

Mr. Theodore A. Sullivan
Vice President Nuclear a Station Director
Boston Edison Company
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360

July 13, 1999

SUBJECT: PILGRIM NUCLEAR POWER STATION-ISSUANCE OF AMENDMENT RE:
SALE AND TRANSFER TO ENTERGY NUCLEAR GENERATION COMPANY
(TAC NO. MA5969)

Dear Mr. Sullivan:

The Commission has issued the enclosed Amendment No. 181 to Facility Operating License No. DPR-35 for the Pilgrim Nuclear Power Station. This amendment is in response to your application dated December 21, 1998, as supplemented on January 28, February 18, April 2, April 15, and April 16, 1999.

This amendment makes changes to Facility Operating License No. DPR-35, including the Technical Specifications and Materials License No. 20-07626-04 to reflect the transfer of the licenses from Boston Edison Company to Entergy Nuclear Generation Company. The Safety Evaluation supporting these changes was issued with the Order dated April 29, 1999, which approved the transfer of the licenses.

Enclosure 4 contains 3 copies of Indemnity Agreement No. B-48 Amendment 11, which is required in connection with the transfer of the licenses. Please keep two copies for your records and sign and return the other copy.

Notice of Issuance will be included in the Commission's biweekly Federal Register Notice.

Sincerely,

ORIGINAL SIGNED BY:

Alan B. Wang, Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-293

Enclosures: 1. Amendment No. 181 to License No. DPR-35
2. Operating License
3. Materials License
4. Indemnity Agreement

cc w/encls: See next page

DOCUMENT NAME: G:\PDI-2\PILGRIM\AMD5969.WPD

*See previous concurrence

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

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NAME	AWang/rs1		TClark		SHom	JClifford	EAdensam
DATE	07/13/99		07/13/99		07/09/99	07/13/99	07/13/99
OFFICE	D:DLPM*		ADPT*		NRR:D*		
NAME	JZwolinski		BSheron		SCollins		
DATE	07/09/99		07/09/99		07/12/99		

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

July 13, 1999

Mr. Theodore A. Sullivan
Vice President Nuclear and Station Director
Boston Edison Company
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360

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Sincerely,

A handwritten signature in cursive script that reads "Alan Wang".

Alan B. Wang, Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-293

Enclosures: 1. Amendment No. 181 to License No. DPR-35
2. Operating License
3. Materials License
4. Indemnity Agreement

cc w/encls: See next page

Pilgrim Nuclear Power Station

cc:

Mr. Ron Ledgett
Executive Vice President
800 Boylston Street
Boston, MA 02199

Resident Inspector
U. S. Nuclear Regulatory Commission
Pilgrim Nuclear Power Station
Post Office Box 867
Plymouth, MA 02360

Chairman, Board of Selectmen
11 Lincoln Street
Plymouth, MA 02360

Chairman, Duxbury Board of Selectmen
Town Hall
878 Tremont Street
Duxbury, MA 02332

Office of the Commissioner
Massachusetts Department of
Environmental Protection
One Winter Street
Boston, MA 02108

Office of the Attorney General
One Ashburton Place
20th Floor
Boston, MA 02108

Mr. Robert M. Hallisey, Director
Radiation Control Program
Massachusetts Department of
Public Health
305 South Street
Boston, MA 02130

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

Mr. C. Stephen Brennon
Acting Licensing Division Manager
Boston Edison Company
600 Rocky Hill Road
Plymouth, MA 02360-5599

Mr. Jack Alexander
Manager, Reg. Relations and
Quality Assurance
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360-5599

Mr. David F. Tarantino
Nuclear Information Manager
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360-5599

Ms. Kathleen M. O'Toole
Secretary of Public Safety
Executive Office of Public Safety
One Ashburton Place
Boston, MA 02108

Mr. Peter LaPorte, Director
Attn: James Muckerheide
Massachusetts Emergency Management
Agency
400 Worcester Road
P.O. Box 1496
Framingham, MA 01701-0317

Chairman, Citizens Urging
Responsible Energy
P.O. Box 2621
Duxbury, MA 02331

Citizens at Risk
P.O. Box 3803
Plymouth, MA 02361

John M. Fulton, Esquire
Boston Edison Company
800 Boylston St., 36th Floor
Boston, MA 02199

Chairman
Nuclear Matters Committee
Town Hall
11 Lincoln Street
Plymouth, MA 02360

Mr. William D. Meinert
Nuclear Engineer
Massachusetts Municipal Wholesale
Electric Company
P.O. Box 426
Ludlow, MA 01056-0426

