

March 20, 2002

Mr. Oliver D. Kingsley  
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: OPERATION WITH A STUCK OPEN SAFETY/RELIEF  
VALVE (TAC NOS. MB2134 AND 2135)

Dear Mr. Kingsley:

The Commission has issued the enclosed Amendment No. 157 to Facility Operating License No. NPF-39 and Amendment No. 119 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 May 23, 2001.

These amendments delete TS 3.4.2, Limiting Condition for Operation, Action b, concerning operator actions with stuck open safety/relief valves.

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. 157 to  
License No. NPF-39  
2. Amendment No. 119 to  
License No. NPF-85  
3. Safety Evaluation

cc w/encls: See next page

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G Thomas	PDI-2 R/F	OGC	ACRS
EAdensam	GHill (4)	JClifford	BPlatchek, RGN-I
WBeckner	RCaruso		

Accession Number: ML020270011

OFFICE	PDI-2/PM	PDI-2/LA	SC: SRXB	OGC	PDI-2/SC
NAME	CGratton:as	MO'Brien	R Caruso	STurk	VNerses for JClifford
DATE	02/07/02	02/07/02	02/08/02	02/12/02	02/22/02

Official Record Copy

Limerick Generating Station, Units 1 & 2

cc:

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Limerick Generating Station, Units 1 & 2

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EXELON GENERATION COMPANY, LLC

DOCKET NO. 50-352

LIMERICK GENERATING STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 157  
License No. NPF-39

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Exelon Generation Company, LLC (the licensee) dated May 23, 2001, 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. 157, 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 VNerses for/***

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: March 20, 2002

ATTACHMENT TO LICENSE AMENDMENT NO. 157

FACILITY OPERATING LICENSE NO. NPF-39

DOCKET NO. 50-352

Replace the following page of the Appendix A Technical Specifications with the attached revised page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

Remove  
3/4 4-7

Insert  
3/4 4-7

EXELON GENERATION COMPANY, LLC

DOCKET NO. 50-353

LIMERICK GENERATING STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 119  
License No. NPF-85

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Exelon Generation Company, LLC (the licensee) dated May 23, 2001, 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. 119, 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 VNurses for/***

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: March 20, 2002

ATTACHMENT TO LICENSE AMENDMENT NO. 119

FACILITY OPERATING LICENSE NO. NPF-85

DOCKET NO. 50-353

Replace the following page of the Appendix A Technical Specifications with the attached revised page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

Remove  
3/4 4-7

Insert  
3/4 4-7

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NOS. 157 AND 119 TO FACILITY OPERATING  
LICENSE NOS. NPF-39 AND NPF-85  
EXELON GENERATION COMPANY, LLC  
LIMERICK GENERATING STATION, UNITS 1 AND 2  
DOCKET NOS. 50-352 AND 50-353

## 1.0 INTRODUCTION

By letter dated May 23, 2001, Exelon Generation Company, LLC (the licensee), submitted a request for changes to the Limerick Generating Station (LGS), Units 1 and 2, Technical Specifications (TSs). The requested changes would modify the actions required to be taken under TS 3.4.2, Limiting Condition for Operation (LCO), with one or more safety/relief valves (SRVs) stuck open. The licensee requests that the license be amended to delete TS 3.4.2, LCO, Action b, concerning stuck open SRVs.

## 2.0 EVALUATION

TS 3.4.2, LCO, Action b, currently states:

“With one or more safety/relief valves stuck open, provided that the suppression pool average water temperature is less than 105 °F, close the stuck open safety/relief valve(s); if unable to close the stuck open valve(s) within 2 minutes or if suppression pool average water temperature is 110 °F or greater, place the reactor mode switch in the Shutdown position.”

The above Action was incorporated as part of the original LGS TSs. The 2-minute operator action time and the references to suppression pool temperature requirements were deleted from the Reactor Coolant (RC) System, SRV TSs in the Boiling Water Reactor (BWR) Standard Technical Specifications (STS). The STS have no time restrictions associated with the inadvertent opening of one or more SRVs. BWRSTS have TSs with Actions that ensure plant safety if plant operations result in increasing suppression pool temperature.

The licensee previously analyzed the inadvertent opening of a main steam SRV. The results of this analysis are discussed in Section 15.1.4 of the LGS Units 1 and 2 Updated Final Safety Analysis Report. The licensee classifies this event as one of moderate frequency, that results in a mild depressurization and has no significant effect on the RC pressure boundary and containment design pressure limits. Operator action is not required to respond to a stuck open SRV. Turbine steam flow is automatically reduced to compensate for the reduction in steam flow diverted through the open SRV. Assuming the suppression pool is at its maximum

operating temperature of 95 °F, and its minimum operating volume, licensee analysis indicates that operators will have at least 6 minutes from the time an SRV sticks open before the suppression pool reaches 110 °F (SRV steam flow is directed to the suppression pool). In accordance with plant procedures and operator training, operators are expected to start the suppression pool cooling as soon as the suppression pool temperature begins to increase. Eliminating the requirement to scram the reactor after 2 minutes will allow operators to devote more time to addressing problems with the malfunctioning valve and to preparing for post-scram activities.

If the suppression pool average water temperature reaches 110 °F, TS 3.6.2.1, "Depressurization Systems - Suppression Chamber," LCO, Action b.2.b) directs the operator to place the reactor mode switch in SHUTDOWN to scram the reactor. TS 3.4.2, LCO, Action b, is, therefore, redundant to TS 3.6.2.1, LCO, Action b.2.b), except for the requirement for operators to shut down the reactor within 2 minutes of the SRV opening. Actions for TS 3.6.2.1 already provide operators with appropriate direction for response to a suppression pool high temperature caused by a stuck open relief valve. Providing specific direction to close the valve within 2 minutes does not provide additional plant protection beyond what is provided in the TSs. Therefore, TS 3.4.2, LCO, Action b, can be eliminated.

The Nuclear Regulatory Commission (NRC) staff has reviewed the licensee's proposed TS changes related to the stuck open SRV in TS 3.4.2, LCO, Action b. Based on this review, the NRC staff concludes that the proposed deletion of TS 3.4.2, LCO, Action b, is acceptable.

### 3.0 STATE CONSULTATION

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

### 4.0 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 (66 FR 44171). Accordingly, the amendments meet 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.

## 5.0 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: George Thomas, NRR  
Christopher Gratton, NRR

Date: March 20, 2002