UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

March 31, 2011

Mr. Michael J. Pacilio
President and Chief Nuclear Officer
Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: LIMERICK GENERATING STATION, UNITS 1 AND 2 - ISSUANCE OF AMENDMENT RE: ADMINISTRATIVE CHANGES TO THE TECHNICAL SPECIFICATIONS (TAC NOS. ME4617 AND ME4618)

Dear Mr. Pacilio:

The Commission has issued the enclosed Amendment No. 200 to Facility Operating License No. NPF-39 and Amendment No. 161 to Facility Operating License No. NPF-85, for Limerick Generating Station, Units 1 and 2. These amendments consist of changes to the Technical Specifications (TSs) in response to your application dated August 31, 2010 (Agencywide Documents Access and Management System Accession No. ML102430466).

The amendments consist of changes to the TSs of each unit regarding administrative issues involving: (1) editorial corrections; (2) layout and format corrections; (3) adding a reference to the turbine bypass valve parameter listing in the Core Operating Limits Report TS.

A copy of the Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

Peter Bamford

Peter Bamford, Project Manager
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-352 and 50-353

Enclosures:
1. Amendment No. 200 to License No. NPF-39
2. Amendment No. 161 to License No. NPF-85
3. Safety Evaluation

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

EXELON GENERATION COMPANY, LLC

DOCKET NO. 50-352

LIMERICK GENERATING STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 200
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 August 31, 2010, 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:

(2) Technical Specifications and Environmental Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 200, 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 60 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Harold K. Chernoff, Chief
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications and Facility Operating License

Date of Issuance: March 31, 2011

ATTACHMENT TO LICENSE AMENDMENT NO. 200

FACILITY OPERATING LICENSE NO. NPF-39

DOCKET NO. 50-352

Replace the following page of the Facility Operating License with the revised page. The revised page is identified by amendment number and contains marginal lines indicating the area of change.

| Remove | Insert |
|---|---|
| Page 3 | Page 3 |

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 | Insert |
|---|---|
| 3/4 3-1 | 3/4 3-1 |
| 3/4 3-4 | 3/4 3-4 |
| 3/4 6-52 | 3/4 6-52 |
| 6-18a | 6-18a |

(3) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;

(4) Pursuant to the Act and 10 CFR Parts 30, 40, 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and

(5) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility, and to receive and possess, but not separate, such source, byproduct, and special nuclear materials as contained in the fuel assemblies and fuel channels from the Shoreham Nuclear Power Station.

C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I (except as exempted from compliance in Section 2.D. below) and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

Exelon Generation Company is authorized to operate the facility at reactor core power levels not in excess of 3458 megawatts thermal (100% rated power) in accordance with the conditions specified herein and in Attachment 1 to this license. The items identified in Attachment 1 to this license shall be completed as specified. Attachment 1 is hereby incorporated into this license.

(2) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 200 , are hereby incorporated into this license. Exelon Generation Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

## 3/4.3 INSTRUMENTATION

### 3/4.3.1 REACTOR PROTECTION SYSTEM INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.1 As a minimum, the reactor protection system instrumentation channels shown in Table 3.3.1-1 shall be OPERABLE with the REACTOR PROTECTION SYSTEM RESPONSE TIME as shown in Table 3.3.1-2.

APPLICABILITY: As shown in Table 3.3.1-1.

ACTION:

Note: Separate condition entry is allowed for each channel.

a. With the number of OPERABLE channels in either trip system for one or more Functional Units less than the Minimum OPERABLE Channels per Trip System required by Table 3.3.1-1, within one hour for each affected functional unit either verify that at least one* channel in each trip system is OPERABLE or tripped or that the trip system is tripped, or place either the affected trip system or at least one inoperable channel in the affected trip system in the tripped condition.

b. With the number of OPERABLE channels in either trip system less than the Minimum OPERABLE Channels per Trip System required by Table 3.3.1-1, place either the inoperable channel(s) or the affected trip system** in the tripped conditions within 12 hours.***

c. With the number of OPERABLE channels in both trip systems for one or more Functional Units less than the Minimum OPERABLE Channels per Trip System required by Table 3.3.1-1, place either the inoperable channel(s) in one trip system or one trip system in the tripped condition within 6 hours**.***

d. If within the allowable time allocated by Actions a, b or c, it is not desired to place the inoperable channel or trip system in trip (e.g., full scram would occur), Then no later than expiration of that allowable time initiate the action identified in Table 3.3.1-1 for the applicable Functional Unit.

