

10 CFR 50.90

April 9, 2013

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Limerick Generating Station, Units 1 and 2
Facility Operating License Nos. NPF-39 and NPF-85
NRC Docket Nos. 50-352 and 50-353

Subject: License Amendment Request to Eliminate Certain Technical Specifications Reporting Requirements

In accordance with 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," Exelon Generation Company, LLC (EGC) requests an amendment to the Technical Specifications (TS), Appendix A of Facility Operating License Nos. NPF-39 and NPF-85 for Limerick Generating Station (LGS), Units 1 and 2, respectively.

The proposed changes will delete various LGS reporting requirements contained in TS. EGC has concluded that the proposed changes present no significant hazards consideration under the standards set forth in 10 CFR 50.92.

The proposed changes have been reviewed by the LGS Plant Operations Review Committee and approved by the Nuclear Safety Review Board in accordance with the requirements of the EGC Quality Assurance Program.

Attachment 1 provides an evaluation of the proposed changes, including a detailed description, technical and regulatory evaluations, and an environmental consideration. Attachment 2 provides the existing TS pages marked up to show the proposed changes.

There are no regulatory commitments contained in this submittal.

EGC requests approval of the proposed license amendments by April 9, 2014, with the amendments being implemented within 60 days of issuance.

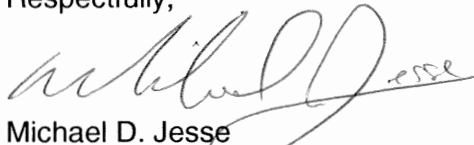
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In accordance with 10 CFR 50.91, "Notice for public comment; State consultation," paragraph (b), EGC is notifying the Commonwealth of Pennsylvania of this application for license amendment by transmitting a copy of this letter and its attachments to the designated state official.

Should you have any questions regarding this submittal, please contact Ms. Stephanie J. Hanson at (610) 765-5143.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 9th day of April 2013.

Respectfully,

A handwritten signature in black ink, appearing to read "Michael D. Jesse". The signature is fluid and cursive, with a long horizontal stroke at the end.

Michael D. Jesse
Director, Licensing and Regulatory Affairs
Exelon Generation Company, LLC

Attachments: 1. Evaluation of Proposed Changes
2. Markup of Technical Specifications Pages

cc: USNRC Region I, Regional Administrator
USNRC Senior Resident Inspector, LGS
USNRC Project Manager, LGS
R. R. Janati, Bureau of Radiation Protection

ATTACHMENT 1

License Amendment Request

Limerick Generating Station, Units 1 and 2

Docket Nos. 50-352 and 50-353

Facility Operating License Nos. NPF-39 and NPF-85

EVALUATION OF PROPOSED CHANGES

Subject: Eliminate Certain Technical Specifications Reporting Requirements

- 1.0 SUMMARY DESCRIPTION
- 2.0 DETAILED DESCRIPTION
- 3.0 TECHNICAL EVALUATION
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 - 4.1 Applicable Regulatory Requirements/Criteria
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 - 4.3 No Significant Hazards Consideration
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1.0 SUMMARY DESCRIPTION

In accordance with 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," Exelon Generation Company, LLC (EGC), requests an amendment to the Technical Specifications (TS), Appendix A of Facility Operating License Nos. NPF-39 and NPF-85 for Limerick Generating Station (LGS), Units 1 and 2, respectively.

The proposed changes will delete certain LGS reporting requirements located in various sections within TS, specifically Sections 3.5.1, Action f; 4.6.1.5.2; 3.7.3, Action b; 4.7.5.3; 6.9.1.1 through 6.9.1.3; 6.9.1.5.c; and 6.9.1.5.d. In particular, the proposed amendment will delete the LGS reporting requirements associated with Emergency Core Cooling System (ECCS) actuation, Primary Containment Structural Integrity, Reactor Core Isolation Cooling (RCIC) system actuation, sealed source contamination, specific activity analysis in which the primary coolant exceeded the limits of TS 3.4.5, as well as the plant Startup Report from TS.

The proposed changes do not alter or change any existing reporting obligations required by 10 CFR and maintain consistency with applicable regulatory requirements.

2.0 DETAILED DESCRIPTION

Section 50.36, "Technical Specifications," of 10 CFR Part 50, "Licensing of Production and Utilization Facilities," requires that each applicant for a license authorizing operation of a nuclear power plant includes in its application proposed TS. These TS, as issued by the NRC, are incorporated into the Facility Operating License as Appendix A. Specifically, Section c(5) of 10 CFR 50.36 requires that the Administrative Controls Section of TS include reporting requirements that assure operation of the facility in a safe manner.

In October of 1971, Regulatory Guide (RG) 1.16, "Reporting of Operating Information – Appendix A, Technical Specifications," (Reference 1) was published by the NRC to provide an acceptable basis for meeting the reporting requirements listed in Appendix A, Technical Specifications, of the Facility Operating License. This RG provided a description of each of the periodic reports, including annual reports and the plant Startup Report, that licensees are required to submit to demonstrate compliance with the TS reporting requirements. Subsequently, in August 2009, via the Federal Register, 74 FR 40244 (Reference 2), the NRC withdrew RG 1.16 because it was no longer needed on the basis that TS reporting requirements are contained in 10 CFR 50 as well as other parts of 10 CFR Chapter 1. In addition, guidance on the content and frequency of required reports are contained in Chapter 5, "Administrative Controls," of the Improved Standard Technical Specifications (ISTS) provided in NUREG – 1433, Volume 1, "Standard Technical Specifications, General Electric BWR/4 Plants" (Reference 3).

