



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

July 1, 1981

ALL LICENSEES OF OPERATING PLANTS AND HOLDERS OF CONSTRUCTION PERMITS

Gentlemen:

SUBJECT: STEAM GENERATOR OVERFILL (GENERIC LETTER 81-16)

In a letter dated March 28, 1980 from H.R. Denton, we informed you of the revised criteria to be used by the staff in evaluating reactor operator training and licensing that could be implemented under the current regulations. We also advised you that Commission review in the area of operator training and qualification was continuing and it could be expected to result in additional criteria.

The NRC Office of Analysis and Evaluation of Operational Data has produced a report entitled, "AEOD Observations and Recommendations Concerning the Problem of Steam Generator Overfill and Combined Primary and Secondary Side Blowdown," dated December 17, 1980, a copy of the report is enclosed. This report documents results of studies completed to date by the Office of Analysis and Evaluation of Operational Data with regard to the steam generator overfill problem.

This report expresses concerns in the following area: (1) increased dead weight and potential seismic loads placed on the main steamline and its support should this line become flooded; (2) the load placed on the main steamlines due to the potential for rapid collapse of steam voids resulting in water hammer; (3) the potential for secondary safety valves sticking open following discharge of water or two-phase flow; (4) the potential for rupture for weakend tubes in the once-through-steam-generator (OTSG) on B&W NSSS plants due to tensile loads caused by the rapid thermal shrinkage of the tubes relative to the generator shell.

From the examining experiences of the Operator Licensing Branch, operators at nuclear power plants are aware of the need to avoid overfilling steam generators and not operating steam systems with water accumulation. However, there may be a general lack of appreciation of the potential seriousness of situations that can arise from these events.

*Emphasis By Underling Added*

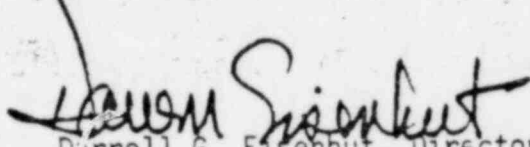


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While this issue is being studied further, we request that you determine which scenarios are credible for your plant and that you include in your overall training program, plant-specific information stressing the importance of feedwater flow as well as the possible consequences of steam generator overfill. This information should be factored into your initial operator training programs and the operator requalification programs.

Sincerely,



Darrell G. Eisenhut, Director  
Division of Licensing  
Office of Nuclear Reactor Regulation

Enclosure:  
As stated

cc w/o enclosure:  
Service Lists