



FRAMATOME ANP

An AREVA and Siemens Company

FRAMATOME ANP, Inc.

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Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

10 CFR Part 21 Notification of an Error in BWR Operating Limits

This letter provides notification of a reportable defect in accordance with 10 CFR Part 21. This situation was reported to the NRC Operations Center by facsimile at 11:10 PST on January 14, 2005.

The defect consists of an error in the calculation of the minimum critical power ratio operating limit and the linear heat generation rate operating limit.

The affected utilities have been informed and the planned actions and actions already taken to address the issue are provided in the attachment to this letter.

Very truly yours,

Jerald S. Holm, Director
Regulatory Affairs

Enclosures

cc: M. C. Honcharik
Project 728

JE20

Attachment 1

Reportable Defect

- (i) *Name and address of the individual informing the Commission*

Jerald S. Holm, Framatome ANP, 2101 Horn Rapids Road, Richland, WA 99354

- (ii) *Identification of the facility, the activity, or the basic component supplied for such facility or such activity within the United States which fails to comply or contains a defect.*

The minimum critical power ratio (MCPR) operating limit and linear heat generation rate (LHGR) operating limit.

- (iii) *Identification of the firm constructing the facility or supplying the basic component which fails to comply or contains a defect.*

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- (iv) *Nature of the defect or failure to comply and the safety hazard which is created or could be created by such a defect or failure to comply.*

The turbine generator load rejection with failure of the turbine bypass valves to open event (LRNB) is a potentially limiting anticipated operational occurrence (AOO) considered in establishing the MCPR operating limit and confirming that the linear heat generation rate (LHGR) limits are adequate. Framatome ANP analyses for the LRNB event assume that the load rejection will initiate a fast closure of the turbine control valves (TCV) at all power levels. Some plants have indicated that the fast closure of the TCV is not initiated below a plant specific power level. The fast closure of the TCV initiates a scram and minimizes turbine overspeed. If a fast closure of the TCV does not occur, the TCV will close at a slower rate, scram will be delayed, and the turbine will overspeed. This may increase the severity of the event. The turbine overspeed may result in an increase in recirculation pump speed that will also increase the severity of the event.

- (v) *The date on which the information of such a defect or failure to comply was obtained.*

This issue was determined to be a deviation on November 18, 2004.

- (vi) *In the case of a basic component which fails to comply, the number and the location of all such components in use at, supplied for, or being supplied for one or more facilities or activities subject to the regulations in this part.*

The plants for which Framatome ANP performs analyses and which are impacted by this defect are LaSalle Unit 2 Cycle 10 and Browns Ferry Unit 3 Cycle 12. The operators of the other plants for which Framatome ANP performs analyses have indicated that they are not impacted by this defect.

- (vii) *The corrective action which has been, is being, or will be taken; the name of the individual or organization responsible for this action; and the length of time that has been or will be taken to complete the action.*

The affected plants have all been notified. A set of revised operating limits, which are appropriate for the conditions when a fast closure of the TCV does not occur, have been provided to the affected plants. The plants are currently monitoring to these limits. Framatome ANP future analyses for these plants will correctly model the TCV closure characteristics.

- (viii) *Any advice related to the defect or failure to comply about the facility, activity, or basic component that has been, is being, or will be given to purchasers or licensees.*

See (vii) above.