Ms. Mary Lampert, Director
Massachusetts Citizens for Safe Energy
148 Washington Street
Duxbury, MA 02332

DATED: July 13, 1999

AMENDMENT NO. 181 TO FACILITY OPERATING LICENSE NO. DPR-35 - PILGRIM
NUCLEAR POWER STATION

Docket File

PUBLIC

PDI-2 Reading

S. Collins/R. Zimmerman

J. Zwolinski/S. Black

E. Adensam (email EGA1)

J. Clifford

T. Clark

A. Wang

OGC

G. Hill (2), T-5 C3

W. Beckner, 013/H15

ACRS

M. Dusaniwskji

C. Andersen, Region I

R. Scholl (e-mail SE to RFS)



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

BOSTON EDISON COMPANY

DOCKET NO. 50-293

PILGRIM NUCLEAR POWER STATION

AMENDMENT TO FACILITY OPERATING LICENSE

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment filed by the Boston Edison Company and Entergy Nuclear Generation Company, dated December 21, 1998, as supplemented January 28, February 18, April 2, April 15, and April 16, 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 as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-35 is hereby amended to read as follows:

3.B Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 181, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION


Samuel J. Collins, Director
Office of Nuclear Reactor Regulation

Attachment: Changes to the Facility Operating License*
& Technical Specifications

Date of Issuance: July 13, 1999

*Pages 1 - 6 are attached, for convenience, for the composite license to reflect these changes.

UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, DC 20545

ENTERGY NUCLEAR GENERATION COMPANY*

(PILGRIM NUCLEAR POWER STATION)

DOCKET NO. 50-293

FACILITY OPERATING LICENSE

License No. DPR-35

The Atomic Energy Commission (the Commission) having found that:

- a. Except as stated in condition 5, construction of the Pilgrim Nuclear Power Station (the facility) has been substantially completed in conformity with the application, as amended, the Provisional Construction Permit No. CPPR-49, the provisions of the Atomic Energy Act of 1954, as amended (the Act), and the rules and regulations of the Commission as set forth in Title 10, Chapter 1, CFR; and
- b. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission; and
- c. There is reasonable assurance (i) that the activities authorized by the operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the rules and regulations of the Commission; and
- d. The Entergy Nuclear Generation Company (Entergy Nuclear) is technically and financially qualified to engage in the activities authorized by this operating license, in accordance with the rules and regulations of the Commission; and
- e. Entergy Nuclear has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements" of the Commission's regulations; and
- f. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public; and
- g. In accordance with the requirements of Appendix D to 10 CFR Part 50, the operating license should be issued subject to conditions for protection of the environment set forth herein.

Facility Operating License No. DPR-35, dated June 8, 1972, issued to the Boston Edison Company (Boston Edison) is hereby amended in its entirety, pursuant to an Initial Decision dated September 13, 1972, by the Atomic Safety and Licensing Board, to read as follows:

*The Nuclear Regulatory Commission approved the transfer of the license from Boston Edison Company to Entergy Nuclear Generation Company on April 29, 1999.

1. This license applies to the Pilgrim Nuclear Power Station, a single cycle, forced circulation, boiling water nuclear reactor and associated electric generating equipment (the facility). The facility is located on the western shore of Cape Cod Bay in the town of Plymouth on the Entergy Nuclear site in Plymouth County, Massachusetts, and is described in the "Final Safety Analysis Report," as supplemented and amended.
2. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses Entergy Nuclear:
 - A. Pursuant to the Section 104b of the Atomic Energy Act of 1954, as amended (the Act) and 10 CFR Part 50, "Licensing of Production and Utilization Facilities," to possess, use, and operate the facility as a utilization facility at the designated location on the Pilgrim site;
 - B. Pursuant to the Act and 10 CFR 70, to receive, possess, and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
 - C. Pursuant to the Act and 10 CFR Parts 30, 40 and 70 to receive, possess and use at any time any byproduct, source or special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
 - D. 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
 - E. Pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
3. This license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations; 10 CFR Part 20, Section 30.34 of 10 CFR Part 30, Section 40.41 of 10 CFR Part 40, Sections 50.54 and 50.59 of 10 CFR Part 50 and Section 70.32 of 10 CFR Part 70; 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 below:

A. Maximum Power Level

Entergy Nuclear is authorized to operate the facility at steady state power levels not to exceed 1998 megawatts thermal.

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 181, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

C. Records

Entergy Nuclear shall keep facility operating records in accordance with the requirements of the Technical Specifications.