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*For Functional Units 2.a, 2.b, 2.c, 2.d, and 2.f, at least two channels shall be OPERABLE or tripped. For Functional Unit 5, both trip systems shall have each channel associated with the MSIVs in three main steam lines (not necessarily the same main steam lines for both trip systems) OPERABLE or tripped. For Function 9, at least three channels per trip system shall be OPERABLE or tripped.

**For Functional Units 2.a, 2.b, 2.c, 2.d, and 2.f, inoperable channels shall be placed in the tripped condition to comply with Action b. Action c does not apply for these Functional Units.

***A channel or trip system which has been placed in the tripped condition to satisfy Action b. or c. may be returned to the untripped condition under administrative control for up to two hours solely to perform testing required to demonstrate its operability or the operability of other equipment provided Action a. continues to be satisfied.

TABLE 3.3.1-1 (Continued)

REACTOR PROTECTION SYSTEM INSTRUMENTATION

ACTION STATEMENTS

ACTION 1 - Be in at least HOT SHUTDOWN within 12 hours.

ACTION 2 - Verify all insertable control rods to be inserted in the core and lock the reactor mode switch in the Shutdown position within 1 hour.

ACTION 3 - Suspend all operations involving CORE ALTERATIONS and insert all insertable control rods within 1 hour.

ACTION 4 - Be in at least STARTUP within 6 hours.

ACTION 5 - Be in STARTUP with the main steam line isolation valves closed within 6 hours or in at least HOT SHUTDOWN within 12 hours.

ACTION 6 - Initiate a reduction in THERMAL POWER within 15 minutes and reduce turbine first stage pressure until the function is automatically bypassed, within 2 hours.

ACTION 7 - Verify all insertable control rods to be inserted within 1 hour.

ACTION 8 - Lock the reactor mode switch in the Shutdown position within 1 hour.

ACTION 9 - Suspend all operations involving CORE ALTERATIONS, and insert all insertable control rods and lock the reactor mode switch in the Shutdown position within 1 hour.

ACTION 10 - a. If the condition exists due to a common-mode OPRM deficiency*, then initiate alternate method to detect and suppress thermal-hydraulic instability oscillations within 12 hours AND restore required channels to OPERABLE status within 120 days,

OR

b. Reduce THERMAL POWER to < 25% RATED THERMAL POWER within 4 hours.

* Unanticipated characteristic of the instability detection algorithm or equipment that renders all OPRM channels inoperable at once.

## STANDBY GAS TREATMENT SYSTEM - COMMON SYSTEM

### LIMITING CONDITION FOR OPERATION

3.6.5.3 Two independent standby gas treatment subsystems shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, 3, and when (1) irradiated fuel is being handled in the refueling area secondary containment, or (2) during CORE ALTERATIONS, or (3) during operations with a potential for draining the reactor vessel with the vessel head removed and fuel in the vessel.

ACTION:

a. In OPERATIONAL CONDITION 1, 2, or 3:

   1. With one standby gas treatment subsystem inoperable, restore the inoperable subsystem to OPERABLE status within 7 days, or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

b. When (1) irradiated fuel is being handled in the refueling area secondary containment, or (2) during CORE ALTERATIONS, or (3) during operations with a potential for draining the reactor vessel with the vessel head removed and fuel in the vessel:

   1. With one standby gas treatment subsystem inoperable, restore the inoperable subsystem to OPERABLE status within 7 days, or suspend handling of irradiated fuel in the secondary containment, CORE ALTERATIONS and operations with a potential for draining the reactor vessel. The provisions of Specification 3.0.3 are not applicable.

   2. With both standby gas treatment subsystems inoperable, if in progress, suspend handling of irradiated fuel in the secondary containment, CORE ALTERATIONS or operations with a potential for draining the reactor vessel. The provisions of Specification 3.0.3. are not applicable.

### SURVEILLANCE REQUIREMENTS

4.6.5.3 Each standby gas treatment subsystem shall be demonstrated OPERABLE:

a. In accordance with the Surveillance Frequency Control Program by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the subsystem operates with the heaters OPERABLE.