As indicated by the Updated Final Safety Analysis Report (UFSAR), Section 1.8, in reference to RG 1.16, LGS reporting requirements established in TS are based on NUREG – 0123, Revision 2, "Standard Technical Specifications for GE Boiling Water Reactors" (Reference 4). Even though LGS is not formally committed to RG 1.16, the intent of this License Amendment Request (LAR) is to be consistent with the regulatory requirements as prescribed in 10 CFR as indicated in the Federal Register Notice which withdrew RG 1.16.

In May of 1997, Generic Letter (GL) 97-02, "Revised Contents of the Monthly Operating Report," (Reference 5) provided the results of the NRC's assessment of their information gathering needs, which identified duplicative reporting, and determined that some reports could be reduced in scope or eliminated. Although this GL was specific to the Monthly Operating Report, this LAR seeks to eliminate, in a similar fashion, redundant reports that are no longer considered warranted.

The changes requested by this amendment application would delete the following LGS reports as described below:

1. TS Section 3.5.1, Action f, on page 3/4 5-3, for LGS, which is being deleted in its entirety, will be revised to replace the words pertaining to the ECCS system actuation reporting, with the word "Deleted."
2. TS Section 4.6.1.5.2, on page 3/4 6-8, for LGS, which is being deleted in its entirety, will be revised to replace the words pertaining to the abnormal degradation of primary containment structural integrity reporting, with the word "Deleted."
3. TS Section 3.7.3, Action b, on page 3/4 7-9, for LGS, which is being deleted in its entirety, will be revised to replace the words relating to the RCIC system actuation reporting, with the word "Deleted."
4. TS Section 4.7.5.3, on page 3/4 7-18, for LGS, which is being deleted in its entirety, will be revised to replace the words pertaining to the sealed source contamination reporting, with the word "Deleted."
5. TS Sections 6.9.1.1, 6.9.1.2 and 6.9.1.3, on page 6-15, for LGS, will be revised to replace the words pertaining to the plant Startup Report, which is being deleted in its entirety, with the word "Deleted."
6. TS Section 6.9.1.5.c, on page 6-16, for LGS, which is being deleted in its entirety, will be revised to replace the words pertaining to unique reports with the word "Deleted."
7. TS Section 6.9.1.5.d, on page 6-16, for LGS, which is being deleted in its entirety, will be revised to replace the words associated with the reporting of the results of specific activity analysis in which the primary coolant exceeded the limits of TS 3.4.5 with the word "Deleted."

Markups of the proposed TS page changes are provided in Attachment 2.

3.0 TECHNICAL EVALUATION

TS 3.5.1, Action f – ECCS System Actuation

Current LGS TS Section 3.5.1, Action f, has a requirement to submit a special report in the event that an ECCS system actuates. However, 10 CFR 50.73(a)(2)(iv) provides the requirements for a licensee to submit a Licensee Event Report (LER) in the event of an ECCS actuation. The information needed by the NRC regarding ECCS actuation is adequately addressed by the reporting requirements in 10 CFR 50.73. Further, information provided in this special report is readily available to the NRC for inspection by the NRC Resident Inspectors. Therefore, current LGS TS Section 3.5.1, Action f, special report is no longer warranted. The proposed amendment would delete the requirement to provide a special report. This proposed change does not alter or change any existing reporting obligations required by 10 CFR and maintains consistency with applicable regulatory requirements.

TS 4.6.1.5.2 – Primary Containment Structural Integrity

Current LGS TS Section 4.6.1.5.2 has a requirement to submit a special report following the detection of any abnormal degradation of the containment structure identified during the visual inspection performed in accordance with the Primary Containment Leakage Rate Testing Program. This program implements the requirements of 10 CFR 50, Appendix J, “Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors.” Appendix J only requires that the results of the containment integrated leak rate testing, including the visual inspection, be documented and readily available on site for inspection by the NRC. Therefore, the special report required by LGS TS Section 4.6.1.5.2 is no longer warranted. The proposed amendment would delete the requirement to provide a special report. This proposed change does not alter or change any existing reporting obligations required by 10 CFR 50 and maintains consistency with applicable regulatory requirements.

TS 3.7.3, Action b – RCIC System Actuation

Current LGS TS Section 3.7.3, Action b, has a requirement to submit a special report in the event that the RCIC system is actuated. However, in accordance with 10 CFR 50.73(a)(2)(iv), a licensee is required to submit an LER in the event that the RCIC system actuates. The information needed by the NRC pertaining to RCIC system actuation is adequately addressed by the reporting requirements in 10 CFR 50.73. Additionally, information provided in this special report is readily available to the NRC for inspection by the NRC Resident Inspectors. Therefore, the current LGS TS special report is no longer warranted. The proposed amendment would delete the requirement to provide a special report. This proposed change does not alter or change any existing reporting obligations required by 10 CFR and maintains consistency with applicable regulatory requirements.

