

May 24, 1999

Mr. Garrett D. Edwards
Director-Licensing, MC 62A-1
PECO Energy Company
Nuclear Group Headquarters
Correspondence Control Desk
P.O. Box No. 195
Wayne, PA 19087-0195

SUBJECT: LIMERICK GENERATING STATION, UNITS 1 AND 2
(TAC NOS. MA4517 AND MA4518)

Dear Mr. Edwards:

The Commission has issued the enclosed Amendment No. 135 to Facility Operating License No. NPF-39 and Amendment No. 100 to Facility Operating License No. NPF-85 for the Limerick Generating Station, Units 1 and 2. These amendments consist of changes to the Technical Specifications (TSs) in response to your application dated January 4, 1999.

These amendments revise the administrative section of the TS pertaining to controlled access to high radiation areas, and the reporting dates for the annual occupational radiation exposure report and the annual radioactive effluent release report.

A copy of our safety evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,
ORIGINAL SIGNED BY:
Bartholomew C. Buckley, Senior Project Manager, Section 2
Project Directorate I
Division Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-352/353

- Enclosures: 1. Amendment No. 135 to License No. NPF-39
2. Amendment No. 100 to License No. NPF-85
3. Safety Evaluation

cc w/encls: See next page

DISTRIBUTION:

Docket File MO'Brien WBeckner CCowgill, RGN-I
PUBLIC BBuckley RTadesse JClifford
PDI-2 Reading OGC ACRS REmch
JZwolinski/SBlack GHill(4) CNorsworthy (E-Mail SE)

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| OFFICE | PDI-2/PM | PDI-2/LA | PERB* | OGC | PDI-2/SC |
| NAME | BBuckley: <i>BCB</i> | MO'Brien <i>EMH for</i> | SE dated | <i>St. Hour</i> | JClifford <i>JK</i> |
| DATE | 4/11/99 | 4/11/99 | 03/04/99 | 4/18/99 | 4/26/99 |

OFFICIAL RECORD COPY

*no major changes to se

DOCUMENT NAME: A:\LIM4517.AMD

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| NAME | BBuckley: <i>BB</i> | MO'Brien <i>EMH for</i> | SE dated | <i>[Signature]</i> | JClifford <i>[Signature]</i> |
| DATE | 4/11/99 | 4/11/99 | 03/04/99 | 4/18/99 | 4/26/99 |

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UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

May 24, 1999

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Director-Licensing, MC 62A-1
PECO Energy Company
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Correspondence Control Desk
P.O. Box No. 195
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Bartholomew C. Buckley

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Project Directorate I
Division Licensing Project Management
Office of Nuclear Reactor Regulation

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Enclosures: 1. Amendment No. 135 to
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License No. NPF-85
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cc w/encls: See next page

Mr. Garrett D. Edwards
PECO Energy Company

Limerick Generating Station, Units 1 & 2

cc:

J. W. Durham, Sr., Esquire
Sr. V.P. & General Counsel
PECO Energy Company
2301 Market Street
Philadelphia, PA 19101

Chief-Division of Nuclear Safety
PA Dept. of Environmental Resources
P.O. Box 8469
Harrisburg, PA 17105-8469

Manager-Limerick Licensing, 62A-1
PECO Energy Company
965 Chesterbrook Boulevard
Wayne, PA 19087-5691

Director-Site Engineering
Limerick Generating Station
P.O. Box A
Sanatoga, PA 19464

Mr. James D. von Suskil, Vice President
Limerick Generating Station
Post Office Box A
Sanatoga, PA 19464

Manager-Experience Assessment
Limerick Generating Station
P.O. Box A
Sanatoga, PA 19464

Plant Manager
Limerick Generating Station
P.O. Box A
Sanatoga, PA 19464

Library
U.S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Senior Manager-Operations
Limerick Generating Station
P.O. Box A
Sanatoga, PA 19464

Senior Resident Inspector
U.S. Nuclear Regulatory Commission
Limerick Generating Station
P.O. Box 596
Pottstown, PA 19464