CORE OPERATING LIMITS REPORT

6.9.1.9 Core Operating Limits shall be established prior to each reload cycle, or prior to any remaining portion of a reload cycle, and shall be documented in the CORE OPERATING LIMITS REPORT for the following:

a. The AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR) for Specification 3.2.1,

b. MAPFAC(P) and MAPFAC(F) factors for Specification 3.2.1,

c. The MINIMUM CRITICAL POWER RATIO (MCPR) for Specification 3.2.3,

d. The MCPR(P) and MCPR(F) adjustment factors for specification 3.2.3,

e. The LINEAR HEAT GENERATION RATE (LHGR) for Specification 3.2.4,

f. The power biased Rod Block Monitor setpoints and the Rod Block Monitor MCPR OPERABILITY limits of Specification 3.3.6,

g. The Reactor Coolant System Recirculation Flow upscale trip setpoint and allowable value for Specification 3.3.6,

h. The Oscillation Power Range Monitor (OPRM) period based detection algorithm (PBDA) setpoints for Specification 2.2.1,

i. The minimum required number of operable main turbine bypass valves for Specification 3.7.8 and the TURBINE BYPASS SYSTEM RESPONSE TIME for Specification 4.7.8.c.

6.9.1.10 The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:

a. NEDE-24011-P-A "General Electric Standard Application for Reactor Fuel" (Latest approved revision),*

b. NEDO-32465-A, "Reactor Stability Detect and Suppress Solutions Licensing Basis Methodology for Reload Applications," August 1996.

6.9.1.11 The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal-mechanical limits, core thermal-hydraulic limits, ECCS limits, nuclear limits such as SHUTDOWN MARGIN, transient analysis limits, and accident analysis limits) of the safety analysis are met.

6.9.1.12 The CORE OPERATING LIMITS REPORT, including any mid-cycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC Document Control Desk with copies to the Regional Administrator and Resident Inspector.

SPECIAL REPORTS

6.9.2 Special reports shall be submitted to the Regional Administrator of the Regional Office of the NRC within the time period specified for each report.

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* For Cycle 8, specific documents were approved in the Safety Evaluation dated (5/4/98) to support License Amendment No. (127).

**UNITED STATES**
**NUCLEAR REGULATORY COMMISSION**
**WASHINGTON, D.C. 20555-0001**

EXELON GENERATION COMPANY, LLC

DOCKET NO. 50-353

LIMERICK GENERATING STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 161
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 August 31, 2010, 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:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No.161, 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 60 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Harold K. Chernoff, Chief
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications and Facility Operating License

Date of Issuance: March 31, 2011

ATTACHMENT TO LICENSE AMENDMENT NO. 161

FACILITY OPERATING LICENSE NO. NPF-85

DOCKET NO. 50-353

Replace the following page of the Facility Operating License with the revised page. The revised page is identified by amendment number and contains marginal lines indicating the area of change.

| Remove | Insert |
|---|---|
| Page 3 | Page 3 |

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 | Insert |
|---|---|
| 3/4 3-4 | 3/4 3-4 |
| 6-18a | 6-18a |

(4) Pursuant to the Act and 10 CFR Parts 30, 40, 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and

(5) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility, and to receive and possess, but not separate, such source, byproduct, and special nuclear materials as contained in the fuel assemblies and fuel channels from the Shoreham Nuclear Power Station.

C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I (except as exempted from compliance in Section 2.D. below) and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

Exelon Generation Company is authorized to operate the facility at reactor core power levels of 3458 megawatts thermal (100 percent rated power) in accordance with the conditions specified herein.

(2) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 161 , 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) Fire Protection (Section 9.5, SSER-2, ~~-4~~)*

Exelon Generation Company shall implement and maintain in effect all provisions of the approved Fire Protection Program as described in the Updated Final Safety Analysis Report for the facility, and as approved in the NRC Safety Evaluation Report dated August 1983 through Supplement 9, dated August 1989, and Safety Evaluation dated November 20, 1995, subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

*The parenthetical notation following the title of license conditions denotes the section of the Safety Evaluation Report and/or its supplements wherein the license condition is discussed.

TABLE 3.3.1-1 (Continued)

REACTOR PROTECTION SYSTEM INSTRUMENTATION

ACTION STATEMENTS

ACTION 1 - Be in at least HOT SHUTDOWN within 12 hours.

ACTION 2 - Verify all insertable control rods to be inserted in the core and lock the reactor mode switch in the Shutdown position within 1 hour.

ACTION 3 - Suspend all operations involving CORE ALTERATIONS and insert all insertable control rods within 1 hour.

ACTION 4 - Be in at least STARTUP within 6 hours.

ACTION 5 - Be in STARTUP with the main steam line isolation valves closed within 6 hours or in at least HOT SHUTDOWN within 12 hours.

