

Exelon Nuclear
200 Exelon Way
Kennett Square, PA 19348

www.exeloncorp.com

10 CFR 50.90

June 1, 2004

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
Proposed Changes to Relocate Operability and Surveillance
Requirements for the Safety/Relief Valve Position Instrumentation

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

The proposed changes would remove the operability and surveillance requirements for the reactor coolant system safety/relief valve position instrumentation from the Limerick Technical Specifications. In conjunction with this change, operability and surveillance requirements for this instrumentation will be incorporated into the LGS Technical Requirements Manual and plant procedures.

The proposed changes conform to NRC regulation 10 CFR 50.36 for the contents of Technical Specifications, and to an improved standard TS approved by the NRC in the document titled: "Standard Technical Specifications – General Electric Plants, BWR/4," NUREG-1433.

Exelon has concluded that the proposed changes present no significant hazards consideration under the standards set forth in 10CFR 50.92.

Exelon requests approval of the proposed amendment by June 1, 2005. Upon NRC approval, the amendment shall be implemented within 60 days of issuance.

These proposed changes have been reviewed by the Plant Operations Review Committee, and approved by the Nuclear Safety Review Board.

ADD 1

Proposed Changes to Relocate Operability and Surveillance
Requirements for the Safety/Relief Valve Position Instrumentation
June 1, 2004
Page 2

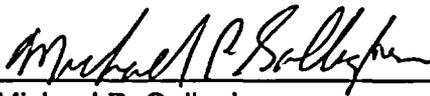
We are notifying the State of Pennsylvania of this application for changes to the Technical Specifications by transmitting a copy of this letter and its attachments to the designated State Official.

If you have any questions or require additional information, please contact Doug Walker at (610) 765-5726.

I declare under penalty of perjury that the foregoing is true and correct.

Respectfully,

Executed on 06/01/2004



Michael P. Gallagher
Director, Licensing & Regulatory Affairs
Exelon Generation Company, LLC

- Attachments:
1. Evaluation of Proposed Changes to Relocate Safety-Relief Valve Position Instrumentation Operability and Surveillance Requirements
 2. Markup of Proposed Technical Specification Page Changes
 3. Typed Technical Specification Page Changes

cc: H. J. Miller, Administrator, Region I, USNRC (w/enc)
A. L. Burritt, USNRC Senior Resident Inspector, LGS "
T. Tate, Project Manager, NRR USNRC "
R. R. Janati, Pennsylvania Department of Environmental Resources "

ATTACHMENT 1

License Amendment Request

Limerick Generating Station, Units 1 and 2

Docket Nos. 50-352 and 50-353

**Evaluation of Proposed Changes to
Relocate Safety-Relief Valve Position Instrumentation
Operability and Surveillance Requirements**

ATTACHMENT 1

EVALUATION OF PROPOSED CHANGES

**Relocation of Safety-Relief Valve Position Instrumentation
Operability and Surveillance Requirements**

CONTENTS

- 1.0 DESCRIPTION**
- 2.0 PROPOSED CHANGES**
- 3.0 BACKGROUND**
- 4.0 TECHNICAL ANALYSIS**
- 5.0 REGULATORY ANALYSIS**
 - 5.1 No Significant Hazards Consideration**
 - 5.2 Applicable Regulatory Requirements/Criteria**
- 6.0 ENVIRONMENTAL CONSIDERATION**
- 7.0 REFERENCES**

EVALUATION OF PROPOSED CHANGES

1.0 DESCRIPTION

The license amendment request proposes changes to Facility Operating Licenses Nos. NPF-39 and NPF-85 for Limerick Generating Station (LGS), Units 1 and 2, respectively. The changes remove the operability and surveillance requirements for the reactor coolant system safety/relief valve (SRV) position instrumentation from; (1) Safety/Relief Valve section, Technical Specifications (TS) 3.4.2 and 4.4.2.1, and (2) the Accident Monitoring Instrumentation section, TS 3.3.7.5 and 4.3.7.5. In conjunction with this change, the operability and surveillance requirements for the SRV position instrumentation will be incorporated verbatim into the LGS Technical Requirements Manual (TRM). The TRM is incorporated by reference into the LGS Updated Final Safety Analysis Report, and subject to the controls of 10 CFR 50.59. Accordingly, future changes to the SRV position instrumentation operability and surveillance requirements will be performed pursuant to 10 CFR 50.59. The proposed changes conform to NRC regulations in 10 CFR 50.36 for the contents of Technical Specifications, and to the improved standard TS approved by the NRC in a document titled: "Standard Technical Specifications – General Electric Plants, BWR/4", NUREG-1433.

