

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)	
)	
Philadelphia Electric Company)	Docket No. 50-352
)	
(Limerick Generating Station,)	
Unit 1))	

EXEMPTION

I.

Philadelphia Electric Company (the licensee), is the holder of Facility Operating License No. NPF-39, which authorizes operation of the Limerick Generating Station (LGS), Unit 1. The license provides, among other things, that the licensee is subject to all rules, regulations, and orders of the Nuclear Regulatory Commission (the Commission) now and hereafter in effect.

The LGS, Unit 1 facility consists of a boiling water reactor located in Chester and Montgomery Counties, Pennsylvania.

II.

In its letter dated November 30, 1993, the licensee requested an exemption from the Commission's regulations. The subject exemption is from a requirement in Appendix J to 10 CFR Part 50 that a set of three Type A tests (Containment Integrated Leakage Rate Tests, or CILRTs) be performed, at approximately equal intervals, during each 10-year service period. The exemption applies to the first 10-year service period; subsequent service periods are not changed. In the same letter, the licensee applied for an amendment to Operating License No. NPF-39 to change certain provisions of the LGS Technical Specifications (TSs).

The type A test is defined in 10 CFR Part 50, Appendix J, Section II.F, as "tests intended to measure the primary reactor containment overall integrated leakage rate (1) after the containment has been completed and is ready for operation, and (2) at periodic intervals thereafter." The 10-year service period begins with the inservice date. The first CILRT testing interval was 36 months, and the second was 39 months. The time interval between CILRTs should be about 40 months based on performing three such tests at approximately equal intervals during each 10-year service period.

The request for a one-time exemption would allow the third Type A CILRT within the first 10-year service period to be conducted during the sixth refueling outage. This requested exemption is a one-time schedular extension of the third interval to 65 months. It does not affect the second 10-year service period.

With respect to the subject exemption request, the NRC staff notes that the first and second CILRTs of the set of three tests for the first 10-year service period for LGS were conducted in August 1987 and November 1990. The third of the first set of three CILRTs will be scheduled for Refueling Outage 6, projected to start in January 1996, pending approval of the exemption request. The current third test period in the first 10-year service period will actually be exceeded by approximately 15 months.

Data from the first August 1989 and second November 1990 CILRT at LGS, Unit 1 indicates that most of the measured leakage is from the containment penetrations and not from the containment barrier. The "as-left" leakage rate was well below the 10 CFR Part 50 Appendix J limit. Both Appendix J and the TS require that the leakage rate be less than 75% of L_n to allow for

deterioration in leakage paths between tests. The allowable leakage rate, L_a , is 0.5 wt.%/day. Therefore, the established acceptable limit is <0.375 wt.%/day. The "as-left" leakage rates for the first two CILRTs were 0.178 and 0.334 wt.%/day, which is below the acceptance limit. The Type B and C test (Local Leakage Rate Test or LLRT) program also provides assurance that containment integrity has been maintained. LLRTs demonstrate operability of components and penetrations by measuring penetration and valve leakage. Additionally, there have been no modifications made to the plant that could adversely affect the test results.

The licensee further notes that the performance of a fourth test in the first 10-year service period to meet the requirements of the TSs and Appendix J would result in additional radiation exposure to personnel. Omitting the test will result in additional dose savings by eliminating contamination and by reducing exposure from venting and draining and from setups and re-ratations of instrumentation required to perform the test. These factors and the costs associated with a fourth test for a 15-month difference in interval time are not offset by the benefits of the fourth test.

For the reasons set forth above, the NRC staff concludes that this deviation from the 10-year service period ending August 1994 is not significant in terms of complying with the safety or scheduling requirements of Section III.D.1.(a) of Appendix J. Accordingly, the staff finds that the additional test would not provide substantially different information and that the intent of Appendix J is met. Therefore, the subject exemption request meets the special circumstances of 10 CFR 50.12(a)(2)(ii), in that the fourth test is not necessary to achieve the underlying purpose of the rule.

On this basis, the NRC staff finds that the licensee has demonstrated that special circumstances are present as required by 10 CFR 50.12(a)(2). Further, the staff also finds that extending the service period will not present an undue risk to the public health and safety; since the licensee has justified the leaktight integrity of the containment based on previous leakage test results, the staff concludes that a one-time extension of approximately 15 months beyond the maximum permitted third test interval within the first 10-year service period will not have a significant safety impact.

III.

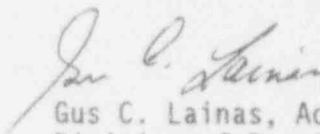
Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12, an exemption is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest and hereby grants the following exemption with respect to a requirement of 10 CFR Part 50, Appendix J, Section III.D.1(a):

For the Limerick Generating Station, Unit 1, the current third test period within the first 10-year service period may be extended by approximately 15 months, so that the third periodic Type A test may be performed during the Sixth refueling outage scheduled for January, 1996.

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this exemption will not have a significant effect on the quality of the human environment (59 FR 5785).

This exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Gus C. Lainas, Acting Director
Division of Reactor Projects - i/II
Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland
this 16 day of February 1994

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this exemption will not have a significant effect on the quality of the human environment (59 FR 5785).

This exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/s/

Gus C. Lainas, Acting Director
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland
this 16 day of February 1994

*Previously Concurred

OFFICE	PDI-2/LA	PDI-2/PM	PDI-2/D	OGC*	DRPE/AD	DRPE/D
NAME	M O'Brien	FRinaldi:rb	C Miller	EHoller	JCalvo	G Lainas
DATE	2/4/94	2/14/94	2/16/94	02/07/94	2/16/94	2/16/94

OFFICIAL RECORD COPY

DOCUMENT NAME: LI87331.EXM