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SEP 12 1984

JOHN S. KEMPER  
VICE-PRESIDENT  
ENGINEERING AND RESEARCH

Mr. A. Schwencer, Chief  
Licensing Branch No. 2  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Docket Nos.: 50-352  
50-353

Subject: Limerick Generating Station  
TMI Item III.D.1.1 Primary Coolant Outside  
Containment

Reference: PECO and NRC Telecon dated 9/6/84.

File: GOVT 1-1 (NRC)

Dear Mr. Schwencer:

As discussed and agreed to with the Meteorological and Effluent Treatment Branch Reviewer in the reference conference call, the Leakage Reduction Program described in FSAR Section 6.2.8 will be implemented both prior to and after fuel load in accordance with the following schedule.

Of the sixteen surveillance tests (see attachment) which are used to satisfy FSAR Section 6.2.8 requirements, the Contaminated Pipe Inspection Tests that deal with the Scram Discharge Volume, Residual Heat Removal, Core Spray, and Safeguard Piping Fill Systems (8 tests in all) will be completed prior to fuel load. These test results will be submitted to you as supplement 1 to this letter after the last test is performed. The remaining tests will be performed after fuel load as outlined below, since the systems to which they apply are not required to be in surveillance for the fuel load operating condition.

The Contaminated Piping Inspection tests for the Post Accident Sampling System will be completed prior to exceeding five percent power and the Post LOCA Recombiners will be completed prior to Start-up (Technical Specification Operating Condition 2). The HPCI and RCIC tests are to be run when reactor pressure reaches normal operating pressure. The results of these 8 tests will also be submitted to you as supplement 2 to this letter after the last test has been performed.

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All sixteen surveillance test procedures and test results will be available at the Limerick site for review by NRC Region I Site inspectors.

As a result of the revised Leak Reduction program schedule, the attached draft revised FSAR page change to TMI Item III.D.1.1 will be incorporated into the FSAR exactly as it appears in the attachment scheduled for October, 1984.

Sincerely,

*J. Ballighan*  
*for*  
*J. Kanzen*

RJS/gra/09118401

cc: See Attached Service List

ATTACHMENT

Leak Reduction Program  
Surveillance Tests

1. ST-1-030-700-1 Post Accident Sampling System Liquid Sample Contaminated Piping Inspection
2. ST-1-030-701-1 Post Accident Sampling System Atmospheric Sample Loops Contaminated Piping Inspection
3. ST-1-047-700-1 Control Rod Drive Scram Discharge Volume Contaminated Piping Inspection
4. ST-1-049-701-1 Reactor Core Isolation Cooling Pump Contaminated Piping Inspection
5. ST-1-049-702-1 Reactor Core Isolation Cooling Turbine Contaminated Piping Inspection
6. ST-1-051-701-1 A Residual Heat Removal Contaminated Piping Inspection
7. ST-1-051-702-1 B Residual Heat Removal Contaminated Piping Inspection
8. ST-1-051-703-1 C Residual Heat Removal Contaminated Piping Inspection
9. ST-1-051-704-1 D Residual Heat Removal Contaminated Piping Inspection
10. ST-1-052-701-1 A Core Spray Contaminated Piping Inspection
11. ST-1-052-702-1 B Core Spray Contaminated Piping Inspection
12. ST-1-052-705-1 Safeguard Piping Fill Contaminated Piping Inspection
13. ST-1-055-701-1 High Pressure Core Injection Pump Contaminated Piping Inspection
14. ST-1-055-702-1 High Pressure Core Injection Turbine Contaminated Piping Inspection
15. ST-1-058-701-1 A Post Accident LOCA Recombiner Contaminated Piping Inspection
16. ST-1-058-702-1 B Post Accident LOCA Recombiner Contaminated Piping Inspection

cc: Judge Lawrence Brenner (w/enclosure)  
Judge Peter A. Morris (w/enclosure)  
Judge Richard F. Cole (w/enclosure)  
Judge Christine N. Kohl (w/enclosure)  
Judge Gary J. Edles (w/enclosure)  
Judge Reginald L. Gotchy (w/enclosure)  
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Mr. Frank R. Romano (w/enclosure)  
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Atomic Safety & Licensing (w/enclosure)  
Appeal Board  
Atomic Safety & Licensing (w/enclosure)  
Board Panel  
Docket & Service Section (w/enclosure)  
Mr. James Wiggins (w/enclosure)  
Mr. Timothy R. S. Campbell (w/enclosure)

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Staffing of the EOF and the TSC is described in the Limerick Emergency Plan, Table I.1.

• III.A.2 EMERGENCY PREPAREDNESS

Position

- (1) Each nuclear facility shall upgrade its emergency plan to provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency. Specific criteria to meet this requirement is delineated in NUREG-0654 (FEMA-REP-1), "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparation in Support of Nuclear Power Plants."
- (2) Perform an emergency response exercise to test the integrated capability and a major portion of the basic elements existing within emergency preparedness plans and organizations.

Response

Emergency planning is discussed in Section 13.3.

• III.D.1.1 PRIMARY COOLANT OUTSIDE CONTAINMENT

Position

Applicants shall implement a program to reduce leakage from systems outside containment that would or could contain highly radioactive fluids during a serious transient or accident to as-low-as-practical levels. This program shall include the following:

No Change

No Change

- (1) Immediate leak reduction
  - (a) Implement all practical leak reduction measures for all systems that could carry radioactive fluid outside of containment.
  - (b) Measure actual leakage rates with system in operation and report them to the NRC.
- (2) Continuing Leak Reduction--Establish and implement a program of preventive maintenance to reduce leakage to as-low-as-practical levels. This program shall include periodic integrated leak tests at intervals not to exceed each refueling cycle.

#### Clarification

Applicants shall provide a summary description, together with initial leak-test results, of their program to reduce leakage from systems outside containment that would or could contain primary coolant or other highly radioactive fluids or gases during or following a serious transient or accident.

- (1) Systems that should be leak tested are as follows (any other plant system which has similar functions or postaccident characteristics even though not specified herein, should be included):
  - (a) Residual heat removal,
  - (b) Containment spray recirculation,
  - (c) High-pressure injection recirculation,
  - (d) Containment and primary coolant sampling,
  - (e) Reactor core isolation cooling,
  - (f) Makeup and letdown (pressurized water reactors only), and
  - (g) Waste gas (includes headers and cover gas system outside of containment in addition to decay or storage system).

Include a list of systems containing radioactive materials which are excluded from program and provide justification for exclusion.

- (2) Testing of gaseous systems should include helium leak detection or equivalent testing methods.

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- (3) Should consider program to reduce leakage potential release paths due to design and operator deficiencies as discussed in our letter to all operating nuclear power plants regarding North Anna and Related incidents, dated October 17, 1979.

Response

A review of all systems designed to handle highly radioactive fluids during or after a serious transient or accident has been performed to ensure that appropriate design features to minimize leakage have been included. System isolation provisions have been reviewed in conjunction with this effort (Section 6.2.7). A leak reduction program for these systems will be implemented prior to fuel load to measure actual leakage rates and to identify sources of leakage in order that total leakage may be reduced to as-low-as-practical levels. The leakage reduction program is described in Section 6.2.8.

*and after*