

Mr. Andrew Drake, Project Manager  
Westinghouse Owners Group  
Westinghouse Electric Corporation  
Mail Stop ECE 5-16  
P.O. Box 355  
Pittsburgh, PA 15230-0355

Dear Mr. Drake:

SUBJECT: REQUEST FOR REVIEW OF REPORT ENTITLED "ASSESSMENT OF RISK SIGNIFICANCE ASSOCIATED WITH ISSUES IDENTIFIED AT D.C. COOK NUCLEAR POWER PLANT"

Attached for your information and review is the draft report entitled "ASSESSMENT OF RISK SIGNIFICANCE ASSOCIATED WITH ISSUES IDENTIFIED AT D.C. COOK NUCLEAR POWER PLANT." This report documents the assessment of the risk significance of 141 issues identified at the Donald C. Cook Nuclear Plant, Units 1 and 2 (Cook) since August 1997.

The Operating Experience Risk Analysis Branch of the office of Nuclear Regulatory Research (RES) conducted this assessment as part of the agency's Accident Sequence Precursor (ASP) Program. In performing this assessment, the RES staff applied the ASP methodology to estimate the risk significance associated with each issue as well as the integrated risk significance associated with the combined issues.

Out of 141 issues analyzed, five issues were identified to be potential accident sequence precursors. The preliminary estimate of the total change in core damage frequency ( $\Delta CDF$ ) resulting from all issues identified at Cook was approximately  $4.7 \times 10^{-4}$ /year for each of the Cook units. The risk significance of the combined impact of all containment-related issues was determined to be small. We plan to finalize the above findings after addressing internal and external peer review comments.

Several high-energy line break (HELB) related issues, degraded seismic capacities, and potential pressure locking conditions in two motor-operated valves were the dominant contributors to the core damage frequency (CDF) increase. The postulated HELB scenarios contributed a  $\Delta CDF$  of  $3.9 \times 10^{-4}$ /year. The CDF increase attributed to the degraded seismic capacity of block walls and the degraded seismic capacity of the emergency service water pump backwash system was also a dominant contributor, which contributed a  $\Delta CDF$  of approximately  $4.2 \times 10^{-5}$ /year. The medium and large loss of coolant-accident (LOCA) sequences associated with the potential pressure locking conditions in the motor-operated valves located in the suction path to the residual heat removal pumps from the containment recirculation sump contributed a  $\Delta CDF$  of  $3.6 \times 10^{-5}$ /year.

In accordance with our peer review process, prior to the distribution of the final report, we want to provide you with the opportunity to review and comment on the attached draft report. In order to meet our planned publication schedule, we would appreciate receiving your comments within 60 days from receipt of this letter.

A copy of this draft report and letter are being placed in the Public Document Room at 2120 L Street NW, Washington, DC 20555.

If you have any questions related to this report, please contact Dr. Sunil Weerakkody of my staff at 301-415-6374 or e-mail: [sdw1@nrc.gov](mailto:sdw1@nrc.gov).

Sincerely,

Thomas L. King, Director  
Division of Risk Analysis and Applications  
Office of Nuclear Regulatory Research

Attachment: As stated

cc w/o att:

A.Thadani, RES  
M. Federline, RES  
S. Collins, NRR  
R. Zimmerman, NRR  
B. Sheron, NRR

MEMORANDUM DATED: / /00

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IDENTICAL LETTERS

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Dr. Theodore U. Marston  
Vice President and Chief Nuclear Officer  
EPRI  
3412 Hillview Avenue  
Palo Alto, CA 94304

Mr. Ralph E. Beedle  
Senior Vice President and Chief Nuclear Officer  
Nuclear Generation Division  
Nuclear Energy Institute  
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Suite 400  
Washington, D.C. 20006-3708

Mr. David A. Lochbaum  
Union of Concerned Scientists  
1616 P Street, N.W.  
Suite 310  
Washington, D.C. 20035-1495

Mr. Joseph M. Solymossy  
Director of Project Services  
Institute of Nuclear Power Operations  
700 Galleria Parkway, NW  
Atlanta, GA 30339-5957

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Mr. Ralph E. Beedle  
Senior Vice President and Chief Nuclear Officer  
Nuclear Generation Division  
Nuclear Energy Institute  
1776 I Street N.W.  
Suite 400  
Washington, D.C. 20006-3708

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Mr. David A. Lochbaum  
Union of Concerned Scientists  
1616 P Street, N.W.  
Suite 310  
Washington, D.C. 20035-1495

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Director of Project Services  
Institute of Nuclear Power Operations  
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Atlanta, GA 30339-5957

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ROUTING AND TRANSMITTAL SLIP					Date 5/2/00	
TO: (Name, office symbol, room #, building, agency/post)					Initials	Date
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3. P. Baranowsky - Concur						
4. T. King - Concur/Signature						
5.						
6.						
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8.						
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10.						
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	As Requested		For Correction		Prepare Reply	
	Circulate		For Your Information		See Me	
	Comment		Investigate	X	Concurrence/Signature	
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