TS 4.7.5.3 – Sealed Source Contamination

The limitations on removable contamination for sources requiring leak testing are based on 10 CFR 70.39(c), “Special licenses for the manufacture or initial transfer of calibration or reference sources” which states:

“Each person licensed under this section shall perform a dry wipe test upon each source containing more than 0.1 microcurie of plutonium prior to transferring the source to a general licensee under § 70.19. This test shall be performed by wiping the entire radioactive surface of the source with a filter paper with the application of moderate finger pressure. The radioactivity on the paper shall be measured by using radiation detection instrumentation capable of detecting 0.005 microcurie of plutonium. If any such test discloses more than 0.005 microcurie of radioactive material, the source shall be deemed to be leaking or losing plutonium and shall not be transferred to a general licensee under § 70.19.”

The focus of the requirement as specified above is to ensure that leakage from byproduct, source, and special nuclear material sources will not exceed allowable intake values. Additionally, LGS TS Section 3.7.5 requires that if the test reveals the presence of 0.005

microcurie or more of removable contamination, it shall immediately be withdrawn from use, decontaminated, and repaired, or be disposed of in accordance with the regulation.

The regulation prohibits the transfer of such material and current LGS TS Section 3.7.5 controls the potential for exposure and contamination of a leaking source. Additionally, identification of a source exceeding the allowable limits would be entered into the corrective action program which would drive the determination of the cause and identify corrective actions. The proposed amendment would delete the requirement to submit a special report in the event radioactive material sources exceed the allowable limits for transfer. There is no requirement in 10 CFR 70 to submit the results of sealed source leak testing. Since the test results are general information in nature, and are not required by statute, the means and frequency of submittal of the sealed source leakage data is not restricted by 10 CFR 70. Accordingly, this proposed change to delete the reporting requirement in TS 4.7.5.3 does not alter or change any existing reporting obligation required by 10 CFR and maintains consistency with applicable regulatory requirements.

TS Sections 6.9.1.1, 6.9.1.2, and 6.9.1.3 – Startup Report

In October of 1971, the NRC published RG 1.16, “Reporting of Operating Information – Appendix A, Technical Specifications” to provide an acceptable basis for meeting the reporting requirements listed in Appendix A, Technical Specifications, of the Facility Operating License. This RG provided a description of each of the routine reports, including the plant Startup Report, that licensees are required to submit to demonstrate compliance with the TS reporting requirements. However, in August 2009 via the Federal Register, 74 FR 40244, the NRC withdrew RG 1.16 because it was no longer needed on the basis that TS reporting requirements are contained in 10 CFR 50 as well as other parts of 10 CFR Chapter 1.

Current LGS TS Sections 6.9.1.1 through 6.9.1.3 include a requirement to submit, on a periodic basis, a plant Startup Report. Even though LGS is not formally committed to RG 1.16, the intent of this LAR is to be consistent with the regulatory requirements as prescribed in 10 CFR as indicated in the Federal Register Notice which withdrew RG 1.16. Additionally, guidance on the content and frequency of required reports is contained in Chapter 5, “Administrative Controls,” of the ISTS provided in NUREG – 1433, which does not include a requirement to submit a Startup Report. Further, information provided in the plant Startup Report is readily available to the NRC for inspection by the NRC Resident Inspectors. No information submitted in this report seeks NRC approval for plant operations. The proposed amendment would delete the requirement to provide, on a periodic basis, a plant Startup Report. This proposed change does not alter or change any existing reporting obligations required by 10 CFR 50 and maintains consistency with applicable regulatory requirements. As a result, the plant Startup Report is no longer warranted.

TS 6.9.1.5.c – Unique Reports

LGS TS Section 6.9.1.5.c is based on the NUREG-0123, Revision 2, generic requirement which states “(Any other unit unique reports required on an annual basis).” The intent of this statement is for the licensee to include any plant-specific annual reports other than those already specified in TS. For LGS, reports that are required to be submitted on an

annual basis are already contained in other portions of TS Section 6.9.1. Therefore, TS Section 6.9.1.5.c is proposed to be deleted because it is no longer warranted.

TS 6.9.1.5.d – Specific activity analysis in which the primary coolant exceeded the limits of TS 3.4.5

LGS TS Section 6.9.1.5.d requires annual reporting of the results of specific activity analysis in which the primary coolant exceeds the limits of TS 3.4.5. However, specific activity analysis pertaining to primary coolant limits is reported to the NRC by means of the Performance Indicator (PI) Program, under the Reactor Oversight Process (ROP). As part of the ROP PI Program, LGS currently provides monthly reactor coolant specific activity data on a quarterly basis to the NRC in accordance with Regulatory Issue Summary (RIS) 2000-08, Revision 1, "Voluntary Submission of Performance Indicator Data" (Reference 6) following the guidelines provided in NEI 99-02, "Regulatory Assessment Performance Indicator Guideline" (Reference 7).

The reactor coolant specific activity concentration is provided more frequently than that required by the TS, regardless of whether or not the TS limit is exceeded. Additionally, if the limit is exceeded, this would be evaluated within the corrective action program, which would drive a determination of the cause and identify appropriate corrective actions to prevent recurrence and the determination of reportability. Therefore, annual reporting of specific activity analysis in accordance with TS 6.9.1.5.d is no longer warranted.

