ATTACHMENT 2

Limerick Generating Station

Units 1 and 2

Docket Nos. 50-352 50-353

License Nos. NPF-39 NPF-85

Technical Specifications Change Request

No. 99-01-0

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REACTOR COOLANT SYSTEM

SURVEILLANCE REQUIREMENTS

4.4.1.1.1 DELETED

4.4.1.1.2 DELETED

4.4.1.1.3 Establish a baseline APRM and LPRM** neutron flux noise value within the regions for which monitoring is required (Specification 3.4.1.1, ACTION c) within 2 hours of entering the region for which monitoring is required unless baselining has previously been performed in the region since the last refueling outage.

4.4.1.1.4 With one reactor coolant system recirculation loop not in operation, at least once per 12 hours verify that:

- a. Reactor THERMAL POWER is ≤ 76.2% of RATED THERMAL POWER,
- The recirculation flow control system is in the Local Manual mode, and
- c. The speed of the operating recirculation pump is ≤ 90% of rated pump speed.
- d. Core flow is greater than 39% when THERMAL POWER is within the restricted zone of Figure 3.4.1.1-1.

4.4.1.1.5 With one reactor coolant system recirculation loop not in operation, within 15 minutes prior to either THERMAL POWER increase or recirculation loop flow increase, verify that the following differential temperature requirements are met if THERMAL POWER is \leq 30% of RATED THERMAL POWER or the recirculation loop flow in the operating recirculation loop is \leq 50% of rated loop flow.

- a. ≤ 145°F between reactor vessel steam space coolant and bottom head drain line coolant,
- b. ≤ 50°F between the reactor coolant within the loop not in operation and the coolant in the reactor pressure vessel, and
- c. ≤ 50°F between the reactor coolant within the loop not in operation and the operating loop.

The differential temperature requirements of Specification 4.4.1.1.5b. and c. do not apply when the loop not in operation is isolated from the reactor pressure vessel.

LIMERICK - UNIT 1

^{**}Detector levels A and C of one LPRM string per core octant plus detectors A and C of one LPRM string in the center of the core should be monitored.

ADMINISTRATIVE CONTROLS

CORE OPERATING LIMITS REPORT

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

- The AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR) for Specification 3.2.1,
- b. MAPFAC(P) and MAPFAC(F) factors for Specification 3.2.1,
- c. The MINIMUM CRITICAL POWER RATIO (MCPR) for Specification 3.2.3.
- d. The MCPR(P) and MCPR(F) adjustment factors for specification 3.2.3,
- e. The LINEAR HEAT GENERATION RATE (LHGR) for Specification 3.2.4,
- f. The power biased Rod Block Monitor setpoints and the Rod Block Monitor MCPR OPERABILITY limits of Specification 3.3.6,
- g. The Reactor Coolant System Recirculation Flow upscale trip setpoint and allowable value for Specification 3.3.6,
- h. DELETED

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

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

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

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

SPECIAL REPORTS

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

LIMERICK - UNIT 1

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

REACTOR COOLANT SYSTEM

SURVEILLANCE REQUIREMENTS

4.4.1.1.1 DELETED

4.4.1.1.2 DELETED

4.4.1.1.3 Establish a baseline APRM and LPRM** neutron flux noise value within the regions for which monitoring is required (Specification 3.4.1.1, ACTION c) within 2 hours of entering the region for which monitoring is required unless baselining has previously been performed in the region since the last refueling outage.

4.4.1.1.4 With one reactor coolant system recirculation loop not in operation, at least once per 12 hours verify that:

- a. Reactor THERMAL POWER is \$ 76.2% of RATED THERMAL POWER,
- b. The recirculation flow control system is in the Local Manual mode, and
- c. The speed of the operating recirculation pump is ≤ 90% of rated pump speed.
- d. Core flow is greater than 39% when THERMAL POWER is within the restricted zone of Figure 3.4.1.1-1.

