

ATTACHMENT 2

LIMERICK GENERATING STATION  
UNIT 1 AND UNIT 2

Docket Nos.  
50-352  
50-353

License Nos.  
NPF-39  
NPF-85

TECHNICAL SPECIFICATIONS CHANGE REQUEST NO. 89-10-0

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(3) Fire Protection (Section 9.5, SSER-2,-4)\*

- a. PECO Energy Company shall implement and maintain in effect all provisions of the approved fire protection program as described in the Updated Final Safety Analysis Report for the facility, and as approved in the NRC Safety Evaluation Report dated August 1983 thru Supplement 9, subject to the following provisions:

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

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

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INSTRUMENTATION

Section 3/4.7.9 (Deleted)

THE INFORMATION FROM THIS TECHNICAL SPECIFICATIONS SECTION HAS BEEN RELOCATED TO THE TECHNICAL REQUIREMENTS MANUAL (TRM) FIRE PROTECTION SECTION. TECHNICAL SPECIFICATIONS PAGES 3/4 3-92 THROUGH 3/4 3-96 OF THIS SECTION HAVE BEEN INTENTIONALLY OMITTED.

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Section 3/4.7.6 through 3/4.7.7 (Deleted)

THE INFORMATION FROM THESE TECHNICAL SPECIFICATIONS SECTIONS  
HAVE BEEN RELOCATED TO THE TECHNICAL REQUIREMENTS MANUAL (TRM) FIRE  
PROTECTION SECTION. TECHNICAL SPECIFICATIONS PAGES 3/4 7-19 THROUGH  
3/4 7-32 HAVE BEEN INTENTIONALLY OMITTED.

## ADMINISTRATIVE CONTROLS

### 6.2.2 UNIT STAFF

- a. Each on duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2.2-1;
- b. At least one licensed Operator shall be in the control room when fuel is in the reactor. In addition, while the unit is in OPERATIONAL CONDITION 1, 2, or 3, at least one licensed Senior Operator shall be in the control room;
- c. A Health Physics Technician\* shall be on site when fuel is in the reactor;
- d. ALL CORE ALTERATIONS shall be observed and directly supervised by either a licensed Senior Operator or licensed Senior Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation;
- e. (Deleted) - INFORMATION FROM THIS SECTION RELOCATED TO THE TRM.
- f. Administrative procedures shall be developed and implemented to limit the working hours of unit staff who perform safety-related functions (e.g., licensed Senior Operators, licensed Operators, health physicists, auxiliary operators, and key maintenance personnel).

Adequate shift coverage shall be maintained without routine heavy use of overtime. The objective shall be to have operating personnel work a normal 8-hour day, 40-hour week while the unit is operating. However, in the event that unforeseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for refueling, major maintenance, or major unit modifications, on a temporary basis the following guidelines shall be followed:

1. An individual should not be permitted to work more than 16 hours straight, excluding shift turnover time.
2. An individual should not be permitted to work more than 16 hours in any 24-hour period, nor more than 24 hours in any 48-hour period, nor more than 72 hours in any 7-day period, all excluding shift turnover time.
3. A break of at least 8 hours should be allowed between work periods, including shift turnover time.
4. Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.

\* The Health Physics Technician position may be less than the minimum requirements for a period of time not to exceed 2 hours, in order to accommodate unexpected absence, provided immediate action is taken to fill the required position.

## ADMINISTRATIVE CONTROLS

### RESPONSIBILITIES

6.5.1.6 The PROC shall be responsible for:

- a. Review of (1) Administrative Procedures and changes thereto, (2) new programs or procedures required by specification 6.8 and requiring a 10 CFR 50.59 safety evaluation, and (3) proposed changes to programs or procedures required by Specification 6.8 and requiring a 10 CFR 50.59 safety evaluation;
- b. Review of all proposed tests and experiments that affect nuclear safety;
- c. Review of all proposed changes to Appendix A Technical Specifications;
- d. Review of all proposed changes or modifications to unit systems or equipment that affect nuclear safety;
- e. DELETED.
- f. Investigation of all violations of the Technical Specifications, including the preparation and forwarding of reports covering evaluation and recommendations to prevent recurrence, to the Vice President, Limerick Generating Station, Plant Manager, and to the Nuclear Review Board;
- g. Review of all REPORTABLE EVENTS;
- h. Review of unit operations to detect potential hazards to nuclear safety;
- i. Performance of special reviews, investigations, or analyses and reports thereon as requested by the Vice President, Limerick Generating Station, plant Manager or the Chairman of the Nuclear Review Board;
- j. Review of the Security Plan and implementing procedures and submittal of recommended changes to the Nuclear Review Board; and
- k. Review of the Emergency Plan and implementing procedures and submittal of the recommended changes to the Nuclear Review Board.
- l. Review of every unplanned onsite release of radioactive material to the environs including the preparation and forwarding of reports covering evaluation, recommendations and disposition of the corrective action to prevent recurrence to the Vice President, Limerick Generating Station, Plant Manager, and to the Nuclear Review Board.
- m. Review of changes to the PROCESS CONTROL PROGRAM, OFFSITE DOSE CALCULATION MANUAL, and radwaste treatment systems.
- n. Review of the Fire Protection Program and implementing procedures and the submittal of recommended changes to the Nuclear Review Board.

