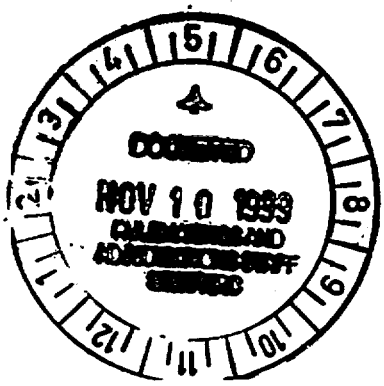
Westinghouse Electric Company LLC

Box 355
Pittsburgh, PA 15230-0355



NSBU-NRC-99-5954

November 4, 1999

The Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

DOCKET NUMBER
PETITION RULE PRM 50-69
(65FR6044)

Attention: Rulemakings and Adjudications Staff

RE: Petition for Rulemaking.

Westinghouse Electric Company LLC petitions the U.S. Nuclear Regulatory Commission to eliminate reactor vessel closure head flange requirements from 10 CFR Part 50, Appendix G. This petition requests that Table 1 in 10 CFR 50, Appendix G be modified such that table footnotes (2) and (6) be removed. The original Table 1 and a suggested modification to Table 1 are provided herein.

Enclosed is the petition and Westinghouse WCAP-15315, "Reactor Vessel Closure Head/Vessel Flange Requirements Evaluation for Operating PWR and BWR Plants" that sets forth the technical basis for the proposed modification, the petitioner's grounds for and interest in the action requested, and the specific issues and facts that support the petition.

H. A. Sepp, Manager
Regulatory and Licensing Engineering
Westinghouse Electric Company LLC

Enclosure

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PETITION FOR RULE MAKING
Modification to Appendix G in 10 CFR 50
by
Westinghouse Electric Company LLC

Proposed Regulatory Text

NRC should modify Table 1 in 10 CFR Part 50, Appendix G removing requirements related to the reactor vessel closure head flange. The basis for this request is set forth in WCAP-15315, "Reactor Vessel Closure Head/Vessel Flange Requirements Evaluation for Operating PWR and BWR Plants".

Table 1 in 10 CFR 50, Appendix G currently shows the following:

Table 1 – Pressure and Temperature Requirements for the Reactor Pressure Vessel

Operating condition	Vessel pressure[1]	Requirements for pressure-temperature limits	Minimum temperature requirements
Hydrostatic pressure and leak tests (core is not critical):			
1.a Fuel in the vessel	≤20%	ASME Appendix G Limits	(2)
1.b Fuel in the vessel	>20%	ASME Appendix G Limits	(2) +90°F (6)
1.c No fuel in the vessel (Preservice Hydrotest Only)	ALL	(Not Applicable)	(3) +60°F
Normal operation (incl. Heat-up and cool-down), including anticipated operational occurrences:			
2.a Core not critical	≤20%	ASME Appendix G Limits	(2)
2.b Core not critical	>20%	ASME Appendix G Limits	(2) + 120°F (6)
2.c Core critical	≤20%	ASME Appendix G Limits + 40°F	Larger of [(4)] or [(2) + 40°F]
2.d Core critical	>20%	ASME Appendix G Limits + 40°F	
2.e Core critical for BWR (5)	≤20%	ASME Appendix G Limits + 40°F	Larger of [(4)] or [(2) + 40°F] 160F] (2) + 60°F

[1]Percent of the preservice system hydrostatic test pressure.
[2]The highest reference temperature of the material in the closure flange region that is highly stressed by the bolt preload.
[3]The highest reference temperature of the vessel.
[4]The minimum permissible temperature for the inservice system hydrostatic pressure test.
[5]For boiling water reactors (BWR) with water level within the normal range for power operation.
[6]Lower temperatures are permissible if they can be justified by showing that the margins of safety of the controlling region are equivalent to those required for the beltline when it is controlling.

As proposed, a revised Table 1 would read:

"Revised" Table 1 – Pressure and Temperature Requirements for the Reactor Pressure Vessel

Operating condition	Vessel pressure[1]	Requirements for pressure-temperature limits	Minimum temperature requirements
Hydrostatic pressure and leak tests (core is not critical):			
1.a Fuel in the vessel	≤20%	ASME Appendix G Limits	
1.b Fuel in the vessel	>20%	ASME Appendix G Limits	
1.c No fuel in the vessel (Preservice Hydrotest Only)	ALL	(Not Applicable)	(2) +60°F
Normal operation (incl. Heat-up and cool-down), including anticipated operational occurrences:			
2.a Core not critical	≤20%	ASME Appendix G Limits	
2.b Core not critical	>20%	ASME Appendix G Limits	
2.c Core critical	≤20%	ASME Appendix G Limits + 40°F	(3)
2.d Core critical	>20%	ASME Appendix G Limits + 40°F	(3)
2.e Core critical for BWR (4)	≤20%	ASME Appendix G Limits + 40°F	

[1]Percent of the preservice system hydrostatic test pressure.
[2]The highest reference temperature of the vessel.
[3]The minimum permissible temperature for the inservice system hydrostatic pressure test.
[4]For boiling water reactors (BWR) with water level within the normal range for power operation.

Background information in support of this petition is provided in the enclosed Westinghouse WCAP-15135, "Reactor Vessel Closure Head/Vessel Flange Requirements Evaluation for Operating PWR and BWR Plants".