4.0 REGULATORY EVALUATION

4.1 Applicable Regulatory Requirements/Criteria

Section 50.36, "Technical Specifications," of 10 CFR Part 50, "Licensing of Production and Utilization Facilities," requires that each applicant for a license authorizing operation of a nuclear power plant includes in its application proposed TS. These TS, as issued by the NRC, are incorporated into the Facility Operating License as Appendix A. Specifically, Section c(5) of 10 CFR 50.36 requires that the Administrative Controls Section of TS include reporting requirements that assure operation of the facility in a safe manner.

In October of 1971, Regulatory Guide (RG) 1.16, "Reporting of Operating Information – Appendix A, Technical Specifications," was published by the NRC to provide an acceptable basis for meeting the reporting requirements listed in Appendix A, Technical Specifications, of the Facility Operating License. This RG provided a description of each of the periodic reports, including annual reports and the plant Startup Report, that licensees are required to submit to demonstrate compliance with the TS reporting requirements. Subsequently, in August 2009, the NRC withdrew RG 1.16 because it was no longer needed on the basis that TS reporting requirements are contained in 10 CFR 50 as well as other parts of 10 CFR Chapter 1. In addition, guidance on the content and frequency of required reports are contained in Chapter 5, "Administrative Controls," of NUREG – 1433.

As indicated by the Updated Final Safety Analysis Report (UFSAR), Section 1.8, in reference to RG 1.16, LGS reporting requirements established in TS are based on NUREG – 0123, Revision 2, "Standard Technical Specifications for GE Boiling Water Reactors." Even though LGS is not formally committed to RG 1.16, the intent of this LAR is to be

consistent with the regulatory requirements as prescribed in 10 CFR 50 as indicated in the Federal Register Notice which withdrew RG 1.16.

10 CFR 50 Appendix J, "Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors," requires the results of the containment integrated leak rate testing, including the visual inspection, be documented and readily available on site for inspection by the NRC.

Sections 50.72, "Immediate notification requirements for operating nuclear power reactors," and 50.73, "Licensee Event Report System," of 10 CFR 50 discuss in detail the requirements for making prompt telephone notifications and submitting written reports to the NRC. 10 CFR 50.72 and 10 CFR 50.73 cover a broad spectrum of events, including emergency system actuation.

The focus of 10 CFR 70.39(c), "Specific licenses for the manufacture or initial transfer of calibration or reference sources" is to ensure that leakage from byproduct, source, and special nuclear material sources will not exceed allowable intake values. The intent is to control the potential for exposure and contamination of a leakage source.

The proposed change to delete the special report requirement TS Section 3.5.1, Action f, regarding ECCS actuation, has been evaluated and determined to be governed by the requirements of 10 CFR 50.72 and CFR 50.73.

The proposed change to delete the special report requirement contained in TS 4.6.1.5.2, relating to primary containment structural integrity, has been evaluated and determined to be governed by the requirements of 10 CFR 50, Appendix J. Information pertaining to abnormal degradation of the structural integrity is documented and readily available for inspection by the NRC as required by the regulation.

The proposed change to delete the special report requirement, TS Section 3.7.3, Action b, pertaining to RCIC actuation, has been evaluated and determined to be governed by the requirements of 10 CFR 50.72 and 10 CFR 50.73.

The proposed change to delete the special report requirement contained in TS 4.7.5.3, associated with sealed source contamination, has been evaluated and determined to be governed by 10 CFR 70.39(c) and current LGS TS Section 3.7.5, which controls the potential for exposure and contamination of leakage. Any radioactive material that exceeds the allowable intake values will be entered into the corrective action program.

TS reporting requirements for licensees are contained in 10 CFR 50 as well as other parts of 10 CFR Chapter 1. Additionally, guidance on the content and frequency of required reports is contained in Chapter 5 of NUREG – 1433, which does not include a requirement to submit a plant Startup Report. The proposed change to delete TS Sections 6.9.1.1, 6.9.1.2, and 6.9.1.3 has been evaluated and determined to be consistent with the regulations.

The proposed change to delete TS 6.9.1.5.c has been evaluated and it has been concluded that reports that are required to be submitted on an annual basis are already contained in other portions of LGS TS Section 6.9.1.

The proposed change to delete TS 6.9.1.5.d has been evaluated and determined that specific activity analysis pertaining to primary coolant limits are reported to the NRC by means of the Performance Indicator (PI) Program, under the Reactor Oversight Process (ROP).

The proposed changes have been evaluated and it has been concluded that applicable regulations and requirements continue to be met. The proposed changes create no operational concerns. The proposed changes do not alter or change any existing reporting obligations required by 10 CFR and they maintain consistency with applicable regulatory requirements. Additionally, the proposed changes are consistent with the ISTS provided in NUREG – 1433.

4.2 Precedent

None

4.3 No Significant Hazards Consideration

In accordance with 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," Exelon Generation Company, LLC (EGC) requests an amendment to the Technical Specifications (TS), Appendix A of Facility Operating License Nos. NPF-39 and NPF-85 for Limerick Generating Station (LGS), Units 1 and 2, respectively.