ACTION 6 - Initiate a reduction in THERMAL POWER within 15 minutes and reduce turbine first stage pressure until the function is automatically bypassed, within 2 hours.

ACTION 7 - Verify all insertable control rods to be inserted within 1 hour.

ACTION 8 - Lock the reactor mode switch in the Shutdown position within 1 hour.

ACTION 9 - Suspend all operations involving CORE ALTERATIONS, and insert all insertable control rods and lock the reactor mode switch in the Shutdown position within 1 hour.

ACTION 10 - a. If the condition exists due to a common-mode OPRM deficiency*, then initiate alternate method to detect and suppress thermal-hydraulic instability oscillations within 12 hours AND restore required channels to OPERABLE status within 120 days,

OR

b. Reduce THERMAL POWER to < 25% RATED THERMAL POWER within 4 hours.

* Unanticipated characteristic of the instability detection algorithm or equipment that renders all OPRM channels inoperable at once.

CORE OPERATING LIMITS REPORT

6.9.1.9 Core Operating Limits shall be established prior to each reload cycle, or prior to any remaining portion of a reload cycle, and shall be documented in the CORE OPERATING LIMITS REPORT for the following:

a. The AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR) for Specification 3.2.1,

b. MAPFAC(P) and MAPFAC(F) factors for Specification 3.2.1,

c. The MINIMUM CRITICAL POWER RATIO (MCPR) for Specification 3.2.3,

d. The MCPR(P) and MCPR(F) adjustment factor for specification 3.2.3,

e. The LINEAR HEAT GENERATION RATE (LHGR) for Specification 3.2.4,

f. The power biased Rod Block Monitor setpoints and the Rod Block Monitor MCPR OPERABILITY limits of Specification 3.3.6.

g. The Reactor Coolant System Recirculation Flow upscale trip setpoint and allowable value for Specification 3.3.6,

h. The Oscillation Power Range Monitor (OPRM) period based detection algorithm (PBDA) setpoints for Specification 2.2.1,

i. The minimum required number of operable main turbine bypass valves for Specification 3.7.8 and the TURBINE BYPASS SYSTEM RESPONSE TIME for Specification 4.7.8.c.

6.9.1.10 The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:

a. NEDE-24011-P-A "General Electric Standard Application for Reactor Fuel" (Latest approved revision),

b. NEDO-32465-A, "Reactor Stability Detect and Suppress Solutions Licensing Basis Methodology for Reload Applications," August 1996.

6.9.1.11 The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal-mechanical limits, core thermal-hydraulic limits, ECCS limits, nuclear limits such as SHUTDOWN MARGIN, transient analysis limits, and accident analysis limits) of the safety analysis are met.

6.9.1.12 The CORE OPERATING LIMITS REPORT, including any mid-cycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC Document Control Desk with copies to the Regional Administrator and Resident Inspector.

SPECIAL REPORTS

6.9.2 Special reports shall be submitted to the Regional Administrator of the Regional Office of the NRC within the time period specified for each report.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 200 TO FACILITY OPERATING LICENSE NO. NPF-39

AND AMENDMENT NO. 161 TO FACILITY OPERATING LICENSE NO. NPF-85

EXELON GENERATION COMPANY, LLC

LIMERICK GENERATING STATION, UNITS 1 AND 2

DOCKET NOS. 50-352 AND 50-353

## 1.0 INTRODUCTION

By application dated August 31, 2010 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML102430466), Exelon Generation Company, LLC (Exelon, the licensee) requested changes to the Technical Specifications (TSs) for Limerick Generating Station (LGS), Units 1 and 2. The amendments consist of changes to the TSs of each unit regarding administrative issues involving: (1) editorial corrections; (2) layout and format corrections; (3) adding a reference to the turbine bypass valve parameter listing in the Core Operating Limits Report TS.

## 2.0 REGULATORY EVALUATION

Section 182a of the Atomic Energy Act of 1954, as amended, requires that all applicants for nuclear power plant licenses include TSs as part of the license application. Matters that must be addressed by the TSs include: (1) the specific characteristics of the facility; and (2) other such information deemed by the Commission necessary to ensure that the utilization of special nuclear material will be in accord with the common defense and security, and will provide adequate protection to the health and safety of the public.

Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.36 specifies the categories and criteria for information that must be included in the TSs. These include the following: (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation (LCOs); (3) surveillance requirements (SRs); (4) design features; and (5) administrative controls. Since the LGS, Units 1 and 2, operating licenses and construction permits were issued after January 16, 1969, the TS requirements described above are applicable to each unit pursuant to 10 CFR 50.36(a)(1).

