed indicated they wanted to remain involved and on the email distribution.

Charter/Membership/Work Instructions David Erickson
No negative responses received, so need to make final then get to Jerry M for approval and then post.
Action: Erickson – Finalize all, send to Jerry for approval

Round Table All
Nothing specific from anyone present.

Adjourn