The proposed changes will delete certain LGS reporting requirements located in various sections within TS, specifically Sections 3.5.1, Action f; 4.6.1.5.2; 3.7.3, Action b; 4.7.5.3; 6.9.1.1 through 6.9.1.3; 6.9.1.5.c; and 6.9.1.5.d. In particular, the proposed amendment will delete the LGS reporting requirements associated with Emergency Core Cooling System (ECCS) actuation, Primary Containment Structural Integrity, Reactor Core Isolation Cooling (RCIC) system actuation, sealed source contamination, specific activity analysis in which the primary coolant exceeded the limits of TS 3.4.5, as well as the Plant Startup report from TS.

EGC has evaluated whether or not a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

1. Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No

The proposed changes do not involve the modification of any plant equipment or affect plant operation. The proposed changes will have no impact on any safety related structures, systems, or components. The reporting requirements proposed for deletion are not required because the requirements are adequately addressed by 10 CFR 50.72 and 10 CFR 50.73, or other regulatory requirements, or are available on site for NRC review, and are no longer warranted. Therefore, the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No

The proposed changes have no impact on the design, function or operation of any plant structure, system or component. The proposed changes do not affect plant equipment or accident analyses. The reporting requirements proposed for deletion are not required because the requirements are adequately addressed by 10 CFR 50.72 and 10 CFR 50.73, or other regulatory requirements, or are available on site for NRC review, and are no longer warranted. Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed amendment involve a significant reduction in a margin of safety?

Response: No

The proposed changes do not adversely affect existing plant safety margins or the reliability of the equipment assumed to operate in the safety analyses. There is no change being made to safety analysis assumptions, safety limits or limiting safety system settings that would adversely affect plant safety as a result of the proposed changes. Margins of safety are unaffected by deletion of the reporting requirements. Therefore, the proposed changes do not involve a significant reduction in a margin of safety.

4.4 Conclusions

In conclusion, based on the considerations discussed above, (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.

5.0 ENVIRONMENTAL CONSIDERATION

The proposed amendment is confined to (i) changes to surety, insurance, and/or indemnity requirements; (ii) changes to recordkeeping, reporting, or administrative procedures or requirements; (iii) changes to the licensee's or permit holder's name, phone number, business or e-mail address; (iv) changes to the name, position, or title of an officer of the licensee or permit holder, including but not limited to, the radiation safety officer or quality assurance manager; or (v) changes to the format of the license or permit or otherwise makes editorial, corrective or other minor revisions, including the updating of NRC approved references. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(10). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

6.0 REFERENCES

1. U.S. Nuclear Regulatory Commission, Office of Standard Development, Regulatory Guide 1.16 Revision 1, "Reporting of Operating Information – Appendix A, Technical Specifications," dated October 1971.
2. Federal Register, Volume 74, Page No. 40244, "Nuclear Regulatory Commission Withdrawal of Regulatory Guide 1.16, 'Reporting of Operating Information – Appendix A Technical Specifications'," dated August 11, 2009.
3. U.S. Nuclear Regulatory Commission, Office of Nuclear Reactor Regulation, NUREG-1433, Revision 4, "Standard Technical Specifications - General Electric BWR/4 Plants," dated April 2012.
4. U.S. Nuclear Regulatory Commission, Office of Nuclear Reactor Regulation, NUREG-0123, Revision 2, "Standard Technical Specifications, General Electric Boiling Water Reactors," dated August 1979.
5. U.S. Nuclear Regulatory Commission, Office of Nuclear Reactor Regulation, NRC Generic Letter 97-02, "Revised Contents of the Monthly Operating Report," dated May 15, 1997.
6. U.S. Nuclear Regulatory Commission, Office of Nuclear Reactor Regulation, NRC Regulatory Issue Summary 2000-08, Revision 1, "Voluntary Submission of Performance Indicator Data," dated February 19, 2009.
7. Nuclear Energy Institute, NEI 99-02, Revision 6, "Regulatory Assessment Performance Indicator Guideline," dated October 2009.

ATTACHMENT 2

Markup of Technical Specifications Pages

Limerick Generating Station, Units 1 and 2

Docket Nos. 50-352 and 50-353

Facility Operating License Nos. NPF-39 and NPF-85

REVISED TECHNICAL SPECIFICATIONS PAGES

Unit 1 TS Pages

3/4 5-3
3/4 6-8
3/4 7-9
3/4 7-18
6-15
6-16

Unit 2 TS Pages

3/4 5-3
3/4 6-8
3/4 7-9
3/4 7-18
6-15
6-16

EMERGENCY CORE COOLING SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

ACTION: (Continued)

