

May 24, 2001

Mr. Oliver D. Kingsley, President  
Exelon Nuclear  
Exelon Generation Company, LLC  
200 Exelon Way, KSA 3-E  
Kennett Square, PA 19348

SUBJECT: LIMERICK GENERATING STATION, UNITS 1 AND 2 - ISSUANCE OF  
AMENDMENT RE: HYDROGEN/OXYGEN ACCIDENT MONITORS  
(TAC NOS. MB0350 AND MB0351)

Dear Mr. Kingsley:

The Commission has issued the enclosed Amendment No. 151 to Facility Operating License No. NPF-39 and Amendment No. 115 to Facility Operating License No. NPF-85 for the Limerick Generating Station, Units 1 and 2. These amendments consist of changes to the Technical Specifications (TSs) in response to your application dated October 25, 2000.

On January 12, 2001, the licenses held by PECO Energy Company (PECO) for Limerick 1 and 2, were transferred to Exelon Generation Company, LLC (Exelon). By letter dated January 30, 2001, Exelon requested that the U.S. Nuclear Regulatory Commission continue to review and act upon all requests before the Commission which had been submitted by PECO.

These amendments revise the Action Statements associated with TS Table 3.3.7.5-1, "Accident Monitoring Instrumentation," concerning the Drywell Hydrogen/Oxygen (H<sub>2</sub>/O<sub>2</sub>) Concentration Analyzers, and the associated TS Bases.

A copy of our safety evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

**/RA/**

Christopher Gratton, Sr. Project Manager, Section 2  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-352 and 50-353

Enclosures: 1. Amendment No. 151 to  
License No. NPF-39  
2. Amendment No. 115 to  
License No. NPF-85  
3. Safety Evaluation

cc w/encls: See next page

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cc w/encls: See next page

DISTRIBUTION:

MO'Brien	WBeckner	PUBLIC	CGrattony	
PDI-2 R/F	OGC	ACRS	EAdensam	GHill (4)
JClifford	BPlatchek	WBeckner		

Accession Number: ML003776893

OFFICE	PDI-1\PM	PDI-1\LA	OGC	TSB	PDI-1\SC	SPLB
NAME	CGratton	MO'Brien	AHodgdon	WBeckner	JClifford	GHubbard
DATE	4/27/01	4/27/01	5/3/01	5/1/01	5/22/01	5/22/01

Official Record Copy

Limerick Generating Station, Units 1 & 2

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EXELON GENERATION COMPANY

DOCKET NO. 50-352

LIMERICK GENERATING STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 151  
License No. NPF-39

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by PECO Energy Company (the then-licensee), adopted by Exelon Generation Company, LLC, dated October 25, 2000, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-39 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 151 , are hereby incorporated into this license. Exelon Generation Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/*

James W. Clifford, Chief, Section 2  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment: Changes to the  
Technical Specifications

Date of Issuance: May 24, 2001

ATTACHMENT TO LICENSE AMENDMENT NO. 151

FACILITY OPERATING LICENSE NO. NPF-39

DOCKET NO. 50-352

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove

3/4 3-85

3/4 3-86

B3/4 3-5

B 3/4 3-5a

Insert

3/4 3-85

3/4 3-86

B 3/4 3-5

B 3/4 3-5a

EXELON GENERATION COMPANY

DOCKET NO. 50-353

LIMERICK GENERATING STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 115  
License No. NPF-85

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by PECO Energy Company (the then-licensee), adopted by Exelon Generation Company, LLC, dated October 25, 2000, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.



2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-85 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 115 , are hereby incorporated in the license. Exelon Generation Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. The license amendment is effective as of its date of issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/*

James W. Clifford, Chief, Section 2  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment: Changes to the  
Technical Specifications

Date of Issuance: May 29 2001

ATTACHMENT TO LICENSE AMENDMENT NO. 115

FACILITY OPERATING LICENSE NO. NPF-85

DOCKET NO. 50-353

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove

3/4 3-85

3/4 3-86

B 3/4 3-5

B 3/4 3-5a

Insert

3/4 3-85

3/4 3-86

B 3/4 3-5

B 3/4 3-5a

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NOS. 151 AND 115 TO FACILITY OPERATING  
LICENSE NOS. NPF-39 AND NPF-85  
EXELON GENERATION COMPANY  
LIMERICK GENERATING STATION, UNITS 1 AND 2  
DOCKET NOS. 50-352 AND 50-353

## 1.0 INTRODUCTION

By letter dated October 25, 2000, PECO Energy Company (PECO), the previous licensee, submitted proposed changes to the Limerick Generating Station (LGS), Units 1 and 2, Technical Specifications (TSs). The requested changes would revise the Action Statements associated with TS Table 3.3.7.5-1, "Accident Monitoring Instrumentation," concerning the Drywell Hydrogen/Oxygen ( $H_2/O_2$ ) Concentration Analyzers, and the associated TS Bases. The licensee's proposal would add new Action Statements 82a and 82b concerning channel operability, which would replace the current requirements of Action Statements 80a and 80b, respectively, for the Drywell Hydrogen/Oxygen Concentration Analyzers.