Dr. Judith Johnsrud
National Energy Committee
Sierra Club
433 Orlando Avenue
State College, PA 16803

Director-Site Support Services
Limerick Generating Station
P.O. Box A
Sanatoga, PA 19464

Chairman
Board of Supervisors
of Limerick Township
646 West Ridge Pike
Linfield, PA 19468



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

PECO ENERGY COMPANY

DOCKET NO. 50-352

LIMERICK GENERATING STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 135
License No. NPF-39

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by PECO Energy Company (the licensee) dated January 4, 1999, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-39 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 135 , are hereby incorporated into this license. PECO Energy Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



James W. Clifford, Chief, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the
Technical Specifications

Date of Issuance: May 24, 1999

ATTACHMENT TO LICENSE AMENDMENT NO. 135

FACILITY OPERATING LICENSE NO. NPF-39

DOCKET NO. 50-352

Replace the following pages of the Appendix A Technical Specifications with the attached pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change.

Remove

6-15
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Insert

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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.

6.9.1.2 The startup report shall address each of the tests identified in Subsection 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.

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.

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. Annual Occupational Radiation Exposure Report

A tabulation on an annual basis of the number of station, utility, and other personnel (including contractors) receiving exposures >100 mrem/yr and their associated man-rem exposure according to work and job functions (e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance [describe maintenance], waste processing, and refueling). This tabulation supplements the requirements of 10CFR20.2206. The dose assignments to various duty functions may be estimated based on pocket

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

ADMINISTRATIVE CONTROLS

ANNUAL REPORTS (Continued)

dosimeter, thermoluminescent dosimeter (TLD), or film badge measurements. Small exposures totalling <20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole-body dose received from external sources should be assigned to specific major work functions. The report shall be submitted by April 30 of each year.

- b. Documentation of all challenges to safety/relief valves; and
- c. Any other unit unique reports required on an annual basis.
- 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.

MONTHLY OPERATING REPORTS*

6.9.1.6 Routine reports of operating statistics and shutdown experience, including documentation of all challenges to the main steam system safety/relief valves, shall be submitted on a monthly basis to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555, with a copy to the Regional Administrator of the Regional Office of the NRC no later than the 15th of each month following the calendar month covered by the report.

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.

ADMINISTRATIVE CONTROLS

ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT*

6.9.1.8 The Annual Radioactive Effluent Release Report covering the operation of the unit during the previous year shall be submitted prior to May 1 of each year in accordance with 10 CFR 50.36a. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit. The material provided shall be consistent with the objectives outlined in the ODCM and Process Control Program and in conformance with 10 CFR 50.36a and 10 CFR Part 50, Appendix I, Section IV.B.1.

*A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station.

ADMINISTRATIVE CONTROLS

RECORD RETENTION (Continued)

- d. Records of gaseous and liquid radioactive material released to the environs.
- e. Records of transient or operational cycles for those unit components identified in Table 5.6.1-1.
- f. Records of reactor tests and experiments.
- g. Records of training and qualification for current members of the unit staff.
- h. Records of inservice inspections performed pursuant to these Technical Specifications.
- i. Records of quality assurance activities required by the Operational Quality Assurance Manual not listed in Section 6.10.2.
- j. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR 50.59.
- k. Records of meetings of the PORC and the NRB.
- l. Records of the service lives of all snubbers including the date at which the service life commences and associated installation and maintenance records.
- m. Records of analysis required by the Radiological Environmental Monitoring Program that would permit evaluation of the accuracy of the analysis at a later date.
- n. Records of reviews performed for changes made to the OFFSITE DOSE CALCULATION MANUAL and the PROCESS CONTROL PROGRAM.

6.11 RADIATION PROTECTION PROGRAM

6.11.1 Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained, and adhered to for all operations involving personnel radiation exposure.