- c. For the HPCI system:
1. With the HPCI system inoperable, provided the CSS, the LPCI system, the ADS and the RCIC system are OPERABLE, restore the HPCI system to OPERABLE status within 14 days or be in at least HOT SHUTDOWN within the next 12 hours and reduce reactor steam dome pressure to ≤ 200 psig within the following 24 hours.
 2. With the HPCI system inoperable, and one CSS subsystem, and/or LPCI subsystem inoperable, and provided at least one CSS subsystem, three LPCI subsystems, and ADS are operable, restore the HPCI to OPERABLE within 8 hours, or be in HOT SHUTDOWN in the next 12 hours, and in COLD SHUTDOWN in the next 24 hours.
 3. Specification 3.0.4.b is not applicable to HPCI. |
- d. For the ADS:
1. With one of the above required ADS valves inoperable, provided the HPCI system, the CSS and the LPCI system are OPERABLE, restore the inoperable ADS valve to OPERABLE status within 14 days or be in at least HOT SHUTDOWN within the next 12 hours and reduce reactor steam dome pressure to ≤ 100 psig within the next 24 hours.
 2. With two or more of the above required ADS valves inoperable, be in at least HOT SHUTDOWN within 12 hours and reduce reactor steam dome pressure to ≤ 100 psig within the next 24 hours.
- e. With a CSS and/or LPCI header ΔP instrumentation channel inoperable, restore the inoperable channel to OPERABLE status within 72 hours or determine the ECCS header ΔP locally at least once per 12 hours; otherwise, declare the associated CSS and/or LPCI, as applicable, inoperable.
- f. In the event an ECCS system is actuated and injects water into the reactor coolant system, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 90 days describing the circumstances of the actuation and the total accumulated actuation cycles to date. The current value of the usage factor for each affected safety injection nozzle shall be provided in this Special Report whenever its value exceeds 0.70.

DELETED →

CONTAINMENT SYSTEMS

PRIMARY CONTAINMENT STRUCTURAL INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.1.5 The structural integrity of the primary containment shall be maintained at a level consistent with the acceptance criteria in Specification 4.6.1.5.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

With the structural integrity of the primary containment not conforming to the above requirements, restore the structural integrity to within the limits within 24 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.5.1 The structural integrity of the exposed accessible interior and exterior surfaces of the primary containment, including the liner plate, shall be determined by a visual inspection of those surfaces. This inspection shall be performed in accordance with the Primary Containment Leakage Rate Testing Program.

4.6.1.5.2 ~~Reports~~ Any abnormal degradation of the primary containment structure detected during the above required inspections shall be reported in a Special Report to the Commission pursuant to Specification 6.9.2 within 30 days. This report shall include a description of the condition of the liner and concrete, the inspection procedure, the tolerances on cracking, and the corrective actions taken.

DELETED

PLANT SYSTEMS

3/4.7.3 REACTOR CORE ISOLATION COOLING SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.3 The reactor core isolation cooling (RCIC) system shall be OPERABLE with an OPERABLE flow path capable of automatically taking suction from the suppression pool and transferring the water to the reactor pressure vessel.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3 with reactor steam dome pressure greater than 150 psig.

ACTION:

- a. With the RCIC system inoperable, operation may continue provided the HPCI system is OPERABLE; restore the RCIC system to OPERABLE status within 14 days. Otherwise, be in at least HOT SHUTDOWN within the next 12 hours and reduce reactor steam dome pressure to less than or equal to 150 psig within the following 24 hours.
- b. ~~In the event the RCIC system is actuated and injects water into the reactor coolant system, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 90 days describing the circumstances of the actuation and the total accumulated actuation cycles to date.~~ ← DELETED
- c. Specification 3.0.4.b is not applicable to RCIC.

SURVEILLANCE REQUIREMENTS

4.7.3 The RCIC system shall be demonstrated OPERABLE:

- a. In accordance with the Surveillance Frequency Control Program by:
 - 1. Verifying by venting at the high point vents that the system piping from the pump discharge valve to the system isolation valve is filled with water.
 - 2. Verifying that each valve (manual, power-operated, or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.
 - 3. Verifying that the pump flow controller is in the correct position.
- b. In accordance with the Surveillance Frequency Control Program by verifying that the RCIC pump develops a flow of greater than or equal to 600 gpm in the test flow path with a system head corresponding to reactor vessel operating pressure when steam is being supplied to the turbine at 1040 + 13, - 120 psig.*

* The provisions of Specification 4.0.4 are not applicable, provided the surveillance is performed within 12 hours after reactor steam pressure is adequate to perform the test. If OPERABILITY is not successfully demonstrated within the 12-hour period, reduce reactor steam pressure to less than 150 psig within the following 72 hours.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- b. Stored sources not in use - Each sealed source and fission detector shall be tested prior to use or transfer to another licensee unless tested within the previous 6 months. Sealed sources and fission detectors transferred without a certificate indicating the last test date shall be tested prior to being placed into use.
- c. Startup sources and fission detectors - Each sealed startup source and fission detector shall be tested within 31 days prior to being subjected to core flux or installed in the core and following repair or maintenance to the source.

~~4.7.5.3 Reports - A report shall be prepared and submitted to the Commission on an annual basis if sealed source or fission detector leakage tests reveal the presence of greater than or equal to 0.005 microcurie of removable contamination.~~

← DELETED

ADMINISTRATIVE CONTROLS

6.9 REPORTING REQUIREMENTS

ROUTINE REPORTS

6.9.1 In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following reports shall be submitted to the Regional Administrator of the Regional Office of the NRC unless otherwise noted.