2.0 PROPOSED CHANGES

Changes requested by this amendment application are:

1. Delete TS 3.4.2.c on page 3/4 4-7. This specification reads: "With one or more safety/relief valve acoustic monitors inoperable, restore the inoperable acoustic monitors 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."
2. Delete TS 4.4.2.1 on page 3/4 4-7. This specification reads: "The acoustic monitor for each safety/relief valve shall be demonstrated operable with the setpoint verified to be 0.20 of the full open noise level## by performance of a;
 - a. CHANNEL FUNCTIONAL TEST at least once per 92 days, and a
 - b. CHANNEL CALIBRATION at least once per 24 months**."

The associated footnotes to be deleted read: "*** 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." and "## Initial setting shall be in accordance with the manufacturer's recommendation. Adjustment to the valve full open noise level shall be accomplished during the startup test program."

3. Delete item 10, "Safety/Relief Valve Position Indicators," from Table 3.3.7.5-1, page 3/4 3-85, "Accident Monitoring Instrumentation" in TS 3.3.7.5. This table identifies the operability requirements for this instrumentation. With less than the required minimum channels operable, the associated action statement requires the inoperable channel to be restored to the operable status within 48 hours or be in at least hot shutdown within the next 12 hours.

4. Delete item 10, "Safety/Relief Valve Position Indicators," from Table 4.3.7.5-1, page 3/4 3-87, "Accident Monitoring Instrumentation Surveillance Requirements" in TS 4.3.7.5. This table identifies the surveillance requirements for this instrumentation. A monthly channel check, and refueling interval channel calibration is specified.

Implementation of the amendment will be performed within 60 days of NRC issuance of the amendment. Prior to implementation, operability and surveillance requirements for the SRV position instrumentation will be incorporated verbatim into the Technical Requirements Manual (TRM). The operability requirements will identify compensatory measures and completion times for these instruments. Any subsequent changes to the requirements as presented in the current Technical Specifications will be performed in accordance with 10 CFR 50.59.

There are no Bases section changes proposed by this amendment application since the SRV position indicators are not specifically identified in the applicable bases section.

3.0 BACKGROUND

Technical Background

Overpressure protection for the reactor coolant pressure boundary is provided by 14 dual function safety/relief valves (SRV). Each SRV is instrumented with acoustic sensors to provide position indication and alarm in the control room. The instrumentation does not provide input to a control or trip function. This is the SRV position indication instrumentation addressed in Technical Specifications (TS) 3.4.2/4.4.2.1 and 3.3.7.5/4.3.7.5. Two sensors per valve are mounted on piping downstream of the SRVs. When an SRV is actuated, the sensor produces a signal proportional to the flow noise through the valve. The two sensors and their connecting cables constitute active and passive channels. The signals from both channels are routed to a preamplifier outside containment where the active signal is amplified and routed to the position indication cabinet in the control room. The passive channel signal is available for use at the preamplifier if a component of the active channel should fail. In addition to this instrumentation specified in the TS, an SRV tailpipe temperature monitoring system provides backup for the dual channel acoustic position instrumentation. Another diverse means of SRV position indication is provided by the redundant safety-grade suppression pool temperature monitoring system.

Regulatory Background

The NRC provided guidance for the contents of TS in its "Final Policy Statement on Technical Specifications Improvement for Nuclear Power Reactors," 58 FR 39132, July 22, 1993. In particular, the NRC indicated that certain items could be relocated from the TS to licensee-controlled documents. The Final Policy Statement identified future criteria to be used in determining whether particular safety functions are required to be included in the TS, as follows: (1) installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary; (2) a process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident or Transient analysis that either assumes the failure of, or presents a challenge to the integrity of a fission product barrier; (3) a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a Design Basis Accident or Transient that either assumes the failure of, or presents a challenge to the integrity of a fission product barrier; (4) a structure, system, or component which operating experience or

probabilistic safety assessment has shown to be significant to public health and safety. The NRC adopted amendments to 10 CFR 50.36, (July 19, 1995) pursuant to which the rule was revised to codify and incorporate these criteria.

