

DISTRIBUTION:
Central Files
SSPD Reading
V. Wilson
R. Diggs
SSPB LA
J. Berggren
N. Lauben
T. Speis

#15



Westinghouse Electric Corporation
ATTN: Mr. E. P. Rahe, Manager
Nuclear Safety Department
P. O. Box 355
Pittsburgh, Pennsylvania 15230

DEC 1 1981

Dear Mr. Rahe:

Subject: Acceptance for Referencing of the 1981 Version of the
Westinghouse Large Break ECCS Evaluation Model

The Nuclear Regulatory Commission has completed its review of the proposed 1981 version of the Westinghouse Appendix K Evaluation Model as described in the Westinghouse letter of May 15, 1981, number HS-TMA-2448 from T. H. Anderson to J. R. Miller. This letter proposed the changes to the 1978 evaluation model that are currently being implemented in general practice be formally approved. These changes involve (a) the impact of the fuel rod burst and blockage models required by NUREG-0630; (b) the use of "UHI Software Technology" models; (c) adjustment to the FLECHT reflood heat transfer correlation; (d) the interaction between the pumped safety injection flow and the accumulator injection flow; (e) programming changes to the skewed power option in LOCTA-IV; and (f) past approval changes to the licensing topical report WCAP-9220 entitled "Westinghouse ECCS Evaluation Model, February 1978 Version." A copy of our "Safety Evaluation Report on the 1981 Version of the Westinghouse Large Break ECCS Evaluation Model" is enclosed.

Based on our review of the Westinghouse 1981 version of the Large Break ECCS Evaluation Model as described in the Westinghouse proposal letter HS-TMA-2448 including its reference and as further described and limited in the enclosed SER and its references, we conclude the model so described is in compliance with Appendix K of 10 CFR 50 for all PWR's currently being supplied with Westinghouse manufactured Zircaloy clad fuel. It must be noted that the Upper Plenum Injection (UPI) "patch" is required for two loop plants until such time as a new UPI model is approved.

In accordance with established procedures, it is requested that the Westinghouse Electric Corporation publish an accepted version of WCAP-9220(P)/WCAP-9221(H) within 90 days after receipt of this letter. This accepted version is to be based on the proposal of Westinghouse letter HS-TMA-2448 and subsequent related correspondence between the NRC and Westinghouse Electric Corporation and it

RD-8-2
W
ECCS

B-7

OFFICE									
SU	8201130333	811201	XA						

DEC 1 1981

must be absolutely in consonance with the enclosed SER. The accepted version is to incorporate this letter and the enclosed SER following the title page and thus just in front of the abstract. The report identifications of the accepted reports are to have an -A suffix.

As a result of our reviews and the revisions of WCAP-9220/9221 in accordance with the above paragraph, we will find the revised WCAP-9220/9221 Licensing Topical Reports acceptable for referencing in licensing actions for PWR's supplied with Westinghouse manufactured Zircaloy clad fuels under the conditions and limitations prescribed in the enclosed SER. This model becomes effective with the publication of the revised WCAP-9220/9221 which must be published no later than 90 days from receipt of this letter. All submittals demonstrating compliance with Appendix K 10 CFR 50 using the Westinghouse model after that time must use the model described in the enclosed SER. During the ensuing 90 days, applicants or licensees requiring an Appendix K analysis may elect to submit a NUREG-630 interim assessment as has been done since January 1980 or submit analyses conforming to the enclosed SER. When the topical report is referenced, the reference must include both the proprietary and nonproprietary versions.

We do not intend to repeat our review of the topical report when it appears as a reference in particular license applications except to assure that the material presented is applicable to the specific plant involved. Our acceptance applies only to the features described in the letter proposal and related correspondence and under the conditions stipulated in the enclosed SER.

Should Nuclear Regulatory Commission criteria or regulations change such that our conclusions as to the acceptability of the report are invalidated, Westinghouse Electric Corporation and/or the applicants referencing the topical report will be expected to revise and resubmit their respective documentation or submit justification for the continued effective applicability of the topical report without revision of their respective documentation.

Sincerely,

James R. Miller, Chief
Standardization & Special
Projects Branch
Division of Licensing

Enclosure: As Stated

OFFICE	DL:SSPB	DL:SSPB	DSI:RSB	DSI:RSB	DL:SS/L		
SURNAME	JBerggren/cc	JM Miller	NLauben	TSpeis	RTedesco		
DATE	11/23/81	11/27/81	11/24/81	11/25/81	11/30/81		

OFFICIAL RECORD COPY

USGPO: 1981-305-960