Enclosure 2

BV-2
S/F

OCT 22 1984

MEMORANDUM FOR: Thomas M. Novak, Assistant Director for Licensing
Division of Licensing

FROM: R. Wayne Houston, Assistant Director for Reactor Safety
Division of Systems Integration

SUBJECT: BASIS FOR BEAVER VALLEY 2 FEEDWATER ISOLATION ON HIGH STEAM GENERATOR LEVEL DESIGN REQUIREMENTS

Plant Name:	Beaver Valley 2
Docket No.:	50-412
Licensing Status:	OL
Responsible Branch:	LB #3
Project Manager:	L. Lazo
Review Branch:	ICSB
Review Status:	Incomplete

In Section 7.3.3.12 of the Beaver Valley 2 draft SER (enclosed), ICSB expressed a concern that the design of feedwater isolation on a high steam generator level did not meet the requirements of paragraph 4.7 of IEEE-STD-279. The applicant's response to that concern, dated March 28, 1984, stated that IEEE-STD-279 is not applicable to the issue.

In response, ICSB stated in our Licensing Position #1 for Beaver Valley 2 dated April 30, 1984, that either the design of the feedwater isolation on a high steam generator level be modified to meet the requirements of IEEE-STD-279 or an analysis be provided to show that the consequences of feedwater addition not being terminated by the high steam generator level signal are not safety significant.

In a May 30, 1984 response, the applicant claimed that ICSB's position was a new requirement and should be processed in accordance with NRR procedures for plant specific backfitting. ICSB reviewed the applicant's

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claim and stated, in a June 18, 1984 memorandum, that this issue should not be considered a new requirement (backfit) and that the applicant should respond to ICSB Licensing Position #1.

In a June 8, 1984 letter, the applicant provided an analysis as a response to our licensing position. That analysis was used to support the applicant's conclusion that sufficient time is available (10 minutes) for the operator to take appropriate action and that, therefore, the current steam generator level design is adequate.

The staff (RSB) has reviewed the applicant's analysis and believes that if a similar analysis was performed for or low zero power operation, a much shorter time would be available for operator action. Based on this, it remains ICSB's position that the design for feedwater isolation on high steam generator level should be modified to meet the requirements of paragraph 4.7 of IEEE-STD-279.

Original signed by
R. Wayne Houston

R. Wayne Houston, Assistant Director
For Reactor Safety
Division of Systems Integration

Enclosure:
As stated

cc: R. Bernero
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BEAVER VALLEY 2

DRAFT SER, DATED JAN. 1, 1984

7.3.3.12 Steam Generator Level Control and Protection

Three steam generator level channels are used in a two-out-of-three logic for isolation of feedwater on high steam generator level. One of the three level channels is used for control. This design for actuation of feedwater isolation does not meet the requirements of Paragraph 4.7 of IEEE 279 on "Control and Protection System Interaction" in that the failure of the level channel used for control could require protective action and the remainder of the protection system channels would not satisfy the single-failure criterion. The applicant has not responded to this concern. This is an open item.