D. Equalizer Valve Restriction - DELETED.

E. Recirculation Loop Inoperable

The reactor shall not be operated with one recirculation loop out of service for more than 24 hours. With the reactor operating, if one recirculation loop is out of service, the plant shall be placed in a hot shutdown condition within 24 hours unless the loop is sooner returned to service.

F. Fire Protection

Entergy Nuclear shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the facility and as approved in the SER dated December 21, 1978 as supplemented subject to the following provision:

Entergy Nuclear 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.

G. Physical Protection

The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10CFR73.55 (51FR27817 and 27822) and to the authority of 10CFR50.90 and 10CFR50.54(p). The plans, which contain Safeguards Information protected under 10CFR73.21, are entitled: "Pilgrim Nuclear Power Station Physical Security Plan," with revisions submitted through September 13, 1987; "Pilgrim Nuclear Power Station Guard Training and Qualification Plan," with revisions submitted through September 24, 1984; and "Pilgrim Nuclear Power Station Safeguards Contingency Plan," with revisions submitted through February 15, 1984. Changes made in accordance with 10CFR73.55 shall be implemented in accordance with the schedule set forth therein.

H. Long Term Program

- (1) The "Plan for the Long Term Program for Pilgrim Nuclear Power Station" (the Plan) submitted on May 7, 1984, is approved.
 - a) The Plan shall be followed by the licensee from and after the effective date of this amendment.
 - b) Changes to dates for completion of items identified in Schedule B of the Plan do not require a license amendment. Dates specified in Schedule A shall be changed only in accordance with applicable NRC procedure.

I. Post-Accident Sampling System, NUREG-0737, Item II.B.3, and Containment Atmospheric Monitoring System, NUREG-0737, Item II.F.1(6)

The licensee shall complete the installation of a post-accident sampling system and a containment atmospheric monitoring system as soon as practicable, but no later than June 30, 1985.

J. Additional Conditions

The Additional Conditions contained in Appendix B, as revised through Amendment No. 177, are hereby incorporated into this license. Entergy Nuclear shall operate the facility in accordance with the Additional Conditions.

K. Conditions Related to the Sale and Transfer

- (1) For purposes of ensuring public health and safety, Entergy Nuclear shall provide decommissioning funding assurance of no less than \$396 million, after payment of any taxes, in the decommissioning trust fund for Pilgrim upon the transfer of the Pilgrim licenses to Entergy Nuclear.
- (2) Entergy Nuclear shall maintain the decommissioning trust funds in accordance with the Order, the related Safety Evaluation dated April 29, 1999, and the related application for approval of the transfer.
- (3) Entergy Nuclear shall provide a Provisional Trust fund in the amount of \$70 million, after payment of any taxes, in the Provisional Trust for Pilgrim upon the transfer of the Pilgrim licenses to Entergy Nuclear. The Provisional Trust shall be established and maintained in conformance with the representations made in the application for approval of the transfer.

Revision 177,
Amendment 75, 85, 143, 177, 181

- (4) Entergy Nuclear shall have access to a contingency fund of not less than fifty million dollars (\$50m) for payment, if needed, of Pilgrim operating and maintenance expenses, the cost to transition to decommissioning status in the event of a decision to permanently shut down the unit, and decommissioning costs. Entergy Nuclear will take all necessary steps to ensure that access to these funds will remain available until the full amount has been exhausted for the purposes described above. Entergy Nuclear shall inform the Director, Office of Nuclear Reactor Regulation, in writing, at such time that it utilizes any of these contingency funds. This provision does not affect the NRC's authority to assure that adequate funds will remain available in the plant's separate decommissioning fund(s), which Entergy Nuclear shall maintain in accordance with NRC regulations. Once the plant has been placed in a safe-shutdown condition following a decision to decommission, Entergy Nuclear will use any remainder of the \$50m contingency fund that has not been used to safely operate and maintain the plant to support the safe and prompt decommissioning of the plant, to the extent such funds are needed for safe and prompt decommissioning.
 - (5) The Decommissioning Trust agreement(s) shall be in a form which is acceptable to the NRC and shall provide, in addition to any other clauses, that:
 - a) Investments in the securities or other obligations of Entergy Nuclear, Entergy Corporation, their affiliates, subsidiaries or associates, or their successors or assigns shall be prohibited. In addition, except for investments tied to market indexes or other non-nuclear sector mutual funds, investments in any entity owning one or more nuclear power plants is prohibited.
 - b) The Director, Office of Nuclear Reactor Regulation, shall be given 30 days prior written notice of any material amendment to the trust agreement(s).
- 4. This license is subject to the following condition for the protection of the environment: Boston Edison shall continue, for a period of five years after initial power operation of the facility, an environmental monitoring program similar to that presently existing with the Commonwealth of Massachusetts (and described generally in Section C-III of Boston Edison's Environmental Report, Operating License Stage dated September, 1970) as a basis for determining the extent of station influence on marine resources and shall mitigate adverse effects, if any, on marine resources.
- 5. Boston Edison has not completed as yet construction of the Rad Waste Solidification System and the Augmented Off-Gas System. Limiting conditions concerning these systems are set forth in the Technical Specifications.

