



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
511 RYAN PLAZA DRIVE, SUITE 1000  
ARLINGTON, TEXAS 76012

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February 8, 1980

States


Docket Nos. 50-313  
50-368

Arkansas Power and Light Company  
Attn: Mr. William Cavanaugh III  
Vice President of Generation  
and Construction  
P. O. Box 551  
Little Rock, Arkansas 72203

Gentlemen:

The enclosed IE Bulletin No. 80-04, is forwarded for action. A written response is required. If you desire additional information regarding this matter, please contact this office.

Sincerely

  
K. V. Seyfrit  
Director

Enclosures:

1. IE Bulletin No. 80-04
2. List of Recently Issued  
IE Bulletins

cc: James P. O'Hanlon, Plant Manager  
Arkansas Nuclear One  
P. O. Box 608  
Russellville, Arkansas 72801

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT  
WASHINGTON, D.C. 20555

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IE Bulletin No. 80-04  
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ANALYSIS OF A PWR MAIN STEAM LINE BREAK WITH CONTINUED FEEDWATER ADDITION

Description of Circumstances:

Virginia Electric and Power Co. submitted a report to the Nuclear Regulatory Commission on September 7, 1979 that identified a deficiency in the original analysis of containment pressurization as a result of reanalysis of steam line break for North Anna Power Station, Units 3 and 4.

Stone and Webster Engineering Corporation performed a reanalysis of containment pressure following a main steam line break and determined that, if the auxiliary feedwater system continued to supply feedwater at runout conditions to the steam generator that had experienced the steam line break, containment design pressure would be exceeded in approximately 10 minutes. The long term blowdown of the water supplied under runout conditions by the auxiliary feedwater system had not been considered in the earlier analysis.

On October 1, 1979, the foregoing information was provided to all holders of operating licenses and construction permits in IE Information Notice No. 79-24. The Palisades facility did an accident analysis review pursuant to the information in the notice and discovered that with offsite power available, the condensate pumps would feed the affected generator at an excessive rate. This excessive feed was not considered in the analysis for the steam line break accident.

On January 30, 1980, Maine Yankee Atomic Power Company informed the NRC of an error in the main steam line break analysis for the Maine Yankee plant. During a review of the main steam line break analysis, for zero or low power at the end of core life, the licensee identified an incorrect postulation that the startup feedwater control valves would remain positioned "as is" during the transient. In reality, the startup feedwater control valves will ramp to 80% full open due to an override signal resulting from the low steam generator pressure reactor trip signal. Reanalysis of the event shows the opening of the startup valve and associated high feedwater addition to the affected steam generator would cause a rapid reactor cooldown and resultant return-to-power, a condition outside the plant design basis.

Actions to be Taken by the Licensee

For all pressurized water power reactors listed in Enclosure 1:

1. Review the containment pressure potential for containment overp

DUPLICATE DOCUMENT

Entire document previously  
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