The NRC's policy statement provides that those existing TS requirements which do not satisfy these four specified criteria may be relocated to licensee-controlled documents, such that future changes could be made to these provisions pursuant to 10 CFR 50.59. Subsequently, the nuclear steam supply system owners groups and the NRC staff developed improved standard technical specifications (ISTS) that would establish models of the Commission's policy for each primary reactor type. The NRC issued the ISTS for General Electric BWR/4 plants as NUREG-1433, which was developed utilizing the guidance and criteria in the Commission's policy statement.

The proposed changes are consistent with similar changes approved for the Nine Mile Point Nuclear Station, Unit 2 on September 11, 1995 (Amendment No. 69).

4.0 TECHNICAL ANALYSIS

The proposed license amendment removes the safety/relief valve (SRV) position instrumentation operability and surveillance requirements from the LGS Technical Specifications (TS). Operability and surveillance requirements will be incorporated into the Technical Requirements Manual (TRM). The TRM is referenced in the LGS Updated Final Safety Analysis Report, and subject to the controls of 10 CFR 50.59. The TRM has been used to capture and control other requirements associated with previous LGS license amendments; e.g., Limerick Generating Station license amendments Nos. 146 and 107, for Units 1 and 2, respectively, relocated the primary containment isolation valve list to the TRM.

The SRV position instrumentation identified in the TS utilizes acoustic sensors mounted on the SRV discharge pipe. The instrumentation performs only an alarm and open/close position indication function, and does not provide input to any automatic trip system. SRV and suppression pool temperature monitoring systems provide backup to the acoustic position instrumentation. Removing operability and surveillance requirements from the TS will allow changes that recognize the diversity of SRV position information to be properly assessed and implemented.

As discussed in the Background section above, an NRC policy statement concluded that those existing TS requirements which do not satisfy the screening criteria specified in regulation 10 CFR 50.36 may be deleted from the TS, and the requirements established in licensee-controlled documents, subject to the controls of 10 CFR 50.59. As identified in reference 1, the NRC position on application of the screening criteria to post-accident monitoring instrumentation is documented in correspondence dated May 7, 1988, T. E. Murley (NRC) to R. F. Janecek (BWR Owners Group). The NRC position is that all Regulatory Guide 1.97, type A, and category 1, post-accident monitoring instrumentation, should be incorporated into the plant's TS. The requirements for those instruments not meeting these criteria may be removed from the TS and established in a licensee-controlled document subject to the controls of 10 CFR 50.59.

Type A instruments monitor primary information required to permit the control room operator to take specific manually controlled actions for which no automatic control is provided and that are required for safety systems to accomplish their safety functions for design basis accident events. Category 1 instruments are designed for full qualification, redundancy, continuous real-time display, and onsite (standby) power. Regulatory Guide 1.97 designates primary system safety relief valve position instrumentation as type D, Category 2, instrumentation. Type D instruments provide information to indicate the operation of individual safety systems and other systems important to safety. Category 2 instruments are designed to less stringent qualifications that do not require seismic qualification, redundancy, or continuous display, and require only a high reliability power source (not necessarily standby power). Relocating SRV position instrumentation from the TS to a licensee-controlled document conforms with this NRC position on application of the screening criteria to post-accident monitoring instrumentation.

NRC approved NUREG-1433, "Standard Technical Specifications – General Electric Plants, BWR/4," Revision 2, identifies an improved TS that was developed based on the screening criteria in the "Final Commission Policy Statement on Technical Specifications Improvement for Nuclear Power Reactors," dated July 22, 1993, and subsequently codified in 10 CFR 50.36. The SRVs themselves are a part of the primary success path in the UFSAR accident analysis in that they can actuate to mitigate a Design Basis Accident (DBA) and therefore meet Criterion 3 (described above in the Regulatory Background section) of the previously referenced Final Commission Policy Statement. Accordingly, their operability is required by TS 3.4.2, "Safety/Relief Valves." However, the SRV position indication does not detect or indicate a significant abnormal degradation of the reactor coolant pressure boundary considered by Criterion 1. This is consistent with the Commission's Final Policy Statement which indicated that the first criterion was intended to assure that Technical Specifications controlled those instruments specifically installed to detect reactor coolant leakage but not to include instrumentation to identify the source of actual leakage (e.g., valve position indication).

SRV position indication is not a process variable, design feature or operating restriction that is an initial condition of a DBA or transient analysis considered in Criterion 2.