6. Pursuant to Section 105c(8) of the Act, the Commission has consulted with the Attorney General regarding the issuance of this operating license. After said consultation, the Commission has determined that the issuance of this license, subject to conditions set forth in this subparagraph 6., in advance of consideration of and findings with respect to matters covered in Section 105c of the Act, is necessary in the public interest to avoid unnecessary delay in the operation of the facility. At the time this operating license is being issued an antitrust proceeding has not been noticed. The Commission, accordingly, has made no determination with respect to matters covered in Section 105c of the Act, including conditions, if any, which may be appropriate as a result of the outcome of any antitrust proceeding. On the basis of its findings made as a result of an antitrust proceeding, the Commission may continue this license as issued, rescind this license or amend this license to include such conditions as the Commission deems appropriate. Boston Edison and others who may be affected hereby are accordingly on notice that the granting of this license is without prejudice to any subsequent licensing action, including the imposition of appropriate conditions, which may be taken by the commission as a result of the outcome of any antitrust proceeding. In the course of its planning and other activities, Boston Edison will be expected to conduct itself accordingly.
7. This license is effective as of the date of issuance and shall expire June 8, 2012.

FOR THE ATOMIC ENERGY COMMISSION

Original Signed by A. Giambusso

A. Giambusso, Deputy Director for Reactor
Projects
Directorate of Licensing

Attachments:
Appendix A - Technical Specifications
(Radiological)

Date of Issuance: September 15, 1972

CORRECTED COPY

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

<p>Licensee</p> <p>1. Entergy Nuclear Generation Company Pilgrim Nuclear Power Station</p> <p>2. 600 Rocky Hill Road Plymouth, Massachusetts 02360-5599</p>	<p>In accordance with letter received December 23, 1998</p> <p>3. License number 20-07626-04 is amended in its entirety to read as follows:</p> <p>4. Expiration date February 28, 2003</p> <p>5. Docket No. 030-34378/20-07626-02 Reference No.</p>	
<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Any byproduct material with atomic numbers 1 through 83 inclusive</p> <p>B. Any byproduct, source or special nuclear material with atomic numbers 84 through 96</p> <p>C. Chromium-51</p> <p>D. Manganese-54</p> <p>E. Iron-55</p> <p>F. Iron-59</p> <p>G. Cobalt-58</p> <p>H. Cobalt-60</p>	<p>7. Chemical and/or physical form</p> <p>A. Contamination on reactor components</p> <p>B. Contamination on reactor components</p> <p>C. Contamination on reactor components</p> <p>D. Contamination on reactor components</p> <p>E. Contamination on reactor components</p> <p>F. Contamination on reactor components</p> <p>G. Contamination on reactor components</p> <p>H. Contamination on reactor components</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. Not to exceed 30 millicuries per nuclide and 3 curies total</p> <p>B. Not to exceed 10 microcuries per nuclide and 100 microcuries total</p> <p>C. 75 millicuries</p> <p>D. 150 millicuries</p> <p>E. 1620 millicuries</p> <p>F. 45 millicuries</p> <p>G. 45 millicuries</p> <p>H. 830 millicuries</p>

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**License Number
20-07626-04Docket or Reference Number
030-34378/20-07626-02

Amendment No. 01

CORRECTED COPY

- | | | |
|---|--|--|
| 6. Byproduct, source, and/or special nuclear material | 7. Chemical and/or physical form | 8. Maximum amount that licensee may possess at any one time under this license |
| I. Nickel-63 | I. Contamination on reactor components | I. 65 millicuries |
| J. Cesium-137 | J. Contamination on reactor components | J. 130 millicuries |
| K. Plutonium-241 | K. Contamination on reactor components | K. 95 microcuries |