6.12 HIGH RADIATION AREA

As provided in paragraph 20.1601(c) of 10 CFR Part 20, the following controls shall be applied to high radiation areas in place of the controls required by paragraph 20.1601(a) and (b) of 10 CFR Part 20:

6.12.1 High Radiation Areas with dose rates (deep dose equivalent) greater than 0.1 rem/hr and not exceeding 1.0 rem/hour (at 30 centimeters from the radiation sources or from any surface penetrated by the radiation):

- a. Each accessible entryway to such an area shall be barricaded and conspicuously posted as a High Radiation Area. Such barricades may be opened as necessary to permit entry or exit of personnel or equipment.

ADMINISTRATIVE CONTROLS

HIGH RADIATION AREA (Continued)

- b. Access to, and activities in, each such area shall be controlled by means of a Radiation Work Permit (RWP) or equivalent that includes radiation protection instructions, job coverage and monitoring requirements. Radiological information (i.e., dose rates) is included on the radiation surveys associated with the RWP or equivalent.
- c. Individuals qualified in radiation protection procedures and personnel continuously escorted by such individuals may be exempted from the requirement for an RWP or equivalent while performing their assigned duties provided that they are following plant radiation protection procedures for entry to, exit from, and work in such areas.
- d. Each individual or group entering such an area shall be provided with or accompanied by one or more of the following:
 1. A radiation monitoring device that continuously displays radiation dose rates in the area ("radiation monitoring and indicating device"), OR
 2. A radiation monitoring device with the capability to display accumulated dose and which continuously integrates the radiation dose rates in the area and alarms when the device's dose alarm setpoint is reached ("alarming dosimeter"), OR
 3. A radiation monitoring device with the capability to display accumulated dose and which continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area, OR
 4. A direct reading dosimeter AND:
 - a) A health physics qualified individual (i.e., qualified in radiation protection procedures) with a radiation dose rate monitoring device who is responsible for controlling personnel radiation exposure within the area, OR
 - b) Be under the surveillance, as specified in the RWP or equivalent, by means of closed circuit television, of a health physics qualified individual (i.e., qualified in radiation protection procedures), responsible for controlling personnel radiation exposure in the area.
- e. Except for individuals qualified in radiation protection procedures, entry into such areas shall be made only after dose rates in the area have been established and entry personnel are knowledgeable of them.

ADMINISTRATIVE CONTROLS

HIGH RADIATION AREA (Continued)

6.12.2 In addition to the requirements of Section 6.12.1, High Radiation Areas with dose rates (deep dose equivalent) greater than 1.0 rem/hour (at 30 centimeters from the radiation source or from any surface penetrated by the radiation), but less than 500 rad/hr (at 1 meter from the radiation source or from any surface penetrated by the radiation source) accessible to personnel shall be controlled as follows:

- a. Each accessible entryway to such an area shall be conspicuously posted as a High Radiation Area and shall be provided with a locked door, gate, or guard that prevents unauthorized entry, and in addition:
 1. All such door and gate keys shall be maintained under the administrative control of radiation protection supervision.
 2. Doors and gates shall remain locked or guarded except during periods of personnel or equipment entry or exit.
- b. Such individual areas that are within a larger area, such as containment, that is controlled as a High Radiation Area, where no enclosure exists for purpose of locking and where no enclosure can reasonable be constructed around the individual area need not be controlled by a locked door or gate, but shall be barricaded and conspicuously posted as a High Radiation Area, and a conspicuous, clearly visible flashing light shall be activated at the area as a warning device.
- c. Each individual entering such an area shall be provided with or accompanied by one or more of the following:
 1. A dose rate survey meter and a radiation monitoring device with the capability to display accumulated dose and an integrating alarm setpoint, OR
 2. A radiation monitoring device with the capability to display accumulated dose and which continuously integrates the radiation dose rates in the area and alarms when the device's dose alarm setpoint is reached ("alarming dosimeter"), OR
 3. A radiation monitoring device with the capability to display accumulated dose and which continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area AND with the means to communicate with the individuals in the area, OR
 4. A direct reading dosimeter AND:

ADMINISTRATIVE CONTROLS

HIGH RADIATION AREA (Continued)

- a) A health physics qualified individual (i.e., qualified in radiation protection procedures) with a radiation dose rate monitoring device who is responsible for controlling personnel radiation exposure within the area, OR
- b) Be under the surveillance, as specified in the RWP or equivalent, by means of closed circuit television, of a health physics qualified individual (i.e., qualified in radiation protection procedures), responsible for controlling personnel radiation exposure in the area, and with the means to communicate with the individuals in the area.

