Attachment 3

ATTACHMENT TO ORDER FOR MODIFICATION OF

FACILITY OPERATING LICENSE NO. DPR-50

DOCKET NO. 50-289

Replace the following pages of Appendix "A" Technical Specifications with the enclosed pages. The revised pages contain vertical lines indicating the area of change.

3-13

3-13a (new)

3-15a (new)

4-12

3.1.6.9 Loss of reactor coolant through reactor coolant pump seals and system valves to connecting systems which vent to the gas vent header and from which coolant can be returned to the reactor coolant system shall not be considered as reactor coolant leakage and shall not be subject to the consideration of Specifications 3.1.6.1, 3.1.6.2, 3.1.6.3, 3.1.6.4, 3.1.6.5, 3.1.6.6 or 3.1.6.7, except that such losses when added to leakage shall not exceed 30 gpm. If leakage plus losses exceeds 30 gpm, the reactor shall be placed in hot shutdown within 24 hours of detection.

3.1.6.10 Operating conditions of power operation, startup and hot shutdown apply to the operational status of the high pressure isolation valves between the primary coolant system and the low pressure injection system.

a. During all operating conditions in this specification, all pressure isolation valves listed in Table 3.1.6.1 that are located between the primary coolant system and the LPIS shall function as pressure isolation devices except as specified in 3.1.6.10.b. Valve leakage shall not exceed the amount indicated in Table 3.1.6.1. (a)

b. In the event that integrity of any high pressure isolation check valves specified in Table 3.1.6.1 cannot be demonstrated, reactor operation may continue provided that at least two valves in each high pressure line having a non-functional valve are in and remain in, the mode corresponding to the isolated condition. (b)

c. If Specification 3.1.6.10.a or 3.1.6.10.b cannot be met, an orderly shutdown shall be accomplished by achieving hot shutdown within six hours and cold shutdown within an additional thirty hours.

Bases

Any leak of radioactive fluid, whether from the reactor coolant system primary boundary or not, can be a serious problem with respect to in-plant radioactive contamination and required cleanup or, in the case of reactor coolant, it could develop into a still more serious problem and, therefore, the first indications of such leakage will be followed up as soon as practical. The unit's makeup system has the capability to makeup considerably more than 30 gpm of reactor coolant leakage.

Water inventory balances, monitoring equipment, radioactive tracing, boric acid crystalline deposits, and physical inspections can disclose reactor coolant leaks.

(a) For the purpose of this specification integrity is considered to have been demonstrated by meeting Specification 4.2.6.

(b) Motor operated valves shall be placed in the closed position and power supplies deenergized.

Bases (Continued)

Although some leak rates on the order of gallons per minute may be tolerable from a dose point of view, it is recognized that leaks in the order of drops per minute through any of the barriers of the primary system could be indicative of materials failure such as by stress corrosion cracking. If depressurization, isolation, and/or other safety measures are not taken promptly, these small leaks could develop into much larger leaks, possibly into a gross pipe rupture. Therefore, the nature and location of the leak, as well as the magnitude of the leakage, must be considered in the safety evaluation.

When reactor coolant leakage occurs to the Reactor Building, it is ultimately conducted to the Reactor Building sump. Although the reactor coolant is safely contained, the gaseous components in it escape to the Reactor Building atmosphere. There, the gaseous components become a potential hazard to plant personnel, during inspection tours within the Reactor Building, and to the general public whenever the Reactor Building atmosphere is periodically purged to the environment.

When reactor coolant leakage occurs to the Auxiliary Building, it is collected in the Auxiliary Building sump. The gases escaping from reactor coolant leakage within the Auxiliary Building will be collected in the Auxiliary and Fuel Handling Building exhaust ventilation system and discharged to the environment via the unit's Auxiliary and Fuel Handling Building vent. Since the majority of this leakage occurs within confined, separately ventilated cubicles within the Auxiliary Building, it incurs very little hazard to plant personnel.