PECO was succeeded by Exelon Generation Company (EGC) as the licensed operator of LGS on January 12, 2001. By letter dated January 30, 2001, EGC requested that the Nuclear Regulatory Commission (NRC) staff continue to process and disposition licensing actions previously docketed and requested by PECO.

## 2.0 BACKGROUND

The containment atmospheric control system is designed to monitor the concentration of combustible gases in the containment during normal operation and accident. The combustible gas analyzer subsystem consists of two analyzer packages, each of which contains a hydrogen analyzer cell and an oxygen analyzer cell. Each analyzer package is independent and powered from different divisions of Class 1E power. A single failure of either analyzer package would render that affected package inoperable with the redundant package fully capable of performing the required function at full capacity.

The combustible gas analyzers are utilized for indication and do not perform any automatic or control function. In the event of a failure of the combustible gas analyzers following a loss-of-coolant accident, concentrations of hydrogen and oxygen in the containment can be measured with grab samples using the post-accident sampling system.

Under the existing TS Action Statements for Table 3.3.7.5-1, with the number of operable accident monitoring instrumentation channels less than the required number of operable channels, TSs require that the licensee restore the inoperable channel within 7 days or place the reactor in at least hot shutdown within the following 12 hours (Action Statement 80a).

Additionally, with the number of operable accident monitoring instrumentation channels less than the minimum number of operable channels, TS Table 3.3.7.5-1 requires that the licensee restore the inoperable channel(s) within 48 hours or place the reactor in at least hot shutdown within the following 12 hours (Action Statement 80b).

Proposed Action Statement 82a for Table 3.3.7.5-1 extends the time allowed for the licensee to restore the "required" number of operable accident monitoring channels to 30 days from 7 days. Currently, Table 3.3.7.5-1 states that two accident monitoring channels are required to be operable. Additionally, the proposed Action Statement 82a requires that the licensee provide a Special Report to the NRC within the following 14 days if the required number of accident monitoring channels cannot be restored within 30 days. The Special Report provided under TS 6.9.2 outlines the preplanned alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrumentation channel to operable status.

Proposed Action Statement 82b for Table 3.3.7.5-1 extends the time allowed for the licensee to restore the "minimum" number of operable channels to 72 hours from 48 hours. Table 3.3.7.5-1 currently requires a minimum of one accident monitoring channel to be operable. In addition, if the minimum number of operable accident monitoring channels cannot be restored within 72 hours, proposed Action Statement 82b requires that the licensee place the reactor in hot shutdown within the next 12 hours.

The associated Bases for TS Section 3/4.3.7.5, "Accident Monitoring Instrumentation," have also been revised to reflect the changes to TS Table 3.3.7.4-1.

### 3.0 EVALUATION

The NRC staff has reviewed the licensee's submittal, considering the factors that are discussed below.

The Drywell Hydrogen/Oxygen Concentration Analyzers are utilized for indication and do not perform any automatic or control function. While the licensee has not adopted Improved Standard Technical Specifications for LGS, the proposed TS changes are bounded by the guidance in NUREG-1433, "Standard Technical Specifications General Electric Plants, BWR/4," Revision 2, dated April 2000. In addition, the proposed extended restoration times for the accident monitoring analyzer channels reflect the passive nature of the instruments, the low probability of an event requiring the instrumentation during the proposed interval, and the availability of alternate means to obtain the required information, namely sampling via the post-accident sampling system.

The NRC concludes, therefore, that extending the time allowed to restore the required number of operable accident monitoring channels to 30 days from 7 days, and extending the time allowed to restore the minimum number of accident monitoring channels to 72 hours from 48 hours, is acceptable. The NRC staff also reviewed the changes to TS bases 3/4.3.7.5, "Accident Monitoring Instrumentation," and found them consistent with the proposed TS changes.

### 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Pennsylvania State official was notified of the proposed issuance of the amendment. The State official had no comments.

## 5.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (65 FR 81929). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

## 6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: C. Gratton

Date: May 24, 2001