

Mr. Guy R. Horn
Vice President - Nuclear
Nebraska Public Power District
P. O. Box 499
Columbus, NE 68602-0499

June 13, 1996

SUBJECT: STAFF REVIEW OF MODIFICATIONS TO REVISION 4 OF THE BWR EMERGENCY
PROCEDURE GUIDELINES

Dear Mr. Horn:

The staff has issued its safety evaluation (SE) on the recent BWROG-proposed modifications to the BWR Emergency Procedure Guidelines. The staff is providing this information to ensure that licensees are aware of the conclusions of the staff's review. Both the staff and the Advisory Committee for Reactor Safeguards (ACRS) agree that, for BWRs injecting standby liquid control through a standpipe below the core, maintenance of level above top-of-active fuel (TAF) is the superior water control strategy in an anticipated transient without scram (ATWS) event. The staff recommends a level around TAF +5 feet (1.52 m), or as high as possible while still maintaining the level at least 2 feet (0.61 m) below the feedwater sparger. Although control at any level between the minimum steam cooling water level and 2 feet below the feedwater sparger was found to be acceptable, both the staff and ACRS urge that a high-water-level control strategy be adopted. Additional details are provided in the enclosed SE.

You should also note the staff's position on bypassing the Main Steam Isolation Valve (MSIV) high radiation closure interlock during ATWS. The staff agrees with the BWROG's qualitative arguments that keeping the MSIVs open significantly reduces containment loading and makes level control much simpler. However, the acceptability of this change is conditional on a plant-specific evaluation by each licensee to assure that, in the event of gross fuel failures, consideration has been given to such items as equipment accessibility, potential off-site radiological doses, and the appropriate time to manually close the MSIVs.

Sincerely,

ORIGINAL SIGNED BY:

David L. Wigginton, Senior Project Manager
Project Directorate IV-1
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

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Docket No. 50-298

Enclosure: Safety Evaluation

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cc w/encl: See next page

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NAME	PNoonan	DWigginton/vw
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0901

June 13, 1996

Mr. Guy R. Horn
Vice President - Nuclear
Nebraska Public Power District
P. O. Box 499
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Sincerely,

A handwritten signature in dark ink, appearing to read "D. Wigginton".

David L. Wigginton, Senior Project Manager
Project Directorate IV-1
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Docket No. 50-298

Enclosure: Safety Evaluation

cc w/encl: See next page

Mr. Guy R. Horn
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cc:

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

June 6, 1996

Kevin P. Donovan
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SUBJECT: ACCEPTANCE OF PROPOSED MODIFICATIONS TO THE BOILING WATER REACTOR
(BWR) EMERGENCY PROCEDURE GUIDELINES (TAC NOS. M89489 AND M89629)

Dear Mr. Donovan:

The staff has completed its review of: (1) your submittal transmitted by letter (BWROG-94038) dated March 21, 1994, requesting our approval of proposed modifications to the BWR Emergency Procedure Guidelines (EPGs) (NEDO-31331) to address reactor core instabilities; and (2) the Operations Engineering, Inc., (OEI) Document 9402-3, "The Management of ATWS by Boron Injection and Water Level Control," submitted by letter (BWROG-94111) dated September 16, 1994. OEI Document 9402-3 gives the analyses used by BWROG to justify its ATWS control strategy. The staff has also reviewed the BWROG submittal transmitted by letter (BWROG-95078) dated September 15, 1995, responding to the staff's request for comments on a draft safety evaluation report (SER). The draft SER was placed in the Federal Register for comment and copies were transmitted with an invitation for comment to other interested parties. The final SER, enclosed, reflects modifications made in response to BWROG and ACRS comments (no other comments were received) and defines the basis for the staff's acceptance of the proposed EPG modifications.

Both the staff and the ACRS agree that, for BWRs injecting standby liquid control through a standpipe below the core, maintenance of level above top-of-active fuel (TAF) is the superior water level control strategy in an anticipated transient without scram (ATWS) event. The staff recommends a level around TAF +5 feet (1.52 m), or as high as possible, while still maintaining the level at least 2 feet (0.61 m) below the feedwater sparger. Although control at any level between the minimum steam cooling water level and 2 feet below the feedwater sparger was found to be acceptable, both the staff and ACRS urge that a high-water-level control strategy be adopted. Additional details are contained in the enclosed SER.

The staff is sending a copy of this letter and the enclosed SER to all BWR licensees and understands that all BWR licensees will revise their emergency operating procedures consistent with the approved modifications. The suggested implementation program contained in Enclosure 1 to the staff's September 12, 1988, letter to the BWROG transmitting the SER on NEDO-31331, Revision 4 remains applicable. The staff requests that the BWROG monitor the progress of implementation and inform the NRC of the number of plants completing implementation and the number selecting each water level option.

~~7/20/15/123 3PP~~

Boiling Water Reactor Owners Group

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