## 3.0 TECHNICAL EVALUATION

The changes associated with this license amendment request (LAR) are described below. They are grouped by category in order to facilitate the evaluation.

Enclosure

3.1 Editorial Corrections

The following editorial changes are proposed in the LAR. All are typographical or grammatical in nature.

The LAR proposes to correct a typographical error replacing the word "tip" with the word "trip" in LGS Unit 1, TS LCO 3.3.1, "Reactor Protection System Instrumentation," Action "b" on page 3/4 3-1. This error was introduced in a "camera-ready" version of TS page 3/4 3-1 that was included with an LAR submitted by the licensee dated May 20, 2004 (ADAMS Accession No. ML041540457). The "mark-up" TS page 3/4 3-1 included with the May 20, 2004, LAR contains the correct word "trip," proving that the word "tip" was not intended for this sentence. Further, the word "tip" clearly has no meaning in the context of the sentence, whereas the word "trip" does. Therefore, the NRC staff concludes that this change corrects a typographical error, is administrative in nature with no impact on plant safety, and is acceptable.

The LAR proposes to replace the capitalized words "IRRADIATED FUEL" with the lowercase words "irradiated fuel" in LGS Unit 1, TS LCO 3.6.5.3, "Standby Gas Treatment System," on TS page 3/4 6-52. The capitalized words "IRRADIATED FUEL" were introduced to TS LCO 3.6.5.3 in an LAR submitted by the licensee via letter dated August 23, 2006 (ADAMS Accession No. ML040980153). Since "irradiated fuel" is not a defined term in Section 1.0 of the TSs, this correction will maintain consistency with how defined words are identified within the TSs. Further, the words "irradiated fuel" are used on the same page in lower case lettering and thus this change will maintain consistency with other uses of the same words. The Nuclear Regulatory Commission (NRC) staff concludes that this change will not alter the meaning of the word "irradiated fuel", will have no impact on plant safety, and is, therefore, acceptable.

The LAR proposes to replace the capitalized word "SHUTDOWN" with the lowercase word "Shutdown" in LGS Unit 1 and 2, TS Table 3.3.1-1, "Reactor Protection System Instrumentation," Actions 2 and 9 on TS page 3/4 3-4. The capitalized word "SHUTDOWN" has been in Action 9 since the first version of the LGS TSs in NUREG-1088 (Unit 1) and NUREG-1360 (Unit 2). It was introduced to Action 2 in a supplement to a previous LAR via letter dated March 26, 2001 (ADAMS Accession No. ML01096077). Since "Shutdown" is not a defined term in Section 1.0 of the TSs this correction will maintain consistency with how defined words are identified within the TSs. The NRC staff concludes that this change will not change the meaning of the word "Shutdown," will have no impact on plant safety, and is, therefore, acceptable.

3.2 Layout and Format Corrections

The LAR proposes to change the layout and format of LGS Unit 1 TS LCO 3.6.5.3, "Standby Gas Treatment System," to match that of LGS Unit 2 TS LCO 3.6.5.3, "Standby Gas Treatment System," in order to make the TS easier to understand for the operators. Currently LGS Unit 1 TS LCO 3.6.5.3 differentiates between Actions 3.6.5.3.a and 3.6.5.3.b based on whether one or both trains of the standby gas treatment system are inoperable. Because the actions are differentiated this way, interpretation of TS 3.6.5.3.b could lead an operator to believe that entry into TS LCO 3.0.3 is not required when both trains of the standby gas treatment system are inoperable when in Operational Conditions 1, 2, or 3, which is not the intention of the TS. Changing the TS to differentiate Actions 3.6.5.3.a and 3.6.5.3.b based on APPLICABILITY would make it easier to understand and ensure that TS LCO 3.0.3 is entered in the event that both trains of the standby gas treatment system are inoperable when in Operational Conditions 1, 2, or 3. The NRC staff reviewed the proposed change and concludes that it does not introduce a new or different interpretation of the TS requirement, and does in fact clarify the

proper action to take with both trains of the standby gas treatment system inoperable. By making the Unit 1 TS match the Unit 2 TS human factor considerations are improved because the operators will now have consistent specification wording between the two units. This change does not alter the intention of the specification, makes the TS more clear, will have no impact on plant safety, and is, therefore, acceptable.