4.4.1.1.5 With one reactor coolant system recirculation loop not in operation, within 15 minutes prior to either THERMAL POWER increase or recirculation loop flow increase, verify that the following differential temperature requirements are met if THERMAL POWER is \leq 30% of RATED THERMAL POWER or the recirculation loop flow in the operating recirculation loop is \leq 50% of rated loop flow.

- a. ≤ 145°F between reactor vessel steam space coolant and bottom head drain line coolant,
- b. ≤ 50°F between the reactor coolant within the loop not in operation and the coolant in the reactor pressure vessel, and
- c. ≤ 50°F between the reactor coolant within the loop not in operation and the operating loop.

The differential temperature requirements of Specification 4.4.1.1.5b. and c. do not apply when the loop not in operation is isolated from the reactor pressure vessel.

LIMERICK - UNIT 2

^{**}Detector levels A and C of one LPRM string per core octant plus detectors A and C of one LPRM string in the center of the core should be monitored.

ADMINISTRATIVE CONTROLS

CORE OPERATING LIMITS REPORT

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

- The AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR) for Specification 3.2.1,
- MAPFAC(P) and MAPFAC(F) factors for Specification 3.2.1,
- c. The MINIMUM CRITICAL POWER RATIO (MCPR) for Specification 3.2.3,
- d. The MCPR(P) and MCPR(F) adjustment factors for specification 3.2.3,
- e. The LINEAR HEAT GENERATION RATE (LHGR) for Specification 3.2.4,
- f. The power biased Rod Block Monitor setpoints and the Rod Block Monitor MCPR OPERABILITY limits of Specification 3.3.6.
- g. The Reactor Coolant System Recirculation Flow upscale trip setpoint and allowable value for Specification 3.3.6,
- h. DELETED

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

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

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

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

SPECIAL REPORTS

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

REACTOR COOLANT SYSTEM

SURVEILLANCE REQUIREMENTS

4.4.1.1.1 DELETED ___ DELETED

4.4.1.1.2 Each pump MG set scoop tube mechanical and electrical stop shall be demonstrated OPERABLE with overspeed satpoints less than or equal to the setpoints as noted in the CORE OPERATING LIMITS REPORT, as a percentage of rated core flow, at least once per 24 months.

4.4.1.1.3 Establish a baseline APRM and LPRM** neutron flux noise value within the regions for which monitoring is required (Specification 3.4.1.1, ACTION c) within 2 hours of entering the region for which monitoring is required unless baselining has previously been performed in the region since the last refueling outage.

4.4.1.1.4 With one reactor coolint system recirculation loop not in operation, at least once per 12 hours verify that:

- a. Reactor THERMAL POWER is ≤ 76.2% of RATED THERMAL POWER.
- b. The recirculation flow control system is in the Local Manual mode, and
- c. The speed of the operating recirculation pump is \leq 90% of rated pump speed.
- d. Core flow is greater than 39% when THERMAL POWER is within the restricted zone of Figure 3.4.1.1-1.

4.4.1.1.5 With one reactor coolant system recirculation loop not in operation, within 15 minutes prior to either THERMAL POWER increase or recirculation loop flow increase, verify that the following differential temperature requirements are met if THERMAL POWER is \leq 30% of RATED THERMAL POWER or the recirculation loop flow in the operating recirculation loop is \leq 50% of rated loop flow.

- a. ≤ 145°F between reactor vessel steam space coolant and bottom head drain line coolant,
- b. ≤ 50°F between the reactor coolant within the loop not in operation and the coolant in the reactor pressure vessel, and
- c. ≤ 50°F between the reactor coolant within the loop not in operation and the operating loop.

The differential temperature requirements of Specification 4.4.1.1.5b. and c. do not apply when the loop not in operation is isolated from the reactor pressure vessel.

**Detector levels A and C of one LPRM string per core octant plus detectors A and C of one LPRM string in the center of the core should be monitored.