While the function of SRVs is part of the primary success path and the SRVs actuate to mitigate a DBA or transient, SRV position indication does not form a part of the primary success path since UFSAR accident analysis assumes the SRVs function as designed; i.e., the UFSAR analysis assumes no operator action based on SRV valve position for the SRVs to perform their primary success path function considered in Criterion 3.

The loss of this instrumentation has no effect on the probabilistic safety assessment, and has not been shown to be significant to public health and safety as considered in Criterion 4.

Finally, failure of SRV position indication would not pose a significant challenge to the ability of the operating staff to respond to a DBA or transient, since the Emergency Operating Procedures (EOP) provide symptom-based instruction to the staff in mitigating an upset condition of the plant; i.e., level, pressure, and temperature provide EOP direction regardless of SRV status.

Consequently, the SRV position indication does not meet any of the screening criteria of the Final Policy Statement. This conclusion is supported by the absence of operability and surveillance requirements for the SRV position instrumentation in the improved Standard Technical Specification (ISTS) presented in NUREG-1433. Accordingly, the proposed changes

conform to the ISTS, and SRV position instrumentation requirements can be established in a licensee-controlled document. Future changes to SRV position instrumentation requirements will be subject to the controls of 10 CFR 50.59.

5.0 REGULATORY ANALYSIS

5.1 No Significant Hazards Consideration

Exelon 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 50.90, "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 failure of the safety/relief valve (SRV) position instrumentation is not assumed to be an initiator of any analyzed event in the UFSAR. The proposed changes do not alter the physical design of the SRVs or any other plant structure, system, or component. The changes would remove the safety/relief valve (SRV) position indicator operability and surveillance requirements from the LGS Technical Specifications, and incorporate requirements verbatim for this instrumentation into a licensee-controlled document under the control of 10 CFR 50.59.

The proposed changes conform to NRC regulatory guidance regarding the content of plant Technical Specifications as identified in regulation 10 CFR 50.36, and NRC publication NUREG-1433, "Standard Technical Specifications-General Electric Plants, BWR/4."

Therefore, this proposed amendment does 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 do not alter the physical design, safety limits, or safety analysis assumptions, associated with the operation of the plant. Accordingly, the proposed changes do not introduce any new accident initiators, nor do they reduce or adversely affect the capabilities of any plant structure or system in the performance of their safety function.

Therefore, the proposed amendment does not create the possibility of a new or different kind of accident from any previously evaluated.

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

Response: No. This instrumentation is not needed for manual operator actions necessary for safety systems to accomplish their safety function for the design basis accident events. The instrumentation provides only alarm and SRV position indication, and does not provide an input to any automatic trip function. Several diverse means are available to monitor SRV position, and operability and surveillance requirements will be established in a licensee-controlled document to assure the reliability of SRV position monitoring capability. Changes to these requirements will be subject to the controls of regulation 10 CFR 50.59, providing the appropriate level of regulatory control.

Therefore, the proposed changes do not involve a significant reduction in a margin of safety.

Based on the above, Exelon concludes that the proposed amendment presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

5.2 Applicable Regulatory Requirements/Criteria

The NRC provided guidance for the contents of TS in its "Final Policy Statement on Technical Specifications Improvement for Nuclear Power Reactors," 58 FR 39132, July 22, 1993. In particular, the NRC indicated that certain items could be relocated from the TS to licensee-controlled documents, and identified criteria to be used to determine the functions to be included in the Technical Specifications (TS). The NRC adopted revisions to 10 CFR 50.36, "Technical Specifications," pursuant to which the rule was revised to codify and incorporate these criteria. The NRC published in NUREG-1433 an improved standard technical specifications (ISTS) utilizing these criteria. The TS requirements proposed herein for relocation do not appear in the ISTS, and accordingly, are not required to be in the TS. Operability and surveillance requirements for the SRV position instrumentation will be maintained in the Technical Requirements Manual, subject to the controls of 10 CFR 50.59.

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.

6.0 ENVIRONMENTAL CONSIDERATION

A review has determined that the proposed amendment would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical

exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

7.0 REFERENCES

1. Peach Bottom Atomic Power Station, Units 2 and 3, Technical Specification Change Request 93-16, September 29, 1994, Attachment 1 "Application of Selection Criteria," Appendix A "Justification for Specification Relocation," page 11.
2. NRC "Final Policy Statement on Technical Specifications Improvement for Nuclear Power Reactors," (58 FR 39132, dated July 22, 1993).
3. NRC Final Rule, "Technical Specifications," 60 FR 36593 (July 19, 1995).
4. 10 CFR 50.36, "Technical Specifications."
5. Regulatory Guide 1.97, Rev. 3, "Instrumentation For Light-Water Cooled Nuclear Power Plants to Assess Plant And Environs Conditions During and Following An Accident."
6. NUREG-1433, Revision 2, "Standard Technical Specifications-General Electric Plants. BWR/4," June 2001.

