



Program Management Office  
1000 Westinghouse Drive  
Cranberry Township, Pennsylvania 16066

Project Number 694

December 14, 2011

OG-11-395

U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555-0001

Subject: PWR Owners Group  
**For Information Only – “Long Term Core Cooling – In-Vessel Effects  
Future Options to Move Forward,” (PA-SEE-0312, Revision 2)**

References:

1. “PWR Owners Group Submittal of WCAP-16793-NP, Revision 2, ‘Evaluation of Long-Term Cooling Considering Particulate, Fibrous and Chemical Debris in the Recirculating Fluid,’ (PA-SEE-0312, Revision 2),” OG-11-290, dated October 12, 2011.

The Pressurized Water Reactor Owners Group (PWROG) recently submitted topical report WCAP-16793-NP, Revision 2, “Evaluation of Long-Term Cooling Considering Particulate, Fibrous and Chemical Debris in the Recirculating Fluid,” to the Nuclear Regulatory Commission (NRC) under PWROG letter OG-11-290 (Reference 1) for formal review. This report provides methods and information for all PWRs licensed in the U.S. to demonstrate reasonable assurance that long term core cooling (LTCC) is maintained through the reactor vessel, even in the presence of debris in the coolant. The report establishes a generic PWR fleet-wide in-vessel fiber limit of 15 grams per fuel assembly. Pursuant to submittal of Reference 1, a set of tools was developed for licensees to consider that may potentially increase their plant specific in-vessel fiber limits.

The proposed tools for increasing in-vessel fiber limits are documented in a white paper titled “Long Term Core Cooling – In-Vessel Effects Future Options to Move Forward,” (Enclosure 1). These tools were to be considered by plants to increase their in-vessel fiber limit beyond the current 15 grams per fuel assembly. The purpose of the white paper is to present these tools so that plants or groups of plants can pursue a less generic approach to increasing the applicable in-vessel fiber limit by implementing these tools in small groupings of plants or even on a plant specific basis.

Additional copies were sent to  
PM

D048  
MRL

The enclosed white paper (Enclosure 1) is being transmitted to the staff via this letter for information only. This is provided in supplement to, and in support of, WCAP-16793-NP, Revision 2, as separately transmitted to the NRC in PWROG letter OG-11-290 (Reference 1). As such, no review fee or separate Safety Evaluation (SE) is expected on the document enclosed with this letter.

Enclosures include:

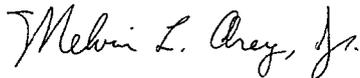
1. Four (4) copies of, "Long Term Core Cooling – In-Vessel Effects Future Options to Move Forward," (non-proprietary).<sup>1</sup>

Correspondence related to this transmittal, including requests for additional information, should be addressed to:

Mr. W. Anthony Nowinowski, Program Manager  
PWROG Program Management Office  
Westinghouse Electric Company  
1000 Westinghouse Drive, Suite 380  
Cranberry Township, PA 16066

If you have any questions, please do not hesitate to contact me at (704) 382-8619 or Mr. W. Anthony Nowinowski of the PWROG Program Management Office at (412) 374-6855.

Sincerely,



Melvin L. Arey, Jr., Chairman  
PWR Owners Group

MLA:WAN:KJN:las

Enclosure (1)

cc:	PWROG Management Committee	S.L. Baier, Westinghouse
	PWROG Steering Committee	T. D. Croyle, Westinghouse
	PWROG SEE Subcommittee	J.T. Maruschak, Westinghouse
	PWROG Licensing Subcommittee	K.F. McNamee, Westinghouse
	PWROG PMO	B. Grambau, AREVA NP
	J. Rowley, USNRC	G. Thomas, AREVA NP
	S. Bailey, USNRC	R. Schomaker, AREVA NP

---

<sup>1</sup> Project Office Internal Reference: Enclosure 1 is archived in the Westinghouse EDMS system as an attachment to file LTR-SEE-1-11-73, Revision 2, "Long Term Core Cooling – In-Vessel Effects Future Options to Move Forward," November 30, 2011.