

## Department of Energy

## **National Nuclear Security Administration**

Washington, DC 20585

August 4, 2008

OFFICE OF THE ADMINISTRATOR

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

Dear Mr. Chairman:

Department of Energy Standard 1189 (DOE-STD-1189), *Integration of Safety into the Design Process*, was approved in March 2008. In a July 12, 2007, letter from the Deputy Secretary, the Department committed to complete the evaluation of current line item capital projects for defense nuclear facilities following approval to determine the degree of implementation of the Standard for these projects. The enclosure to this letter identifies the current and emerging National Nuclear Security Administration (NNSA) line item capital projects for Hazard Category 1, 2, and 3 defense nuclear facilities, and those aspects of DOE-STD-1189 that will be implemented for each project. The planned implementation of DOE-STD-1189 for the listed construction projects is consistent with the expectations outlined in the Deputy Secretary's letter. In several cases, evaluation of the individual project status and related safety documentation resulted in commitments to implement additional elements of DOE-STD-1189 beyond the minimum requirements. For future line item capital projects for Hazard Category 1, 2, and 3 defense nuclear facilities not included in the enclosure, DOE-STD-1189 will be fully implemented.

NNSA will continue to work with your staff to ensure that safety design concerns are resolved as early in the design process as feasible. If you have any questions, please contact me or Mr. James McConnell of the Office of Safety at 202-586/4379.

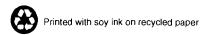
Sincerely,

William C. Ostendorff
Principal Deputy Administrator

Modendorf

Enclosure

cc w/enclosure: M. Whitaker, Jr., HS-1.1



## DOE-STD-1189 Implementation for NNSA Defense Nuclear Facility Line Item Capital Projects<sup>1</sup>

		Planned Hazard	Critical Decision	
Site	Facility	Category	Approved	Aspects of DOE-STD-1189 to be implemented
Los Alamos National Laboratory (LANL)	Chemistry and Metallurgy Research Replacement (CMRR) Project	2	CD-1	Currently starting preliminary design phase. The format and content for a Preliminary Safety Design Report (PSDR) from DOE-STD-1189 will be used for preparation of a Preliminary Documented Safety Analysis (PDSA). A Preliminary Safety Validation Report will be developed to document the basis for approval of this PDSA. In the final design phase, the format and content for a PDSA from DOE-STD-1189 will be used for preparation of the PDSA.  A Safety Design Strategy has been prepared for the project.
LANL	Technical Area-55 Reinvestment Project (TRP) Phase I	2	TRP I: CD-2	TRP I involves upgrades to chillers and cooling towers. Per the scope of this project, a determination has been made that the associated subprojects are not major modifications and therefore DOE-STD-1189 does not apply.
LANL	Technical Area-55 Reinvestment Project (TRP) Phase II	2	TRP II: CD-0 (CD-1 Energy Systems Acquisition Advisory Board conducted in June 2008)	TRP II previously determined not to be a major modification so PDSA not prepared. However, this phase involves upgrades to safety structures, systems, and components to be relied upon in new TA-55 DSA and will be re-evaluated as to whether they meet the definition of a major modification per DOE-STD-1189. If determined to be a major modification, a PDSA using DOE-STD-1189 format and content will be required. If determined not to be a major modification, an evaluation will be completed to determine if some aspects of DOE-STD-1189 should be implemented during the design.
LANL	Technical Area-55 Reinvestment Project (TRP) Phase III	2	TRP III: Pre-CD-0	TRP III: For this group of subprojects, after reaching CD-1, a determination will be made using the criteria from DOE-STD-1189 to conclude whether the subprojects are major modifications.
LANL	Radioactive Liquid Waste Treatment Facility Upgrade Project	2	CD-1	A draft PDSA has been completed. However, there are open design issues. DOE-STD-1189 will be used for the preparation of a PDSA in the preliminary design phase using the PSDR format and content requirements. The PDSA prepared in the final design phase will use the DOE-STD-1189 format and content requirements.

## DOE-STD-1189 Implementation for NNSA Defense Nuclear Facility Line Item Capital Projects<sup>1</sup>

		Planned	Critical	
		Hazard	Decision	
Site	Facility	Category	Approved	Aspects of DOE-STD-1189 to be implemented
	New Solid		CD-0 ( request	Project completed preliminary hazard analysis in 2006 in conjunction with conceptual design development, and is seeking CD-1 in near term. DOE-STD-
	Transuranic Waste		for CD-1	
LANL				1189 will be used for the format and content for preparation of the PSDR and PDSA.
LAINL	Facility Project	2	pending)	Project on hold, no progress since conceptual design was put on hold in 2006. If
	Technical Area-55	1300000	CD-0 (Project	project of floid, no progress since conceptual design was put of floid in 2006. If
	Radiography		on hold since	minimum, DOE-STD-1189 would be used for the format and content for
LANL	Project	2	2006)	preparation of the PDSA if the project restarted.
LYNYL	110,000	-		properties of the Foot in the project restance.
	Device Assembly			
	Facility - Criticality			DOE-STD-1189 will not be implemented for this project. The PDSA has been
Nevada Tes	Experiments			approved by DOE and the Independent Project Reviews have ensured that safety
Site	Facility	2	CD-2/3A-D	has been integrated into the design process.
F TALOXIG	Weapon			
	Surveillance	ALCOHOL:	CD-0 (Project	
Pantex Plan	Facility	2	on hold)	If the project proceeds, DOE-STD-1189 will be implemented in its entirety.
Savannah	Pit Disassembly			
River Site	and Conversion			DOE-STD-1189 will be used for the format and content for preparation of the
(SRS)	Facility	2	CD-1	PSDR and PDSA.
	Waste			
	Solidification	_		DOE-STD-1189 will be used for the format and content for preparation of the
SRS	Building	2	CD-1	PSDR and PDSA.
National	Highly Enriched			DOE-STD-1189 will not be implemented for this project. The PDSA has been
Security	Uranium Materials			approved by DOE and the Independent Project Reviews have ensured that safety
Complex	Facility	2	CD-3	has been integrated into the design process.
National	Uranium			
Security	Processing Facility			DOE-STD-1189 will be fully implemented for this project. UPF was the test case
Complex	(UPF)	2	CD-1	for the draft of the Standard.

Note 1: The MOX Fuel Fabrication Facility at the Savannah River Site is being constructed per Nuclear Regulatory Commission licensing requirements.