

Russell J. Bell DIRECTOR, NEW PLANT LICENSING NUCLEAR GENERATION DIVISION

December 15, 2006

Chief, Rules and Directives Branch Office of Administration U.S. Nuclear Regulatory Commission Mail Stop T6-D59 Washington, DC 20555-0001

SUBJECT: Draft Regulatory Guide DG-1159, "Design Limits, Loading Combinations, Materials, Construction, and Testing of Concrete Containments"

PROJECT NUMBER: 689

On behalf of the nuclear industry, the Nuclear Energy Institute (NEI) is pleased to submit the following response to the Federal Register notice, dated September 22, 2006, Volume 71, Number 184, which invited written comments on the Proposed Revision 3 of Regulatory Guide 1.136 (DG-1159), "Design Limits, Loading" Combinations, Materials, Construction, and Testing of Concrete Containments."

The enclosure provides recommendations to improve clarity and ensure consistency with current industry standards and practices.

riduals involved in the nuclear charges of the services of the SUNSI Review Complete PCILE = ADM-013 6 1776 I STREET, NW SUITE 400 WASHINGTON, DC 20006-3708

NEI is the organization responsible for establishing unified industry policy on matters affecting the nuclear energy industry. NEI's members include all entities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect/engineering firms, fuel fabrication facilities, nuclear material licensees, and other organizations and individuals involved in the nuclear energy industry.

Chief, Rules and Directives Branch December 15, 2006 • Page 2

We appreciate the opportunity to comment on the draft documents. If you have any questions regarding this effort please contact Leslie Kass at (202) 739-8115; lck@nei.org.

Sincerely,

Russell J. Bell

Enclosure

c: Mr. Syed K. Shaukat

Mr. Stephen C. O'Connor

NRC Document Control Desk

Comments for DG-1159

ltem	Section	Priority ¹	Basis ¹	Description of the Issue	Proposed Alternate
1	В	3	4	Second paragraph mentions AP1000 and ESBWR. ABWR is also an advanced reactor using concrete containment and it should be mentioned.	Add ABWR.
2	C.5.A	3	3	Requirements for loads and load combinations associated with P_{g1} , P_{g2} and P_{g3} appear related to Regulatory Position C.5 of RG 1.7 Revision 3. A cross reference would be helpful for a better understanding of the requirements.	Add RG 1.7 Revision 3 in the references.
3	C.5.A	3	3	Descriptions for P_{g1} , P_{g2} and P_{g3} are not exactly the same as those in DG-1158.	Use consistent descriptions for P _{g1} , P _{g2} and P _{g3} in DG-1158 and DG-1159.
4	C.5.A, second (2)	3	3	P _{g3} is defined to be pressure resulting from post accident inerting assuming carbon dioxide is the inerting agent. Since it is associated with post accident conditions, Factored Load Category would be more appropriate than Service Load Category as proposed.	Move P _{g3} to Factored Load Category.
5	C.8	2	4	Modern modularization of rebar (cages) requires termination of bars at same point; otherwise modularization concept is not efficient.	Allow splicing at one location with additional small surface bars to limit cracking to hairline width.

Notes:

1. See Tables below for Priority and Basis

Priority			Examples	
High	=	1	New requirements, requirements without regulatory basis, inconsistent with established precedent, significant hearing exposure, clear revisiting of closed issues, etc.	
Medium	=	2	Additional information submittal, opportunity for inconsistency between individual reviewers, unclear distinction in credit for closed issues, opportunity to negotiate after COLA submittal, etc.	
Low	=	3	Editorial, straightforward clarification required	

Basis Category	Description
1	Conforms guidance with the regulatory requirements of 10 CFR 20, 50, 52, 100, etc., or other regulatory guidance
2	For internal consistency within the guidance document.
3	Clarifies guidance document requirements
4	Other – specify