ATTACHMENT 2

License Amendment Request

Limerick Generating Station Units 1 and 2

Docket Nos. 50-352 and 50-353

Relocate Safety-Relief Valve Position Instrumentation
Operability and Surveillance Requirements

Markup of Proposed Technical Specification Page Changes

Unit 1 TS Pages

3/4 3-85

3/4 3-87

3 /4 4-7

Unit 2 TS Pages

3/4 3-85

3/4 3-87

3/4 4-7

TABLE 3.3.7.5-1

ACCIDENT MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>REQUIRED NUMBER OF CHANNELS</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE OPERATIONAL CONDITIONS</u>	<u>ACTION</u>
1. Reactor Vessel Pressure	2	1	1,2	80
2. Reactor Vessel Water Level	2	1	1,2	80
3. Suppression Chamber Water Level	2	1	1,2	80
4. Suppression Chamber Water Temperature	8, 6 locations	6, 1/location	1,2	80
5. Suppression Chamber Air Temperature	1	1	1,2	80
6. Drywell Pressure	2	1	1,2	80
7. Drywell Air Temperature	1	1	1,2	80
8. Drywell Oxygen Concentration Analyzer	2	1	1,2	82
9. Drywell Hydrogen Concentration Analyzer	2	1	1,2	82
10. Safety/Relief Valve Position Indicators	1/valve	1/valve	1,2	80
11. Primary Containment Post-LOCA Radiation Monitors	4	2	1,2,3	81
12. North Stack Wide Range Accident Monitor**	3*	3*	1,2,3	81
13. Neutron Flux	2	1	1,2	80

TABLE 4.3.7.5-1

ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>
1. Reactor Vessel Pressure	M	R
2. Reactor Vessel Water Level	M	R
3. Suppression Chamber Water Level	M	R
4. Suppression Chamber Water Temperature	M	R
5. Suppression Chamber Air Temperature	M	R
6. Primary Containment Pressure	M	R
7. Drywell Air Temperature	M	R
8. Drywell Oxygen Concentration Analyzer	M	Q#
9. Drywell Hydrogen Concentration Analyzer	M	Q*
10. Safety/Relief Valve Position Indicators	M	R
11. Primary Containment Post LOCA Radiation Monitors	M	R**
12. North Stack Wide Range Accident Monitor***	M	R
13. Neutron Flux	M	R

*Using calibration gas containing:

Seven volume percent hydrogen, balance nitrogen.

**CHANNEL CALIBRATION shall consist of an electronic calibration of the channel, not including the detector, for range decades above 10 R/h and a one point calibration check of the detector below 10 R/h with an installed or portable gamma source.

***High range noble gas monitors.

#Using calibration gas containing:

Seven volume percent oxygen, balance nitrogen.

LIMERICK - UNIT 1

3/4 3-87

Amendment No. 116

MAY 3 0 1986

REACTOR COOLANT SYSTEM

3/4.4.2 SAFETY/RELIEF VALVES

LIMITING CONDITION FOR OPERATION

3.4.2 The safety valve function of at least 12 of the following reactor coolant system safety/relief valves shall be OPERABLE with the specified code safety valve function lift settings: *#

- 4 safety/relief valves @ 1170 psig $\pm 3\%$
- 5 safety/relief valves @ 1180 psig $\pm 3\%$
- 5 safety/relief valves @ 1190 psig $\pm 3\%$

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

- a. With the safety valve function of one or more of the above required safety/relief valves inoperable, be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.

b. DELETED

- c. ~~With one or more safety/relief valve acoustic monitors inoperable, restore the inoperable acoustic monitors 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.~~

SURVEILLANCE REQUIREMENTS

4.4.2.1 ~~The acoustic monitor for each safety/relief valve shall be demonstrated OPERABLE with the setpoint verified to be 0.20 of the full open noise level## by performance of a.~~

- ~~a. CHANNEL FUNCTIONAL TEST at least once per 92 days, and a.~~
- ~~b. CHANNEL CALIBRATION at least once per 24 months**.~~

4.4.2.2 At least 1/2 of the safety relief valves shall be removed, set pressure tested and reinstalled or replaced with spares that have been previously set pressure tested and stored in accordance with manufacturer's recommendations at least once per 24 months, and they shall be rotated such that all 14 safety relief valves are removed, set pressure tested and reinstalled or replaced with spares that have been previously set pressure tested and stored in accordance with manufacturer's recommendations at least once per 54 months. All safety valves will be recertification tested to meet a $\pm 1\%$ tolerance prior to returning the valves to service.