STARTUP REPORT

~~6.9.1.1 A summary report of plant startup and power escalation testing shall be submitted following (1) receipt of an Operating License, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the unit.~~

← Deleted

~~6.9.1.2 The startup report shall address each of the tests identified in Sub-section 14.2.12 of the Final Safety Analysis Report and shall include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described. Any additional specific details required in license conditions based on other commitments shall be included in this report.~~

← Deleted

~~6.9.1.3 Startup reports shall be submitted within (1) 90 days following completion of the startup test program, (2) 90 days following resumption or commencement of commercial power operation, or (3) 9 months following initial criticality, whichever is earliest. If the startup report does not cover all three events (i.e., initial criticality, completion of startup test program, and resumption or commencement of commercial operation) supplementary reports shall be submitted at least every 3 months until all three events have been completed.~~

← Deleted

ANNUAL REPORTS*

6.9.1.4 Annual reports covering the activities of the unit as described below for the previous calendar year shall be submitted prior to March 1 of each year unless otherwise noted.

6.9.1.5 Reports required on an annual basis shall include:

- a. Deleted

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*A single submittal may be made for a multiple unit station.

ADMINISTRATIVE CONTROLS

ANNUAL REPORTS (Continued)

- b. (Deleted)
- c. ~~Any other unit unique reports required on an annual basis.~~ ← (Deleted)
- d. ~~The results of specific activity analysis in which the primary coolant exceeded the limits of Specification 3.4.5. The following information shall be included: (1) Reactor power history starting 48 hours prior to the first sample in which the limit was exceeded; (2) Results of the last isotopic analysis for radioiodine performed prior to exceeding the limit, results of analysis while limit was exceeded and results of one analysis after the radioiodine activity was reduced to less than limit. Each result should include date and time of sampling and the radioiodine concentrations; (3) Cleanup system flow history starting 48 hours prior to the first sample in which the limit was exceeded; (4) Graph of the I 131 concentration and one other radioiodine isotope concentration in microcuries per gram as a function of time for the duration of the specific activity above the steady state level; and (5) The time duration when the specific activity of the primary coolant exceeded the radioiodine limit.~~ ← (Deleted)

MONTHLY OPERATING REPORTS*

6.9.1.6 Deleted

ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT*

6.9.1.7 The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted before May 1 of each year. The report shall include summaries, interpretations, analysis of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in (1) the ODCM and (2) Sections IV.B.2, IV.B.3, and IV.C of Appendix I to 10 CFR Part 50.

*A single submittal may be made for a multiple unit station.

EMERGENCY CORE COOLING SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

ACTION: (Continued)

- c. For the HPCI system:
1. With the HPCI system inoperable, provided the CSS, the LPCI system, the ADS and the RCIC system are OPERABLE, restore the HPCI system to OPERABLE status within 14 days or be in at least HOT SHUTDOWN within the next 12 hours and reduce reactor steam dome pressure to ≤ 200 psig within the following 24 hours.
 2. With the HPCI system inoperable, and one CSS subsystem, and/or LPCI subsystem inoperable, and provided at least one CSS subsystem, three LPCI subsystems, and ADS are operable, restore the HPCI to OPERABLE within 8 hours, or be in HOT SHUTDOWN in the next 12 hours, and in COLD SHUTDOWN in the next 24 hours.
 3. Specification 3.0.4.b is not applicable to HPCI. |
- d. For the ADS:
1. With one of the above required ADS valves inoperable, provided the HPCI system, the CSS and the LPCI system are OPERABLE, restore the inoperable ADS valve to OPERABLE status within 14 days or be in at least HOT SHUTDOWN within the next 12 hours and reduce reactor steam dome pressure to ≤ 100 psig within the next 24 hours.
 2. With two or more of the above required ADS valves inoperable, be in at least HOT SHUTDOWN within 12 hours and reduce reactor steam dome pressure to ≤ 100 psig within the next 24 hours.
- e. With a CSS and/or LPCI header ΔP instrumentation channel inoperable, restore the inoperable channel to OPERABLE status within 72 hours or determine the ECCS header ΔP locally at least once per 12 hours; otherwise, declare the associated CSS and/or LPCI, as applicable, inoperable.
- f. ~~In the event an ECCS system is actuated and injects water into the reactor coolant system, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 90 days describing the circumstances of the actuation and the total accumulated actuation cycles to date. The current value of the usage factor for each affected safety injection nozzle shall be provided in this Special Report whenever its value exceeds 0.70.~~

DELETED →

CONTAINMENT SYSTEMS

PRIMARY CONTAINMENT STRUCTURAL INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.1.5 The structural integrity of the primary containment shall be maintained at a level consistent with the acceptance criteria in Specification 4.6.1.5.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

With the structural integrity of the primary containment not conforming to the above requirements, restore the structural integrity to within the limits within 24 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.5.1 The structural integrity of the exposed accessible interior and exterior surfaces of the primary containment, including the liner plate, shall be determined by a visual inspection of those surfaces. This inspection shall be performed in accordance with the Primary Containment Leakage Rate Testing Program.

4.6.1.5.2 ~~Reports~~ Any abnormal degradation of the primary containment structure detected during the above required inspections shall be reported in a Special Report to the Commission pursuant to Specification 6.9.2 within 30 days. This report shall include a description of the condition of the liner and concrete, the inspection procedure, the tolerances on cracking, and the corrective actions taken.

← DELETED

PLANT SYSTEMS

3/4.7.3 REACTOR CORE ISOLATION COOLING SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.3 The reactor core isolation cooling (RCIC) system shall be OPERABLE with an OPERABLE flow path capable of automatically taking suction from the suppression pool and transferring the water to the reactor pressure vessel.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3 with reactor steam dome pressure greater than 150 psig.

