

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION III  
799 ROOSEVELT ROAD  
GLEN ELLYN, ILLINOIS 60137

FEB 1 1977

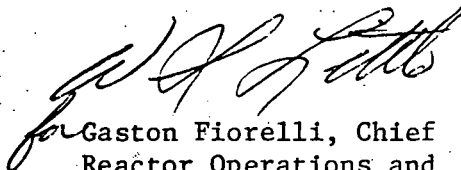
Commonwealth Edison Company                      Docket No. 50-249  
ATTN: Mr. Byron Lee, Jr.  
      Vice President  
P.O. Box 767  
Chicago, Illinois 60690

Gentlemen:

Thank you for your letter dated December 14, 1976, informing us of the new test program relating to feedwater check valve local leak-rate tests. Your program is presently under review by our office and has also been forwarded to our headquarters for a generic review.

Your cooperation with us is appreciated.

Sincerely yours,

  
for Gaston Fiorelli, Chief  
Reactor Operations and  
Nuclear Support Branch

cc: Mr. B. B. Stephenson  
      Station Superintendent

cc w/ltr dtd 12/14/76:  
Central Files  
Reproduction Unit NRC 20b  
PDR  
Local PDR  
NSIC  
TIC  
Anthony Roisman, Esq.,  
Attorney





**Commonwealth Edison**

Dresden Nuclear Power Station

R.R. #1

Morris, Illinois 60450

Telephone 815/942-2920

BBS Ltr. #76-871

December 14, 1976

Mr. James G. Keppler, Regional Director  
Directorate of Regulatory Operations - Region III  
U. S. Nuclear Regulatory Commission  
799 Roosevelt Road  
Glen Ellyn, Illinois 60137

SUBJECT: Dresden Station Feedwater Check Valve Local Leak-Rate Testing

REFERENCE: Letter to J. G. Keppler from B. B. Stephenson dated November 4, 1976 (Reportable Occurrence report no. 50-249/1976-25)

Because feedwater check valve local leak-rate tests (LLRT's) have repeatedly yielded excessive "as found" leakage results, a new test method has been developed which approximates as closely as possible the primary containment conditions during a loss-of-coolant accident (LOCA).

The new test method involves pressurizing the volume upstream of the feedwater check valve with water to approximately 50 psig, then draining the system and performing a LLRT utilizing isolation valve test procedures. Current isolation valve test procedures specify a pneumatic pressure decay test as required by the Technical Specifications. The station procedures will be revised to reflect the new method of testing the feedwater check valves in the "as found" condition.

Development of this new test method was based on typical postulated conditions following a LOCA. The conditions selected were the design basis LOCA followed by a loss of off-site power, two failures which would result in the lowest differential pressure available to seat the feedwater check valves. For these conditions, reactor and containment pressure would be approximately 50 psig when the feedwater system pressure dropped to zero as the result of the loss of off-site power. Postulated LOCA's with less than design basis-size breaks would result in longer blowdown rates and potentially higher differential pressure available to seat the check valves following the subsequent loss of off-site power. Since there would still be water on the valves due to their position in the low point of the line, the new method of seating the valves with water is representative of accident conditions.

10 C.F.R. part 50, appendix J, section III.C.1 specifies that each valve to be tested shall be closed by normal operation and without any preliminary exercising or adjustments. Feedwater check valve seating with water is considered a normal operation since the valve is normally seated with water and a differential pressure.

Based on the results of testing performed during the Dresden Unit-3 1976 refueling outage, it is anticipated that the utilization of the new

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test method will significantly reduce the incidence of excessive "as found" leakage test results on the feedwater check valves. (The method used to test the Unit-3 feedwater check valves is described in the referenced reportable occurrence report.) As stated previously, the Dresden Station LLRT procedure for the feedwater check valves will be revised to include this new testing method.



B. B. Stephenson  
Station Superintendent  
Dresden Nuclear Power Station

BBS:CES:jo

cc: Director of Inspection & Enforcement  
Director of Management Information & Program Control  
File/NRC