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June 3, 1981

EF2 - 52,674

Mr. L. L. Kintner  
Division of Project Management  
Office of Nuclear Regulation  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Dear Mr. Kintner:

Reference: Enrico Fermi Atomic Power Plant, Unit 2  
NRC Docket No. 50-341

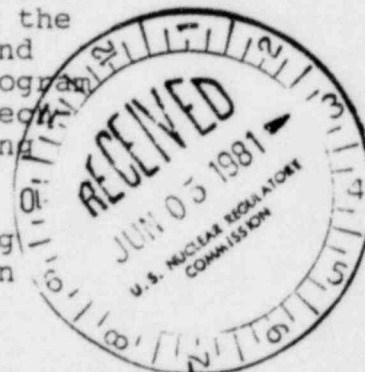
Subject: Inservice Inspection of Pressure Isolation  
Valves

The following information is submitted in response to Mr. Robert L. Tedesco's letter of November 17, 1980 to W. H. Jens on the subject of inservice inspection of pressure isolation valves at Fermi 2. Edison has reviewed the NRC Staff position contained in your letter and intends to incorporate it to the extent practicable.

Table 1 (attached) contains a list of valves performing an isolation function between high pressure and low pressure portions of systems connected to the reactor coolant system (RCS). Four (4) sets of piping and instrumentation diagrams showing these valves are also enclosed. These valves will be incorporated into the ASME Section XI Pump and Valve Testing Program, and categorized as Type A or Type AC. The testing program for the valves, which will be referenced by the Technical Specifications, will consist of the following methods:

Exercise valve and verify valve position during refueling and after maintenance prior to return to service in accordance with IWV-3300 or IWV-3522-(b).

Exercise valve (full stroke) for operability during cold shutdown mode as time permits but not more frequently than once every three months.



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Measure the full stroke time (not for check valves)

Leak test the valve seat prior to reaching power operation following refueling and after valve maintenance prior to return to service.

These valves shall not be routinely exercised every three months during plant operation as required by IWV-3410 because:

1. Such tests remove one of the two barriers protecting the low pressure portion of the emergency core cooling systems.
2. The operators on testible check valves cannot overcome the force on the valve with reactor pressure on one side.

Instead, they will be exercised during cold shutdown periods as time permits (but not more frequently than once every three months).

We believe it is necessary to take exception to the requirement of leak testing each time the valve is moved from its fully closed position. Because of the time and equipment necessary for these tests, it is absolutely impractical to leak test these valves following the exercise test done during cold shutdown periods other than refueling. On the other hand, full closure of these valves, including check valves, is verified in the control room by direct monitoring position indicators. In addition, these lines are equipped with overpressure detection and protection devices should pressure isolation valves leak. These are summarized in Table 2. It shows every line is protected with a relief valve and has pressure monitoring. Based on these design provisions, it is felt that sufficient justification has been provided to preclude the need to perform the leakage test each time the valve is moved from its fully closed position.

We agree to the 1 gpm acceptance criteria for each valve as stated in the NRC criteria. However, we believe this is very strict and may be difficult to achieve. We intend to follow industry experience with meeting this criterion and to request relief should other plants find it necessary.

TABLE 1

LIST OF PRESSURE ISOLATION VALVES

<u>SYSTEM</u>	<u>P&amp;ID</u>	<u>VALVE NUMBERS</u>	<u>TYPE</u>	<u>SIZE IN.</u>	<u>FUNCTION</u>
RHR	6M721-2083 6M721-2084	E11-F015A, B	Gate	24	Discharge to Recirc. System
		-F050A, B	Check	24	Discharge to Recirc. System
		-F023	Globe	6	Discharge to Head Spray
		-F022	Gate	6	Discharge to Head Spray
		-F008	Gate	20	Suction from Recirc. System
		-F009	Gate	20	Suction from Recirc. System
		-F608	Gate	20	Suction from Recirc. System
CS	6M721-2034	E21-F005A, B	Gate	12	Discharge to Core Spray Sparger
		-F006A, B	Check	12	Discharge to Core Spray Sparger
HPCI	6M721-2035	E41-F006	Gate	14	Discharge to FW Line
		E41-F005	Check	14	Pump Discharge
RCIC	6M721-2044	E51-(V8-2229)	Check	6	Pump Discharge
		E51-F013	Gate	6	Discharge to FW Line

TABLE 2PRESSURE ISOLATION PROTECTION AND MONITORING

System/Line Needing Protection	Relief Valve Overpressure Protection	Control Room Alarm	Control Room Indicator	Local Indicator
RHR Discharge	F025A, B, 1-1/2 inch	E11-N022A, B at 400 psig	E11-R003,A,B,C,D 0-600 psig	
RHR Suction	F030A, B, C, D, F029 1 inch		E11-R002A,B,C,D, 30" Hg - 150 psig	
CS Discharge	V22-2016, V22-2017 V22-2119, V22-2120	E21-N007A,B, at 450 psig		E21-R600A, B 0-500 psig
HPCI	E42-F020 (V22-2044) 1-1/2 inch	E41-N031 at 75 psig		E41-R004 0-1500 psig
RCIC Suction	E51-F017 (V22-2002) 1 inch	E51-N030 at 75 psig		E51-R002 30" hg-85 psig