* The lift setting pressure shall correspond to ambient conditions of the valves at nominal operating temperatures and pressures.

~~*** 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.~~

Up to 2 inoperable valves may be replaced with spare OPERABLE valves with lower setpoints until the next refueling.

~~## Initial setting shall be in accordance with the manufacturer's recommendation. Adjustment to the valve full open noise level shall be accomplished during the startup test program.~~

TABLE 3.3.7.5-1

ACCIDENT MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>REQUIRED NUMBER OF CHANNELS</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE OPERATIONAL CONDITIONS</u>	<u>ACTION</u>
1. Reactor Vessel Pressure	2	1	1,2	80
2. Reactor Vessel Water Level	2	1	1,2	80
3. Suppression Chamber Water Level	2	1	1,2	80
4. Suppression Chamber Water Temperature	8, 6 locations	6, 1/location	1,2	80
5. Suppression Chamber Air Temperature	1	1	1,2	80
6. Drywell Pressure	2	1	1,2	80
7. Drywell Air Temperature	1	1	1,2	80
8. Drywell Oxygen Concentration Analyzer	2	1	1,2	82
9. Drywell Hydrogen Concentration Analyzer	2	1	1,2	82
10. Deleted Safety/Relief Valve Position Indicators	1/valve	1/valve	1,2	80
11. Primary Containment Post-LOCA Radiation Monitors	4	2	1,2,3	81
12. North Stack Wide Range Accident Monitor**	3*	3*	1,2,3	81
13. Neutron Flux	2	1	1,2	80

TABLE 4.3.7.5-1

ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>
1. Reactor Vessel Pressure	M	R
2. Reactor Vessel Water Level	M	R
3. Suppression Chamber Water Level	M	R
4. Suppression Chamber Water Temperature	M	R
5. Suppression Chamber Air Temperature	M	R
6. Primary Containment Pressure	M	R
7. Drywell Air Temperature	M	R
8. Drywell Oxygen Concentration Analyzer	M	Q#
9. Drywell Hydrogen Concentration Analyzer	M	Q*
10. Safety/Relief Valve Position Indicators	M	R
11. Primary Containment Post LOCA Radiation Monitors	M	R**
12. North Stack Wide Range Accident Monitor***	M	R
13. Neutron Flux	M	R

*Using calibration gas containing:
Seven volume percent hydrogen, balance nitrogen.

**CHANNEL CALIBRATION shall consist of an electronic calibration of the channel, not including the detector, for range decades above 10 R/h and a one point calibration check of the detector below 10 R/h with an installed or portable gamma source.

***High range noble gas monitors.

#Using calibration gas containing:
Seven volume percent oxygen, balance nitrogen.

LIMERICK - UNIT 2

3/4 3-87

Amendment No. 78

MAY 30 1996

REACTOR COOLANT SYSTEM

3/4.4.2 SAFETY/RELIEF VALVES

LIMITING CONDITION FOR OPERATION

3.4.2 The safety valve function of at least 12 of the following reactor coolant system safety/relief valves shall be OPERABLE with the specified code safety valve function lift settings:*

- 4 safety/relief valves @ 1170 psig $\pm 3\%$
- 5 safety/relief valves @ 1180 psig $\pm 3\%$
- 5 safety/relief valves @ 1190 psig $\pm 3\%$

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

- a. With the safety valve function of one or more of the above required safety/relief valves inoperable, be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.

b. DELETED

- c. ~~With one or more safety/relief valve acoustic monitors inoperable, restore the inoperable acoustic monitors 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.~~

SURVEILLANCE REQUIREMENTS

4.4.2.1 ~~The acoustic monitor for each safety/relief valve shall be demonstrated OPERABLE with the setpoint verified to be 0.20 of the full open noise level### by performance of a.~~