9. Authorized use:

A. through K. Decontamination, repair and testing of reactor components.

CONDITIONS

10. Licensed material may be used only at temporary job sites of the licensee anywhere in the United States where the Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material.
11. A. Licensed material shall be used by, or under the supervision of, Susan R. Landahl.
- B. The Radiation Safety Officer for this license is Susan R. Landahl.
12. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material so that at no time is a quantity of radioactive material is possessed in excess of a quantity which requires consideration of the need for an emergency plan for responding to a release of licensed material in accordance with 10 CFR 30.72.
13. The licensee may transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

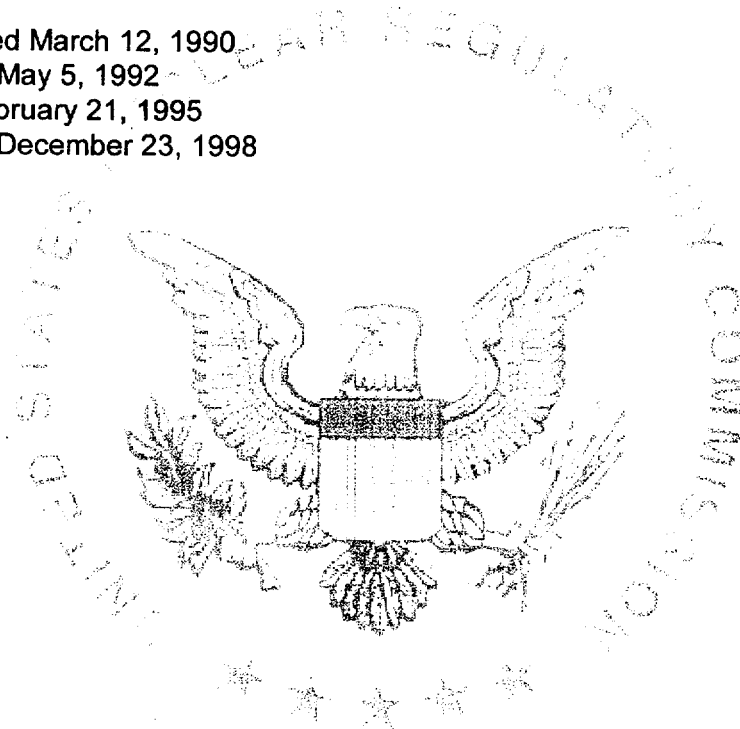
**MATERIALS LICENSE
SUPPLEMENTARY SHEET**License Number
20-07626-04Docket or Reference Number
030-34378/20-07626-02

Amendment No. 01

CORRECTED COPY

14. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.

- A. Application dated March 12, 1990
- B. Letter received May 5, 1992
- C. Letter dated February 21, 1995
- D. Letter received December 23, 1998



For the U.S. Nuclear Regulatory Commission

Date July 13, 1999

By

A handwritten signature in dark ink, appearing to read "Duncan White", is written over a horizontal line.

Duncan White
Division of Nuclear Materials Safety
Region I
King of Prussia, Pennsylvania 19406

CORRECTED COPY**MATERIALS LICENSE**

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

<p>Licensee</p> <p>1. Entergy Nuclear Generation Company Pilgrim Nuclear Power Station</p> <p>2. 600 Rocky Hill Road Plymouth, Massachusetts 02360-5599</p>	<p>In accordance with letter received December 23, 1998</p> <p>3. License number 20-07626-04 is amended in its entirety to read as follows:</p> <p>4. Expiration date February 28, 2003</p> <p>5. Docket No. 030-34378/20-07626-02 Reference No.</p>	
<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Any byproduct material with atomic numbers 1 through 83 inclusive</p> <p>B. Any byproduct, source or special nuclear material with atomic numbers 84 through 96</p> <p>C. Chromium-51</p> <p>D. Manganese-54</p> <p>E. Iron-55</p> <p>F. Iron-59</p> <p>G. Cobalt-58</p> <p>H. Cobalt-60</p>	<p>7. Chemical and/or physical form</p> <p>A. Contamination on reactor components</p> <p>B. Contamination on reactor components</p> <p>C. Contamination on reactor components</p> <p>D. Contamination on reactor components</p> <p>E. Contamination on reactor components</p> <p>F. Contamination on reactor components</p> <p>G. Contamination on reactor components</p> <p>H. Contamination on reactor components</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. Not to exceed 30 millicuries per nuclide and 3 curies total</p> <p>B. Not to exceed 10 microcuries per nuclide and 100 microcuries total</p> <p>C. 75 millicuries</p> <p>D. 150 millicuries</p> <p>E. 1620 millicuries</p> <p>F. 45 millicuries</p> <p>G. 45 millicuries</p> <p>H. 830 millicuries</p>