6.13 PROCESS CONTROL PROGRAM (PCP)

6.13.1 Changes to the PCP:

- a. Shall be documented and records of reviews performed shall be retained as required by Specification 6.10.3n. This documentation shall contain:
 1. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and



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

PECO ENERGY COMPANY

DOCKET NO. 50-353

LIMERICK GENERATING STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 100
License No. NPF-85

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by PECO Energy Company (the licensee) dated January 4, 1999, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

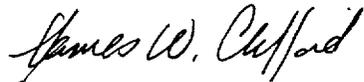
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-85 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 100 , are hereby incorporated in the license. PECO Energy Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



James W. Clifford, Chief, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the
Technical Specifications

Date of Issuance: May 24, 1999

ATTACHMENT TO LICENSE AMENDMENT NO. 100

FACILITY OPERATING LICENSE NO. NPF-85

DOCKET NO. 50-353

Replace the following pages of the Appendix A Technical Specifications with the attached pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change.

Remove

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Insert

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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.

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.

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.

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. Annual Occupational Radiation Exposure Report

A tabulation on an annual basis of the number of station, utility, and other personnel (including contractors) receiving exposures >100 mrem/yr and their associated man-rem exposure according to work and job functions (e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance [describe maintenance], waste processing, and refueling). This tabulation supplements the requirements of 10CFR20.2206. The dose assignments to various duty functions may be estimated based on pocket

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

ADMINISTRATIVE CONTROLS

ANNUAL REPORTS (Continued)

dosimeter, thermoluminescent dosimeter (TLD), or film badge measurements. Small exposures totalling <20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole-body dose received from external sources should be assigned to specific major work functions. The report shall be submitted by April 30 of each year.

- b. Documentation of all challenges to safety/relief valves; and
- c. Any other unit unique reports required on an annual basis.
- 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.

MONTHLY OPERATING REPORTS*

6.9.1.6 Routine reports of operating statistics and shutdown experience, including documentation of all challenges to the main steam system safety/relief valves, shall be submitted on a monthly basis to the ATTN: Document Control Desk, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, with a copy to the Regional Administrator of the Regional Office of the NRC no later than the 15th of each month following the calendar month covered by the report.

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.

ADMINISTRATIVE CONTROLS

ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT*

6.9.1.8 The Annual Radioactive Effluent Release Report covering the operation of the unit during the previous year shall be submitted prior to May 1 of each year in accordance with 10 CFR 50.36a. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit. The material provided shall be consistent with the objectives outlined in the ODCM and Process Control Program and in conformance with 10 CFR 50.36a and 10 CFR Part 50, Appendix I, Section IV.B.1.

*A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station.

ADMINISTRATIVE CONTROLS

RECORD RETENTION (Continued)

- d. Records of gaseous and liquid radioactive material released to the environs.
- e. Records of transient or operational cycles for those unit components identified in Table 5.6.1-1.
- f. Records of reactor tests and experiments.
- g. Records of training and qualification for current members of the unit staff.
- h. Records of inservice inspections performed pursuant to these Technical Specifications.
- i. Records of quality assurance activities required by the Operational Quality Assurance Manual not listed in Section 6.10.2.
- j. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR 50.59.
- k. Records of meetings of the PORC and the NRB.
- l. Records of the service lives of all snubbers including the date at which the service life commences and associated installation and maintenance records.
- m. Records of analysis required by the Radiological Environmental Monitoring Program that would permit evaluation of the accuracy of the analysis at a later date.
- n. Records of reviews performed for changes made to the OFFSITE DOSE CALCULATION MANUAL and the PROCESS CONTROL PROGRAM.