3.3 Adding a reference to the turbine bypass valve parameter listing in the Core Operating Limits Report TS

The LAR proposes to add the minimum number of operable main turbine bypass valves for LGS Unit 1 and 2 as item "i." to TS Section 6.9.1.9 "Core Operating Limits Report." References to these values are contained in TS 3.7.8 and 4.7.8.c in the existing LGS Units 1 and 2 TSs. Generic Letter (GL) 88-16, "Removal of Cycle-Specific Parameter Limits from Technical Specifications," outlined certain TS limits that should be removed from TS and placed into licensee-controlled documents. Specifically, GL 88-16 outlined the need for a document that would be controlled by the licensee and allow licensees to change certain cycle-specific limits that were originally in TS without the prior approval of the NRC and remove an unnecessary burden on the licensee and the NRC. Section 6.9.1.9 of the LGS Unit 1 and 2 TS provides a listing of core operating limits that are required to be documented in the COLR. Adding the turbine bypass parameters to TS 6.9.1.9 will be consistent with the other core operating limits currently specified in that section. The turbine bypass valve parameters should have been added to TS Section 6.9.1.9 as part of Amendments 52 (LGS Unit 1) and 16 (LGS Unit 2) via letter dated October 24, 1991 (ADAMS Accession No. ML011550213), but were not requested to be added in the submittal from the licensee. Since the changes were not requested, the issued amendments did not contain the updated parameter listing. This change corrects an oversight from previous amendments, is administrative in nature, makes the TS more conservative by adding additional references to the core operating limits parameter listing, will have no impact on plant safety, and is, therefore, acceptable.

3.4 Conclusion

The NRC Staff has reviewed the proposed changes to TS LCO 3.3.1, "Reactor Protection System Instrumentation," for LGS Unit 1; TS LCO 3.6.5.3, "Standby Gas Treatment System," for LGS Unit 1; TS Table 3.3.1-1, "Reactor Protection System Instrumentation," for LGS Units 1 and 2; and TS Section 6.9.1.9 "Core Operating Limits Report," for LGS Units 1 and 2, based on applicable regulatory requirements outlined in 10 CFR 50.36. The requested changes maintain conformance with 10 CFR 50.36. Based on this, and as outlined above, the NRC staff finds that the changes made in this amendment are administrative in nature, will have no impact on plant safety, will not alter the meaning of the TSs, and are, therefore, acceptable.

## 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 portions of these amendments described in Sections 3.1 and 3.2 of this evaluation 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 increases 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 published in the *Federal Register* on November 2, 2010 (75 FR 67402). The portion of these amendments described in Section 3.3 of this evaluation relates to administrative procedures or requirements. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and 10 CFR 51.22(c)(10). 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 amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: Jeffrey Whited
Peter Bamford

Date: March 31, 2011

March 31, 2011

Mr. Michael J. Pacilio
President and Chief Nuclear Officer
Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: LIMERICK GENERATING STATION, UNITS 1 AND 2 - ISSUANCE OF AMENDMENT RE: ADMINISTRATIVE CHANGES TO THE TECHNICAL SPECIFICATIONS (TAC NOS. ME4617 AND ME4618)

Dear Mr. Pacilio:

The Commission has issued the enclosed Amendment No. 200 to Facility Operating License No. NPF-39 and Amendment No. 161 to Facility Operating License No. NPF-85, for Limerick Generating Station, Units 1 and 2. These amendments consist of changes to the Technical Specifications (TSs) in response to your application dated August 31, 2010 (Agencywide Documents Access and Management System Accession No. ML102430466).

The amendments consist of changes to the TSs of each unit regarding administrative issues involving: (1) editorial corrections; (2) layout and format corrections; (3) adding a reference to the core operating limits documented in the Core Operating Limits Report.

A copy of the Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,
***/ra/***
Peter Bamford, Project Manager
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-352 and 50-353

Enclosures:
1. Amendment No. 200 to License No. NPF-39
2. Amendment No. 161 to License No. NPF-85
3. Safety Evaluation

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**Amendment Accession Number: ML110610163**

| | LPLI-2/PM | LPLI-2/PM | LPLI-2/LA | OGC | LPLI-2/BC |
|---|---|---|---|---|---|
| Name | JWhited | PBamford | ABaxter (SLittle for) | MSpencer (NLO subject to comment) | HChernoff |
| Date | 03/02/2011 | 03/15/2011 | 03/21/2011 | 03/22/2011 | 03/31/2011 |

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