In regard to the surveillance specification 4.2.6, the isolation valves may be tested at a reduced pressure in accordance with the Franklin Research Center Report titled "Primary Coolant System Pressure Isolation Valves for TMI-1" (FRC Task 212) dated October 24, 1980, Section 2.2.2.

TABLE 3.1.6.1

PRESSURE ISOLATION CHECK VALVES BETWEEN THE PRIMARY COOLANT SYSTEM & LPIS

System	Valve No.	Maximum(a) Allowable Leakage
Low Pressure Injection		(≤ 5.0 GPM for all valves)
Train A	CF-V5A DH-V22A	(≤ 5.0 GPM for all valves)
Train B	CF-V5B DH-V22B	(≤ 5.0 GPM for all valves)

Footnote:

(a)

1. Leakage rates less than or equal to 1.0 gpm are considered acceptable.
2. Leakage rates greater than 1.0 gpm but less than or equal to 5.0 gpm are considered acceptable if the latest measured rate has not exceeded the rate determined by the previous test by an amount that reduces the margin between measured leakage rate and the maximum permissible rate of 5.0 gpm by 50% or greater.
3. Leakage rates greater than 1.0 gpm but less than or equal to 5.0 gpm are considered unacceptable if the latest measured rate exceeded the rate determined by the previous test by an amount that reduces the margin between measured leakage rate and the maximum permissible rate of 5.0 gpm by 50% or greater.
4. Leakage rates greater than 5.0 gpm are considered unacceptable.

4.2.4 The licensee shall submit a report or application for license amendment to the NRC within 90 days after any time that Crystal River Unit No. 3 fails to maintain a cumulative reactor utilization factor of at least 65%.

The report shall provide justification for continued operation of TMI-1 with the reactor vessel surveillance program conducted at Crystal River Unit No. 3, or the application for license amendment shall propose an alternate program for conduct of the TMI-1 reactor vessel surveillance program.

For the purpose of this technical specification, the definition of commercial operation is that given in Regulatory Guide 1.16, Revision 4. The definition of cumulative reactor utilization factor is:

> Cumulative reactor utilization factor - (Cumulative megawatt hours (thermal) since attainment of commercial operation at 100% power x (100)) divided by (licensed power (MWt) x (Cumulative hours since attainment of commercial operation at 100% power)).

4.2.5 In addition to the reports required by Specification 4.2.4, a report shall be submitted to the NRC prior to September 1, 1982, which summarizes the first five years of operating experience with the TMI-1 integrated surveillance program performed at a host reactor. If, at the time of submission of this report, it is desired to continue the surveillance program at a host reactor, such continuation shall be justified on the basis of the attained operating experience.

4.2.6 A surveillance program for the pressure isolation valves between the primary coolant system and the low pressure injection system shall be as follows:

1. Periodic leakage testing[(a)] at test differential pressure greater than 150 psid shall be accomplished for the valves listed in Table 3.1.6.1 for the following conditions:
   (a) prior to achieving hot shutdown after returning the valve to service following maintenance repair or replacement work, and

   (b) prior to achieving hot shutdown following a cold shutdown of greater than 72 hours duration unless testing has been performed within the previous 9 months.
2. Whenever integrity of a pressure isolation valve listed in Table 3.1.6.1 cannot be demonstrated, the integrity of the other remaining valve in each high pressure line having a leaking valve shall be determined and recorded daily. In addition, the position of one other valve located in the high pressure piping shall be recorded daily.

Bases

a. Specifications 4.2.1 & 2 ensure that inservice inspection of ASME Code Class 1, 2 and 3 components will be performed in accordance with a periodically updated version of Section XI of the ASME Boiler and Pressure Vessel Code and Addenda as required by 10 CFR 50.55a(g). Relief from any of the above requirements has been provided in writing by the NRC and is not a part of these technical specifications.

(a) To satisfy ALARA requirements, leakage may be measured indirectly (as from the performance of pressure indicators) if accomplished in accordance with approved procedures and supported by computations showing that the method is capable of demonstrating valve compliance with the leakage criteria.