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ADMINISTRATIVE CONTROLS

CORE OPERATING LIMITS REPORT

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

- a. The AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR) for Specification 3.2.1,
- b. MAPFAC(P) and MAPFAC(F) factors for Specification 3.2.1,
- c. The MINIMUM CRITICAL POWER RATIO (MCPR) for Specification 3.2.3,
- d. The MCPR(P) and MCPR(F) adjustment factors for specification 3.2.3,
- e. The LINEAR HEAT GENERATION RATE (LHGR) for Specification 3.2.4,
- f. The power biased Rod Block Monitor setpoints and the Rod Block Monitor MCPR OPERABILITY limits of Specification 3.3.6.
- 9. The Reactor Coolant System Recirculation Flow upscale trip setpoint and allowable value for Specification 3.3.6, DELETED
- h. . The Recirculation MG set mechanical and electrical overspeed stop

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

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

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

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

SPECIAL REPORTS

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

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

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Amendment No. 127

SURVEILLANCE REDUIREMENTS

4.4.1.1.1 DELETED DELETED

4.4.1.1.2 Each pump MG set accorp tube mechanical and electrical stop shall be demonstrated OPERABLE with overspeed setpoints less than or equal to the setpoints as noted in the CORE OPERATING LIMITS REPORT, as a percentage of rated core flow, at least once per 24 months.

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4.4.1.1.3 Establish a baseline APRM and LPRM** neutron flux noise value within the regions for which monitoring is required (Specification 3.4.1.1, ACTION c) within 2 hours of entering the region for which monitoring is required unless baselining has previously been performed in the region since the last refueling outage.

4.4.1.1.4 With one reactor coolant system recirculation loop not in operation, at least once per 12 hours verify that:

- a. Reactor THERMAL POWER is ≤ 76.2% of RATED THERMAL POWER.
- The recirculation flow control system is in the Local Manual mode, and
- c. The speed of the operating recirculation pump is \leq 90% of rated pump speed.
- d. Core flow is greater than 39% when THERMAL POWER is within the restricted zone of Figure 3.4.1.1-1.

4.4.1.1.5 With one reactor coolant system recirculation loop not in operation, within 15 minutes prior to either THERMAL POWER increase or recirculation loop flow increase, verify that the following differential temperature requirements are met if THERMAL POWER is \leq 30% of RATED THERMAL POWER or the recirculation loop flow in the operating recirculation loop is \leq 50% of rated loop flow.

- a. ≤ 145°F between reactor vessel steam space coolant and bottom head drain line coolant,
- b. ≤ 50°F between the reactor coolant within the loop not in operation and the coolant in the reactor pressure vessel, and
- c. \leq 50°F between the reactor coolant within the loop not in operation and the operating loop.

The differential temperature requirements of Specification 4.4.1.1.5b. and c. do not apply when the loop not in operation is isolated from the reactor pressure vessel.

**Detector levels A and C of one LPRM string per core octant plus detectors A and C of one LFRM string in the center of the core should be monitored.

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CORE OPERATING LIMITS REPORT

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

- a. The AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR) for Specification 3.2.1,
- b. MAPFAC(P) and MAPFAC(F) factors for Specification 3.2.1.
- c. The MINIMUM CRITICAL POWER RATIO (MCPR) for Specification 3.2.3,
- d. The MCPR(P) and MCPR(F) adjustment factor for specification 3.2.3,
- e. The LINEAR HEAT GENERATION RATE (LHGR) for Specification 3.2.4,
- f. The power biased Rod Block Monitor setpoints and the Rod Block Monitor MCPR OPERABILITY limits of Specification 3.3.5.
- g. The Reactor Coolant System Recirculation Flow upscale trip setpoint and allowable value for Specification 3.3.6, OELETED
- h. The Recirculation MG set machanical and electrical overspeed stop

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

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

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

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

SPECIAL REPORTS

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

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