



Domestic Utilities

American Electric Power
Carolina Power & Light
Commonwealth Edison
Consolidated Edison
Duquesne Light
Duke Power
Georgia Power
Florida Power & Light

Houston Lighting & Power
New York Power Authority
Northeast Utilities
Northern States Power
Pacific Gas & Electric
Public Service Electric & Gas
Rochester Gas & Electric
South Carolina Electric & Gas

Southern Nuclear
Tennessee Valley Authority
TU Electric
Union Electric
Virginia Power
Wisconsin Electric Power
Wisconsin Public Service
Wolf Creek Nuclear

International Utilities

Electrabel
Kansas Electric Power
Korea Electric Power
Nuclear Electric plc
Nuklearna Elektrana
Spanish Utilities
Taiwan Power
Vattenfall

OG-97-123

Project Number 694

November 25, 1997

Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Attention: Document Control

Subject: Westinghouse Owners Group
Request for the Application of Leak Before Break (LBB) in Response to Draft
Generic Letter "Potential for Degradation of the Emergency Core Cooling and
Containment Spray Systems Following a Loss of Coolant Accident due to
Construction and Protective Coating Deficiencies and Foreign Material in the
Containment" (MUHP-4011)

The NRC has proposed a Generic Letter (GL) to evaluate the potential that failed (delaminated)
containment coatings and other debris that may clog containment sumps during a design basis
accident inside containment and its effect on containment sump performance. The Generic Letter
is entitled "Potential for Degradation of the Emergency Core Cooling and Containment Spray
Systems Following a Loss of Coolant Accident Due to Construction and Protective Coating
Deficiencies and Foreign Material in the Containment". Paramount to the meeting between the
Westinghouse Owners Group and NRC senior management on November 13, 1997 at the NRC
headquarters in Rockville, MD, and per the direction provided by the NRC at the meeting, this
letter is written to document the Westinghouse Owners Group's request that the following be
included in the proposed GL on containment evaluation.

The NRC modified the General Design Criterion (GDC) 4 requirements for protection against
dynamic effects of postulated pipe ruptures in the notification of final rule, Federal Register / Vol.
52, No. 207 / dated October 27, 1987, pages 41288 through 41295.

Specifically, this rule making modifies GDC-4 to the extent that dynamic effects of pipe ruptures
in nuclear power units may be excluded from the design basis provided it is demonstrated that the
probability of pipe rupture is extremely low under conditions consistent with the design for the
piping. The modification to GDC-4 allows exclusion from the design basis of dynamic effects
associated with the high energy pipe rupture by application of leak before break (LBB) technology.

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The dynamic effects associated with a pipe rupture are described as follows in the Federal Register:

“Dynamic effects of pipe rupture covered by this rule are missile generation, pipe whipping, pipe break reaction forces, jet impingement, decompression waves within the ruptured pipe and dynamic or non-static pressurization in cavities, subcompartments, and compartments. However, cavities, subcompartments, and compartments necessary to the containment function are not affected by this modification.”

This letter specifically requests that the provisions provided in modification to GDC-4 noticed in the subject Federal Register be made part of the other related federal regulations and the proposed generic letter identified above.

The inclusion of the LBB provisions would allow the exclusion of the dynamic effects of pipe rupture loads consistent with plant-specific LBB calculations of record for those nuclear plants for which LBB has been accepted as the licensing basis and has been approved by the NRC. As such dynamic effects of a pipe break would not be considered as a debris generation source or as a coatings removal mechanism. However, submergence and wash down effects will be considered as the primary cause for debris generation.

Thank you for your consideration of this request, which has also been discussed with cognizant NEI representatives. If you have any questions or desire further information, please call me at 205-992-7103.

Very truly yours,



Thomas V. Greene, Chairman
Westinghouse Owners Group

cc:

Mr. Sam Collins, NRC
Mr. Brian Sheron, NRC
Mr. Jack Strosneider, NRC
Mr. Scott Newberry, NRC
Mr. Gary Holahan, NRC
Mr. Gus Lainas, NRC
Ms. Claudia Craig, NRC
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