ACTION:

- a. With the RCIC system inoperable, operation may continue provided the HPCI system is OPERABLE; restore the RCIC system to OPERABLE status within 14 days. Otherwise, be in at least HOT SHUTDOWN within the next 12 hours and reduce reactor steam dome pressure to less than or equal to 150 psig within the following 24 hours.
- b. ~~In the event the RCIC system is actuated and injects water into the reactor coolant system, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 90 days describing the circumstances of the actuation and the total accumulated actuation cycles to date.~~ ← DELETED
- c. Specification 3.0.4.b is not applicable to RCIC.

SURVEILLANCE REQUIREMENTS

4.7.3 The RCIC system shall be demonstrated OPERABLE:

- a. In accordance with the Surveillance Frequency Control Program by:
 - 1. Verifying by venting at the high point vents that the system piping from the pump discharge valve to the system isolation valve is filled with water.
 - 2. Verifying that each valve (manual, power-operated, or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.
 - 3. Verifying that the pump flow controller is in the correct position.
- b. In accordance with the Surveillance Frequency Control Program by verifying that the RCIC pump develops a flow of greater than or equal to 600 gpm in the test flow path with a system head corresponding to reactor vessel operating pressure when steam is being supplied to the turbine at 1040 + 13, - 120 psig.*

* The provisions of Specification 4.0.4 are not applicable provided the surveillance is performed within 12 hours after reactor steam pressure is adequate to perform the test. If OPERABILITY is not successfully demonstrated within the 12-hour period, reduce reactor steam dome pressure to less than 150 psig within the following 72 hours.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- b. Stored sources not in use - Each sealed source and fission detector shall be tested prior to use or transfer to another licensee unless tested within the previous 6 months. Sealed sources and fission detectors transferred without a certificate indicating the last test date shall be tested prior to being placed into use.
- c. Startup sources and fission detectors - Each sealed startup source* and fission detector shall be tested within 31 days prior to being subjected to core flux or installed in the core and following repair or maintenance to the source.

4.7.5.3 Reports — A report shall be prepared and submitted to the Commission on an annual basis if sealed source or fission detector leakage tests reveal the presence of greater than or equal to 0.005 microcurie of removable contamination.

← DELETED

*Except the Cf-252 startup sources which shall be tested within 6 months prior to being subjected to core flux or installed in the core and following repair or maintenance to the source.

ADMINISTRATIVE CONTROLS

6.9 REPORTING REQUIREMENTS

ROUTINE REPORTS

6.9.1 In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following reports shall be submitted to the Regional Administrator of the Regional Office of the NRC unless otherwise noted.

STARTUP REPORT

~~6.9.1.1 A summary report of plant startup and power escalation testing shall be submitted following (1) receipt of an Operating License, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the unit.~~

← Deleted

~~6.9.1.2 The startup report shall address each of the tests identified in Sub-section 14.2.12 of the Final Safety Analysis Report and shall include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described. Any additional specific details required in license conditions based on other commitments shall be included in this report.~~

← Deleted

~~6.9.1.3 Startup reports shall be submitted within (1) 90 days following completion of the startup test program, (2) 90 days following resumption or commencement of commercial power operation, or (3) 9 months following initial criticality, whichever is earliest. If the startup report does not cover all three events (i.e., initial criticality, completion of startup test program, and resumption or commencement of commercial operation) supplementary reports shall be submitted at least every 3 months until all three events have been completed.~~

← Deleted

ANNUAL REPORTS*

6.9.1.4 Annual reports covering the activities of the unit as described below for the previous calendar year shall be submitted prior to March 1 of each year unless otherwise noted.

6.9.1.5 Reports required on an annual basis shall include:

- a. Deleted

|

*A single submittal may be made for a multiple unit station.

ADMINISTRATIVE CONTROLS

ANNUAL REPORTS (Continued)

- b. (Deleted)
- c. ~~Any other unit-unique reports required on an annual basis.~~ ← (Deleted)
- d. ~~The results of specific activity analysis in which the primary coolant exceeded the limits of Specification 3.4.5. The following information shall be included: (1) Reactor power history starting 48 hours prior to the first sample in which the limit was exceeded; (2) Results of the last isotopic analysis for radioiodine performed prior to exceeding the limit, results of analysis while limit was exceeded and results of one analysis after the radioiodine activity was reduced to less than limit. Each result should include date and time of sampling and the radioiodine concentrations; (3) Cleanup system flow history starting 48 hours prior to the first sample in which the limit was exceeded; (4) Graph of the I 131 concentration and one other radioiodine isotope concentration in microcuries per gram as a function of time for the duration of the specific activity above the steady state level; and (5) The time duration when the specific activity of the primary coolant exceeded the radioiodine limit.~~ ← (Deleted)

MONTHLY OPERATING REPORTS*

6.9.1.6 Deleted

ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT*

6.9.1.7 The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted before May 1 of each year. The initial report shall be submitted prior to May 1 of the year following initial criticality. The report shall include summaries, interpretations, analysis of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in (1) the ODCM and (2) Sections IV.B.2, IV.B.3, and IV.C of Appendix I to 10 CFR Part 50.

*A single submittal may be made for a multiple unit station.