6.5.1.7 The PORC shall:

- a. Recommend in writing to the Plant Manager approval or disapproval of items considered under Specification 6.5.1.6a. through d. prior to their implementation.
- b. Render determinations in writing with regard to whether or not each item considered under Specification 6.5.1.6b. through f. constitutes an unreviewed safety question.

## BASES

### 3/4.3.7.7 TRAVERSING IN-CORE PROBE SYSTEM

The OPERABILITY of the traversing in-core probe system with the specified minimum complement of equipment ensures that the measurements obtained from use of this equipment accurately represent the spatial neutron flux distribution of the reactor core.

The TIP system OPERABILITY is demonstrated by normalizing all probes (i.e., detectors) prior to performing an LPRM calibration function. Monitoring core thermal limits may involve utilizing individual detectors to monitor selected areas of the reactor core, thus all detectors may not be required to be OPERABLE. The OPERABILITY of individual detectors to be used for monitoring is demonstrated by comparing the detector(s) output in the resultant heat balance calculation (P-1) with data obtained during a previous heat balance calculation (P-1).

### 3/4.3.7.8 CHLORINE AND TOXIC GAS DETECTION SYSTEMS

The OPERABILITY of the chlorine and toxic gas detection systems ensures that an accidental chlorine and/or toxic gas release will be detected promptly and the necessary protective actions will be automatically initiated for chlorine and manually initiated for toxic gas to provide protection for control room personnel. Upon detection of a high concentration of chlorine, the control room emergency ventilation system will automatically be placed in the chlorine isolation mode of operation to provide the required protection. Upon detection of a high concentration of toxic gas, the control room emergency ventilation system will manually be placed in the chlorine isolation mode of operation to provide the required protection. The detection systems required by this specification are consistent with the recommendations of Regulatory Guide 1.95, "Protection of Nuclear Power Plant Control Room Operators against an Accidental Chlorine Release," February 1975.

Specified surveillance intervals and maintenance outage times have been determined in accordance with GENE-770-06-1, "Bases for Changes to Surveillance Test Intervals and Allowed Out-of-Service Times for Selected Instrumentation Technical Specifications," as approved by the NRC and documented in the SER (letter to R.D. Binz, IV, from C.E. Rossi dated July 21, 1992).

3/4.3.7.9 (Deleted) - INFORMATION FROM THIS SECTION RELOCATED TO THE TRM

## INSTRUMENTATION

### BASES

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#### 3/4.3.7.10 LOOSE PART DETECTION SYSTEM

The OPERABILITY of the loose-part detection system ensures that sufficient capability is available to detect loose metallic parts in the primary system and avoid or mitigate damage to primary system components. The allowable out-of-service times and surveillance requirements are consistent with the recommendations of Regulatory Guide 1.133, "Loose-Part Detection Program for the Primary System of Light-Water-Cooled Reactors," May 1981.

3/4.3.7.11 (Deleted) - INFORMATION FROM THIS SECTION RELOCATED TO THE ODCM.

#### 3/4.3.7.12 OFFGAS MONITORING INSTRUMENTATION

This instrumentation includes provisions for monitoring the concentrations of potentially explosive gas mixtures and noble gases in the off-gas system.

#### 3/4.3.8 TURBINE OVERSPEED PROTECTION SYSTEM

This specification is provided to ensure that the turbine overspeed protection system instrumentation and the turbine speed control valves are OPERABLE and will protect the turbine from excessive overspeed. Protection from turbine excessive overspeed is required since excessive overspeed of the turbine could generate potentially damaging missiles which could impact and damage safety related components, equipment or structures.

#### 3/4.3.9 FEEDWATER/MAIN TURBINE TRIP SYSTEM ACTUATION INSTRUMENTATION

The feedwater/main turbine trip system actuation instrumentation is provided to initiate action of the feedwater system/main turbine trip system in the event of failure of feedwater controller under maximum demand.

PLANT SYSTEMS

BASES

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3/4 7.6 (Deleted) - INFORMATION FROM THIS SECTION RELOCATED TO THE TRM.

3/4.7.7 (Deleted) - INFORMATION FROM THIS SECTION RELOCATED TO THE TRM.

- (4) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (5) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility, and to receive and possess, but not separate, such source, byproduct, and special nuclear materials as contained in the fuel assemblies and fuel channels from the Shoreham Nuclear Power Station.