6.11 RADIATION PROTECTION PROGRAM

6.11.1 Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained, and adhered to for all operations involving personnel radiation exposure.

6.12 HIGH RADIATION AREA

As provided in paragraph 20.1601(c) of 10 CFR Part 20, the following controls shall be applied to high radiation areas in place of the controls required by paragraph 20.1601(a) and (b) of 10 CFR Part 20:

6.12.1 High Radiation Areas with dose rates (deep dose equivalent) greater than 0.1 rem/hr and not exceeding 1.0 rem/hour (at 30 centimeters from the radiation sources or from any surface penetrated by the radiation):

- a. Each accessible entryway to such an area shall be barricaded and conspicuously posted as a High Radiation Area. Such barricades may be opened as necessary to permit entry or exit of personnel or equipment.

ADMINISTRATIVE CONTROLS

HIGH RADIATION AREA (Continued)

- b. Access to, and activities in, each such area shall be controlled by means of a Radiation Work Permit (RWP) or equivalent that includes radiation protection instructions, job coverage and monitoring requirements. Radiological information (i.e., dose rates) is included on the radiation surveys associated with the RWP or equivalent.
- c. Individuals qualified in radiation protection procedures and personnel continuously escorted by such individuals may be exempted from the requirement for an RWP or equivalent while performing their assigned duties provided that they are following plant radiation protection procedures for entry to, exit from, and work in such areas.
- d. Each individual or group entering such an area shall be provided with or accompanied by one or more of the following:
 1. A radiation monitoring device that continuously displays radiation dose rates in the area ("radiation monitoring and indicating device"), OR
 2. A radiation monitoring device with the capability to display accumulated dose and which continuously integrates the radiation dose rates in the area and alarms when the device's dose alarm setpoint is reached ("alarming dosimeter"), OR
 3. A radiation monitoring device with the capability to display accumulated dose and which continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area, OR
 4. A direct reading dosimeter AND:
 - a) A health physics qualified individual (i.e., qualified in radiation protection procedures) with a radiation dose rate monitoring device who is responsible for controlling personnel radiation exposure within the area, OR
 - b) Be under the surveillance, as specified in the RWP or equivalent, by means of closed circuit television, of a health physics qualified individual (i.e., qualified in radiation protection procedures), responsible for controlling personnel radiation exposure in the area.
- e. Except for individuals qualified in radiation protection procedures, entry into such areas shall be made only after dose rates in the area have been established and entry personnel are knowledgeable of them.

ADMINISTRATIVE CONTROLS

HIGH RADIATION AREA (Continued)

6.12.2 In addition to the requirements of Section 6.12.1, High Radiation Areas with dose rates (deep dose equivalent) greater than 1.0 rem/hour (at 30 centimeters from the radiation source or from any surface penetrated by the radiation), but less than 500 rad/hr (at 1 meter from the radiation source or from any surface penetrated by the radiation source) accessible to personnel shall be controlled as follows:

- a. Each accessible entryway to such an area shall be conspicuously posted as a High Radiation Area and shall be provided with a locked door, gate, or guard that prevents unauthorized entry, and in addition:
 1. All such door and gate keys shall be maintained under the administrative control of radiation protection supervision.
 2. Doors and gates shall remain locked or guarded except during periods of personnel or equipment entry or exit.
- b. Such individual areas that are within a larger area, such as containment, that is controlled as a High Radiation Area, where no enclosure exists for purpose of locking and where no enclosure can reasonable be constructed around the individual area need not be controlled by a locked door or gate, but shall be barricaded and conspicuously posted as a High Radiation Area, and a conspicuous, clearly visible flashing light shall be activated at the area as a warning device.
- c. Each individual entering such an area shall be provided with or accompanied by one or more of the following:
 1. A dose rate survey meter and a radiation monitoring device with the capability to display accumulated dose and an integrating alarm setpoint, OR
 2. A radiation monitoring device with the capability to display accumulated dose and which continuously integrates the radiation dose rates in the area and alarms when the device's dose alarm setpoint is reached ("alarming dosimeter"), OR
 3. A radiation monitoring device with the capability to display accumulated dose and which continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area AND with the means to communicate with the individuals in the area, OR
 4. A direct reading dosimeter AND:

ADMINISTRATIVE CONTROLS

HIGH RADIATION AREA (Continued)

- a) A health physics qualified individual (i.e., qualified in radiation protection procedures) with a radiation dose rate monitoring device who is responsible for controlling personnel radiation exposure within the area, OR
- b) Be under the surveillance, as specified in the RWP or equivalent, by means of closed circuit television, of a health physics qualified individual (i.e., qualified in radiation protection procedures), responsible for controlling personnel radiation exposure in the area, and with the means to communicate with the individuals in the area.

6.13 PROCESS CONTROL PROGRAM (PCP)

6.13.1 Changes to the PCP:

- a. Shall be documented and records of reviews performed shall be retained as required by Specification 6.10.3n. This documentation shall contain:
 1. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NOS. 135 AND 100 TO FACILITY OPERATING
LICENSE NOS. NPF-39 AND NPF-85
PECO ENERGY COMPANY
LIMERICK GENERATING STATION, UNITS 1 AND 2
DOCKET NOS. 50-352 AND 50-353

1.0 INTRODUCTION

By letter dated January 4, 1999, PECO Energy Company (the licensee) submitted proposed changes to Limerick Generating Station, Units 1 and 2, Technical Specifications (TSs) in support of its plan to implement the revised Title 10 of the Code of Federal Regulations (10 CFR) Part 20.

2.0 EVALUATION

The licensee has revised the TS pertaining to (1) controlled access to High Radiation Areas and (2) reporting dates for the Annual Occupational Radiation Exposure Report and Annual Radioactive Effluent Release Report.

The Proposed TS changes and evaluations follow:

1. Technical Specification 6.9.1.4

The licensee has proposed to revise the wording to be consistent with the changes to TS Section 6.9.1.5(a) and 6.9.1.8.

The change is administrative in nature to incorporate the corresponding revised 10 CFR 20.2206 and is acceptable.

2. Technical Specification 6.9.1.5(a)

The licensee has proposed to revise the submittal date of the "Annual Occupational Radiation Exposure Report" from March 1 to April 30. The licensee has also proposed to correct a typographical error (i.e., the word "poxect" in TS 6.9.1.5a was misspelled and was corrected to read "pocket").

The submittal date change is acceptable since it is consistent with the requirements of 10 CFR 20.2206. This change does not impact the report range (i.e. 12 months), dose measurement requirements, dose tabulations or Regulatory/Administrative dose limits for personnel.

3. Technical Specification 6.9.1.8

The licensee has proposed to revise the submittal date of the "Annual Radioactive Effluent Release Report" from March 1 to May 1.

The change is consistent with the guidance in NUREG 1433 "Standard Technical Specifications General Electric Plants BWR/4" and is acceptable.

4. Technical Specifications 6.12, 6.12.1 and 6.12.2

The licensee has proposed to clarify requirements, incorporate additional monitoring options (to allow dosimetry and video monitoring) for entry into high radiation areas; add the requirement that all individuals entering a high radiation area have knowledge of the dose rates in the area; and add the requirement that locked high radiation controls apply to each individual entering the area.

The change is consistent with the Regulatory Guide 8.38 "Control of Access to High and Very High Radiation Areas in Nuclear Power Plants" and therefore acceptable.

3.0 SUMMARY CONCLUSION

Based upon the NRC staff review of the licensee's submittal, we find the proposed changes to the Limerick Generating Station, Units 1 and 2 TS acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Pennsylvania State official was notified of the proposed issuance of the amendments. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendments relate to changes in recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: R. Tadesse
B. Buckley

Date: May 24, 1999