

November 19, 2007

MEMORANDUM TO: E. William Brach, Director
Division of Spent Fuel Storage
and Transportation, NMSS

FROM: Geoff Hornseth, Senior Materials Engineer /RA/
Division of Spent Fuel Storage
and Transportation, NMSS

SUBJECT: FOR PUBLIC COMMENT: DRAFT ISG-18, REV. 1, "THE DESIGN AND TESTING OF LID WELDS ON AUSTENITIC STAINLESS STEEL CANISTERS AS CONFINEMENT BOUNDARY FOR SPENT FUEL STORAGE"

Enclosed for public comment is the draft revision of the Division of Spent Fuel Storage and Transportation (SFST) Director's Interim Staff Guidance (ISG) Document No.18, Revision 1, (ISG-18, Rev. 1), "The Design and Testing of Lid Welds on Austenitic Stainless Steel Canisters as Confinement Boundary for Spent Fuel Storage." This revision is proposed to incorporate lessons gathered during the several years since the original issuance of ISG-18. The SFST staff has reviewed the enclosed draft and all relevant comments have been incorporated. Note that this revision is a substantial re-write of the original guidance.

This revision adds discussion and staff review guidance for the:

1. Helium leak test requirement for closure welds.
2. Design and examination criteria to be met before any closure weld may be exempted from the helium leak test.
3. Criteria for helium leak testing any closure weld which may be pressurized during the welding process.
4. ASME Code, Section III, hydrostatic test requirement.
5. ASME Code Case N-595.
6. Criteria for limiting root pass thickness.

This revision also removes all references to transportation casks. The containment boundaries of transportation casks are not presently constructed with welded lids, nor are any such expected in the future.

This ISG is to be used in conjunction with NUREG-1567, "Standard Review Plan for Spent Fuel Dry Storage Facilities," until such time as this ISG is incorporated into the NUREG. This document is being provided to ensure consistent reviews by the SFST staff.

E. W. Brach

- 2 -

If you have any comments or questions about the attached guidance document, please contact Geoff Hornseth.

Enclosure: Draft ISG-18, Rev. 1, and (2) sketches

CONTACT: G. Hornseth, SFST/NMSS
(301) 492-3330

If you have any comments or questions about the attached guidance document, please contact Geoff Hornseth.

Enclosure: Draft ISG-18, Rev. 1, and (2) sketches

CONTACT: G. Hornseth, SFST/NMSS
(301) 492-3330

DISTRIBUTION: SFST r/f NMSS r/f SFST ISG Contact NRCWEB (MKarmis)
ML072410347

OFFICE	SFST	E	SFST	E	SFST	E	SFST	E	SFST	E
NAME	GHornseth		WWheatley		CRegan		LCampbell		MWaters	
DATE	5 /30 /07		8/30/07		9/13/07		5 /30 /07		5 /30 /07	
OFFICE	SFST	E	SFST	E	SFST	E	SFST	E	SFST	
NAME	RNelson		DPstrak		EHackett		NMamish		EWBrach	
DATE	5 /30 /07		9/12/07		10/18 /07		10/29/07		11/19/07	

OFFICIAL RECORD COPY