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

(1) Maximum Power Level

Philadelphia Electric Company is authorized to operate the facility at reactor core power levels of 3293 megawatts thermal (100 percent rated power) in accordance with the conditions specified herein.

(2) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 42, are hereby incorporated into this license. Philadelphia Electric Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(3) Fire Protection (Section 9.5, SSER-2,-4)\*

PECO Energy Company shall implement and maintain in effect all provisions of the approved Fire Protection Program as described in the Updated Final Safety Analysis Report for the facility, and as approved in the NRC Safety Evaluation Report dated August 1983 thru Supplement 9, subject to the following provision:

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

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

(4) Physical Security and Safeguards

The licensee shall fully implement and maintain in effect all provisions of the physical security, guard training and qualification and safeguards contingency plans previously approved by the Commission and all amendments and revisions to such plans made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Limerick Generating Station, Units 1 & 2, Physical Security Plan," with revisions submitted through October 31, 1988; "Limerick Generating Station, Units 1 & 2, Plant Security Personnel Training and Qualification Plan," with revisions submitted through October 1, 1985; and "Limerick Generating Station, Units 1 & 2, Safeguards Contingency Plan," with revisions submitted through November 15, 1986.

- D. The facility requires exemptions from certain requirements of 10 CFR Part 50 and 10 CFR Part 70. These include (a) exemption from the requirement of paragraph III.D.2.(b)(ii) of Appendix J, the testing of containment air locks at times when the containment integrity is not required (Section 6.2.6.1 of the SER and SSER-3) (b) exemption from the requirements of paragraphs II.H.4 and III.C.2 of Appendix J, the leak rate testing of the Main Steam Isolation Valves (MSIVs) at the peak calculated containment pressure, Pa, and exemption from the requirements of paragraph III.C.3 of Appendix J that the measured MSIV leak rates be included in the summation for the local leak rate test (Section 6.2.6.1 of SSER-3), (c) exemption from the requirement of paragraphs II.H.1 and III.C.2 of Appendix J,

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INSTRUMENTATION

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## ADMINISTRATIVE CONTROLS

### 6.2.2 UNIT STAFF

- a. Each on duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2.2-1;
- b. At least one licensed Operator shall be in the control room when fuel is in the reactor. In addition, while the unit is in OPERATIONAL CONDITION 1, 2, or 3, at least one licensed Senior Operator shall be in the control room;
- c. A Health Physics Technician\* shall be on site when fuel is in the reactor;
- d. ALL CORE ALTERATIONS shall be observed and directly supervised by either a licensed Senior Operator or licensed Senior Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation;
- e. (Deleted) - INFORMATION FROM THIS SECTION RELOCATED TO THE TRM.
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Adequate shift coverage shall be maintained without routine heavy use of overtime. The objective shall be to have operating personnel work a normal 8-hour day, 40-hour week while the unit is operating. However, in the event that unforeseen problems require substantial amounts of overtime to be used, or during extended periods of shut-down for refueling, major maintenance, or major unit modifications, on a temporary basis the following guidelines shall be followed:

1. An individual should not be permitted to work more than 16 hours straight, excluding shift turnover time.
2. An individual should not be permitted to work more than 16 hours in any 24-hour period, nor more than 24 hours in any 48-hour period, nor more than 72 hours in any 7-day period, all excluding shift turnover time.

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\* The Health Physics Technician position may be less than the minimum requirements for a period of time not to exceed 2 hours, in order to accommodate unexpected absence, provided immediate action is taken to fill the required position.

## ADMINISTRATIVE CONTROLS

### RESPONSIBILITIES

6.5.1.6 The PROC shall be responsible for:

- a. Review of (1) Administrative Procedures and changes thereto, (2) new programs or procedures required by Specification 6.8 and requiring a 10 CFR 50.59 safety evaluation, and (3) proposed changes to programs or procedures required by Specification 6.8 and requiring a 10 CFR 50.59 safety evaluation;
- b. Review of all proposed tests and experiments that affect nuclear safety;
- c. Review of all proposed changes to Appendix A Technical Specifications;
- d. Review of all proposed changes or modifications to unit systems or equipment that affect nuclear safety;
- e. DELETED.
- f. Investigation of all violations of the Technical Specifications, including the preparation and forwarding of reports covering evaluation and recommendations to prevent recurrence, to the Vice President, Limerick Generating Station, Plant Manager, and to the Nuclear Review Board;
- g. Review of all REPORTABLE EVENTS;
- h. Review of unit operations to detect potential hazards to nuclear safety;
- i. Performance of special reviews, investigations, or analyses and reports thereon as requested by the Vice President, Limerick Generating Station, plant Manager or the Chairman of the Nuclear Review Board;
- j. Review of the Security Plan and implementing procedures and submittal of recommended changes to the Nuclear Review Board; and
- k. Review of the Emergency Plan and implementing procedures and submittal of the recommended changes to the Nuclear Review Board.
- l. Review of every unplanned onsite release of radioactive material to the environs including the preparation and forwarding of reports covering evaluation, recommendations and disposition of the corrective action to prevent recurrence to the Vice President, Limerick Generating Station, Plant Manager, and to the Nuclear Review Board.
- m. Review of changes to the PROCESS CONTROL PROGRAM, OFFSITE DOSE CALCULATION MANUAL, and radwaste treatment systems.
- n. Review of the Fire Protection Program and implementing procedures and the submittal of recommended changes to the Nuclear Review Board.

