



Department of Energy  
National Nuclear Security Administration  
Washington, DC 20585



February 23, 2009

The Honorable A. J. Eggenberger  
Chairman, Defense Nuclear Facilities Safety Board  
625 Indiana Avenue, NW, Suite 700  
Washington, D.C. 20004-2901

Dear Mr. Chairman:

This letter transmits the Department of Energy (DOE) Annual Report on Nuclear Criticality Safety (NCS) for Calendar Year 2008, and response to the supplemental information you requested in your letter of January 13, 2009. The two enclosures respond to the eight topics you specifically identified in the January 29, 2008, letter. One is a response from the National Nuclear Security Administration (NNSA) and the other is the response from the Office of Environmental Management (EM).

Additionally, your January 13, 2009, letter requested DOE to supplement the 2008 NCS Report with a response related to three areas for improvement. Thank you for sharing these three areas of opportunity for continued improvement in our corporate nuclear criticality safety program. Our path forward in these three areas is summarized below:

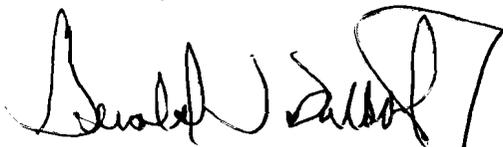
- Regarding DOE Standard 1158-2002, *Self-Assessment Standard for DOE Contractor Criticality Safety Programs*, we agree that this Standard should be reviewed and modified as appropriate based on the latest revision to American National Standards Institute / American Nuclear Society Standard 8.19, and lessons learned through implementation of DOE Standard 1158-2002, during the last six years. The Nuclear Criticality Safety Program (NCSP) Manager will initiate a review of DOE Standard 1158-2002 by April 2009, using the federal Criticality Safety Coordinating Team (CSCT) as the lead with support from the Criticality Safety Support Group (CSSG). The results of this effort will be used to initiate the formal DOE RevCom process.
- Regarding the categorization of criticality safety non-compliances, on January 5, 2009, the CSSG was tasked by the NCSP Manager to review existing criticality incident categorization schemes used at DOE sites (and possibly Nuclear Regulatory Commission or foreign categorization systems) and, if necessary develop a recommended scheme that can be used on a complex-wide basis. The response is due to the NCSP Manager on March 6, 2009. The results will be posted on the NCSP website once approved by the NCSP Manager and forwarded to the CSCT.



- Finally, regarding leading and lagging indicators for monitoring the effectiveness of criticality safety program implementation, the CSCT invested significant time two years ago developing a flexible set of metrics that are appropriate for the diverse operations within the Department. The CSCT, chaired by the NCSP Manager, will re-examine the previously identified metrics with a view toward developing useful leading indicators where they are missing, categorizing all those previously identified as leading or lagging, and proposing a path forward for incorporating metrics in site performance plans in future years. The CSCT will take full benefit of the experience Y-12 Site Office has had with their sub-threshold leading indicators put in place for the Building 9212 Continued Safe Operations Oversight Team. This review will be completed by the end of June 2009, and the results posted on the NCSP website.

If you have any questions or need further information please contact Dr. Chuan Wu at (202) 586-5151 for EM related issues and Dr. Jerry N. McKamy at (202) 586-4166 for NNSA related issues.

Sincerely,

  
for JONATHAN D. GEORGE, Brig Gen USAF  
Principal Assistant Deputy Administrator  
for Military Application  
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Enclosures

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