- a. ~~CHANNEL FUNCTIONAL TEST at least once per 92 days, and a~~
- b. ~~CHANNEL CALIBRATION at least once per 24 months**.~~

4.4.2.2 At least 1/2 of the safety relief valves shall be removed, set pressure tested and reinstalled or replaced with spares that have been previously set pressure tested and stored in accordance with manufacturer's recommendations at least once per 24 months, and they shall be rotated such that all 14 safety relief valves are removed, set pressure tested and reinstalled or replaced with spares that have been previously set pressure tested and stored in accordance with manufacturer's recommendations at least once per 54 months. All safety valves will be recertification tested to meet a $\pm 1\%$ tolerance prior to returning the valves to service.

* The lift setting pressure shall correspond to ambient conditions of the valves at nominal operating temperatures and pressures.

** ~~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.~~

Up to 2 inoperable valves may be replaced with spare OPERABLE valves with lower setpoints until the next refueling.

~~Initial setting shall be in accordance with the manufacturer's recommendation. Adjustment to the valve full open noise level shall be accomplished during the startup test program.~~

ATTACHMENT 3

License Amendment Request

Limerick Generating Station Units 1 and 2

Docket Nos. 50-352 and 50-353

Relocate Safety-Relief Valve Position Instrumentation
Operability and Surveillance Requirements

Typed Technical Specification Page Changes

Unit 1 TS Pages

3/4 3-85

3/4 3-87

3/4 4-7

Unit 2 TS Pages

3/4 3-85

3/4 3-87

3/4 4-7

TABLE 3.3.7.5-1

ACCIDENT MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>REQUIRED NUMBER OF CHANNELS</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE OPERATIONAL CONDITIONS</u>	<u>ACTION</u>
1. Reactor Vessel Pressure	2	1	1,2	80
2. Reactor Vessel Water Level	2	1	1,2	80
3. Suppression Chamber Water Level	2	1	1,2	80
4. Suppression Chamber Water Temperature	8, 6 locations	6, 1/location	1,2	80
5. Suppression Chamber Air Temperature	1	1	1,2	80
6. Drywell Pressure	2	1	1,2	80
7. Drywell Air Temperature	1	1	1,2	80
8. Drywell Oxygen Concentration Analyzer	2	1	1,2	82
9. Drywell Hydrogen Concentration Analyzer	2	1	1,2	82
10. Deleted				
11. Primary Containment Post-LOCA Radiation Monitors	4	2	1,2,3	81
12. North Stack Wide Range Accident Monitor**	3*	3*	1,2,3	81
13. Neutron Flux	2	1	1,2	80

TABLE 4.3.7.5-1

ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>
1. Reactor Vessel Pressure	M	R
2. Reactor Vessel Water Level	M	R
3. Suppression Chamber Water Level	M	R
4. Suppression Chamber Water Temperature	M	R
5. Suppression Chamber Air Temperature	M	R
6. Primary Containment Pressure	M	R
7. Drywell Air Temperature	M	R
8. Drywell Oxygen Concentration Analyzer	M	Q#
9. Drywell Hydrogen Concentration Analyzer	M	Q*
10. Deleted		
11. Primary Containment Post LOCA Radiation Monitors	M	R**
12. North Stack Wide Range Accident Monitor***	M	R
13. Neutron Flux	M	R

*Using calibration gas containing:

Seven volume percent hydrogen, balance nitrogen.

**CHANNEL CALIBRATION shall consist of an electronic calibration of the channel, not including the detector, for range decades above 10 R/h and a one point calibration check of the detector below 10 R/h with an installed or portable gamma source.

***High range noble gas monitors.

#Using calibration gas containing:

Seven volume percent oxygen, balance nitrogen.

REACTOR COOLANT SYSTEM

3/4.4.2 SAFETY/RELIEF VALVES

LIMITING CONDITION FOR OPERATION

3.4.2 The safety valve function of at least 12 of the following reactor coolant system safety/relief valves shall be OPERABLE with the specified code safety valve function lift settings:##

- 4 safety/relief valves @ 1170 psig $\pm 3\%$
- 5 safety/relief valves @ 1180 psig $\pm 3\%$
- 5 safety/relief valves @ 1190 psig $\pm 3\%$

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

- a. With the safety valve function of one or more of the above required safety/relief valves inoperable, be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.
- b. DELETED
- c. DELETED

SURVEILLANCE REQUIREMENTS

4.4.2.1 DELETED

4.4.2.2 At least 1/2 of the safety relief valves shall be removed, set pressure tested and reinstalled or replaced with spares that have been previously set pressure tested and stored in accordance with manufacturer's recommendations at least once per 24 months, and they shall be rotated such that all 14 safety relief valves are removed, set pressure tested and reinstalled or replaced with spares that have been previously set pressure tested and stored in accordance with manufacturer's recommendations at least once per 54 months. All safety valves will be recertification tested to meet a $\pm 1\%$ tolerance prior to returning the valves to service.