6.5.1.7 The PORC shall:

- a. Recommend in writing to the Plant Manager approval or disapproval of items considered under Specification 6.5.1.6a. through d. prior to their implementation.
- b. Render determinations in writing with regard to whether or not each item considered under Specification 6.5.1.6b. through f. constitutes an unreviewed safety question.

## INSTRUMENTATION

### BASES

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#### 3/4.3.7.7 TRAVERSING IN-CORE PROBE SYSTEM

The OPERABILITY of the traversing in-core probe system with the specified minimum complement of equipment ensures that the measurements obtained from use of this equipment accurately represent the spatial neutron flux distribution of the reactor core.

The TIP system OPERABILITY is demonstrated by normalizing all probes (i.e., detectors) prior to performing an LPRM calibration function. Monitoring core thermal limits may involve utilizing individual detectors to monitor selected areas of the reactor core, thus all detectors may not be required to be OPERABLE. The OPERABILITY of individual detectors to be used for monitoring is demonstrated by comparing the detector(s) output in the resultant heat balance calculation (P-1) with data obtained during a previous heat balance calculation (P-1).

#### 3/4.3.7.8 CHLORINE AND TOXIC GAS DETECTION SYSTEMS

The OPERABILITY of the chlorine and toxic gas detection systems ensures that an accidental chlorine and/or toxic gas release will be detected promptly and the necessary protective actions will be automatically initiated for chlorine and manually initiated for toxic gas to provide protection for control room personnel. Upon detection of a high concentration of chlorine, the control room emergency ventilation system will automatically be placed in the chlorine isolation mode of operation to provide the required protection. Upon detection of a high concentration of toxic gas, the control room emergency ventilation system will manually be placed in the chlorine isolation mode of operation to provide the required protection. The detection systems required by this specification are consistent with the recommendations of Regulatory Guide 1.95, "Protection of Nuclear Power Plant Control Room Operators against an Accidental Chlorine Release," February 1975.

Specified surveillance intervals and maintenance outage times have been determined in accordance with GENE-770-06-1, "Bases for Changes to Surveillance Test Intervals and Allowed Out-of-Service Times for Selected Instrumentation Technical Specifications," as approved by the NRC and documented in the SER (letter to R.D. Binz, IV, from C.E. Rossi dated July 21, 1992).

3/4.3.7.9 (Deleted) - INFORMATION FROM THIS SECTION RELOCATED TO THE TRM. |

## INSTRUMENTATION

### BASES

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#### 3/4.3.7.10 LOOSE PART DETECTION SYSTEM

The OPERABILITY of the loose-part detection system ensures that sufficient capability is available to detect loose metallic parts in the primary system and avoid or mitigate damage to primary system components. The allowable out-of-service times and surveillance requirements are consistent with the recommendations of Regulatory Guide 1.133, "Loose-Part Detection Program for the Primary System of Light-Water-Cooled Reactors," May 1981.

3/4.3.7.11 (Deleted) - INFORMATION FROM THIS SECTION RELOCATED TO THE ODCM.

#### 3/4.3.7.12 OFFGAS MONITORING INSTRUMENTATION

This instrumentation includes provisions for monitoring the concentrations of potentially explosive gas mixtures and noble gases in the off-gas system.

#### 3/4.3.8 TURBINE OVERSPEED PROTECTION SYSTEM

This specification is provided to ensure that the turbine overspeed protection system instrumentation and the turbine speed control valves are OPERABLE and will protect the turbine from excessive overspeed. Protection from turbine excessive overspeed is required since excessive overspeed of the turbine could generate potentially damaging missiles which could impact and damage safety related components, equipment or structures.

#### 3/4.3.9 FEEDWATER/MAIN TURBINE TRIP SYSTEM ACTUATION INSTRUMENTATION

The feedwater/main turbine trip system actuation instrumentation is provided to initiate action of the feedwater system/main turbine trip system in the event of failure of feedwater controller under maximum demand.

PLANT SYSTEMS

BASES

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3/4 7.6 (Deleted) - INFORMATION FROM THIS SECTION RELOCATED TO THE TRM.

3/4.7.7 (Deleted) - INFORMATION FROM THIS SECTION RELOCATED TO THE TRM.