* The lift setting pressure shall correspond to ambient conditions of the valves at nominal operating temperatures and pressures.

Up to 2 inoperable valves may be replaced with spare OPERABLE valves with lower setpoints until the next refueling.

TABLE 3.3.7.5-1

ACCIDENT MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>REQUIRED NUMBER OF CHANNELS</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE OPERATIONAL CONDITIONS</u>	<u>ACTION</u>
1. Reactor Vessel Pressure	2	1	1,2	80
2. Reactor Vessel Water Level	2	1	1,2	80
3. Suppression Chamber Water Level	2	1	1,2	80
4. Suppression Chamber Water Temperature	8, 6 locations	6, 1/location	1,2	80
5. Suppression Chamber Air Temperature	1	1	1,2	80
6. Drywell Pressure	2	1	1,2	80
7. Drywell Air Temperature	1	1	1,2	80
8. Drywell Oxygen Concentration Analyzer	2	1	1,2	82
9. Drywell Hydrogen Concentration Analyzer	2	1	1,2	82
10. Deleted				
11. Primary Containment Post-LOCA Radiation Monitors	4	2	1,2,3	81
12. North Stack Wide Range Accident Monitor**	3*	3*	1,2,3	81
13. Neutron Flux	2	1	1,2	80

TABLE 4.3.7.5-1

ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>
1. Reactor Vessel Pressure	M	R
2. Reactor Vessel Water Level	M	R
3. Suppression Chamber Water Level	M	R
4. Suppression Chamber Water Temperature	M	R
5. Suppression Chamber Air Temperature	M	R
6. Primary Containment Pressure	M	R
7. Drywell Air Temperature	M	R
8. Drywell Oxygen Concentration Analyzer	M	Q#
9. Drywell Hydrogen Concentration Analyzer	M	Q*
10. Deleted		
11. Primary Containment Post LOCA Radiation Monitors	M	R**
12. North Stack Wide Range Accident Monitor***	M	R
13. Neutron Flux	M	R

*Using calibration gas containing:

Seven volume percent hydrogen, balance nitrogen.

**CHANNEL CALIBRATION shall consist of an electronic calibration of the channel, not including the detector, for range decades above 10 R/h and a one point calibration check of the detector below 10 R/h with an installed or portable gamma source.

***High range noble gas monitors.

#Using calibration gas containing:

Seven volume percent oxygen, balance nitrogen.

REACTOR COOLANT SYSTEM

3/4.4.2 SAFETY/RELIEF VALVES

LIMITING CONDITION FOR OPERATION

3.4.2 The safety valve function of at least 12 of the following reactor coolant system safety/relief valves shall be OPERABLE with the specified code safety valve function lift settings: *#

- 4 safety/relief valves @ 1170 psig $\pm 3\%$
- 5 safety/relief valves @ 1180 psig $\pm 3\%$
- 5 safety/relief valves @ 1190 psig $\pm 3\%$

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

- a. With the safety valve function of one or more of the above required safety/relief valves inoperable, be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.
- b. DELETED
- c. DELETED

SURVEILLANCE REQUIREMENTS

4.4.2.1 DELETED

4.4.2.2 At least 1/2 of the safety relief valves shall be removed, set pressure tested and reinstalled or replaced with spares that have been previously set pressure tested and stored in accordance with manufacturer's recommendations at least once per 24 months, and they shall be rotated such that all 14 safety relief valves are removed, set pressure tested and reinstalled or replaced with spares that have been previously set pressure tested and stored in accordance with manufacturer's recommendations at least once per 54 months. All safety valves will be recertification tested to meet a $\pm 1\%$ tolerance prior to returning the valves to service.

* The lift setting pressure shall correspond to ambient conditions of the valves at nominal operating temperatures and pressures.

Up to 2 inoperable valves may be replaced with spare OPERABLE valves with lower setpoints until the next refueling.