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**License Number
20-07626-04Docket or Reference Number
030-34378/20-07626-02

Amendment No. 01

CORRECTED COPY

- | | | |
|---|--|--|
| 6. Byproduct, source, and/or special nuclear material | 7. Chemical and/or physical form | 8. Maximum amount that licensee may possess at any one time under this license |
| I. Nickel-63 | I. Contamination on reactor components | I. 65 millicuries |
| J. Cesium-137 | J. Contamination on reactor components | J. 130 millicuries |
| K. Plutonium-241 | K. Contamination on reactor components | K. 95 microcuries |

9. Authorized use:

A. through K. Decontamination, repair and testing of reactor components.

CONDITIONS

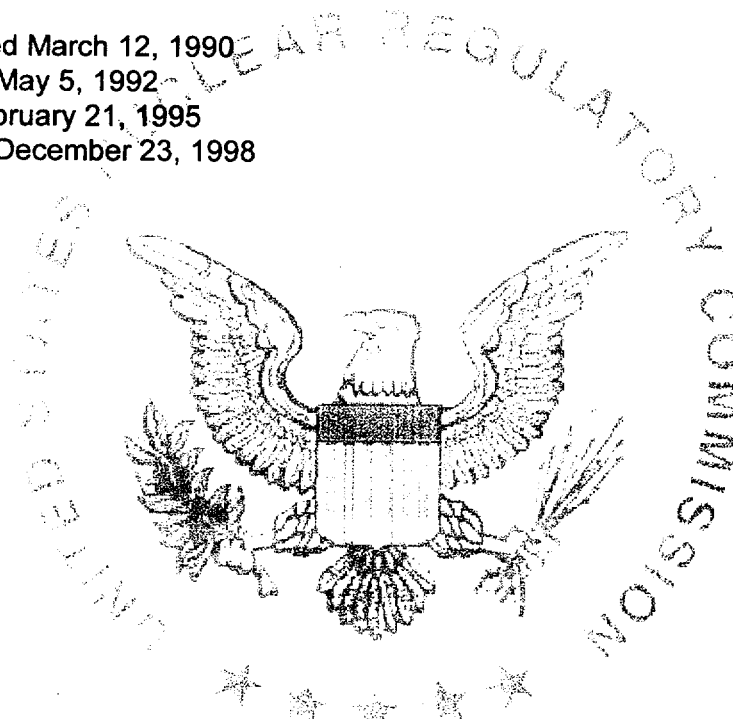
10. Licensed material may be used only at temporary job sites of the licensee anywhere in the United States where the Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material.
11. A. Licensed material shall be used by, or under the supervision of, Susan R. Landahl.
- B. The Radiation Safety Officer for this license is Susan R. Landahl.
12. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material so that at no time is a quantity of radioactive material is possessed in excess of a quantity which requires consideration of the need for an emergency plan for responding to a release of licensed material in accordance with 10 CFR 30.72.
13. The licensee may transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**License Number
20-07626-04Docket or Reference Number
030-34378/20-07626-02

Amendment No. 01

CORRECTED COPY

14. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.
- A. Application dated March 12, 1990
 - B. Letter received May 5, 1992
 - C. Letter dated February 21, 1995
 - D. Letter received December 23, 1998



For the U.S. Nuclear Regulatory Commission

Date July 13, 1999

By

Original signed by Duncan WhiteDuncan White
Division of Nuclear Materials Safety
Region I
King of Prussia, Pennsylvania 19406

ATTACHMENT TO LICENSE AMENDMENT NO. 181

FACILITY OPERATING LICENSE NO. DPR-35

DOCKET NO. 50-293

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove

Title Page Appendix A
Appendix B
4.0-1
5.0-2

Insert

Title Page Appendix A
Appendix B
4.0-1
5.0-2

APPENDIX A
TO
FACILITY OPERATING LICENSE DPR-35
TECHNICAL SPECIFICATION AND BASES
FOR
PILGRIM NUCLEAR POWER STATION
PLYMOUTH, MASSACHUSETTS
ENTERGY NUCLEAR
DOCKET NO. 50-293

Appendix B
ADDITIONAL CONDITIONS
OPERATING LICENSE NO. DPR-35

Entergy Nuclear shall comply with the following conditions on the schedules noted below:

<u>Amendment Number</u>	<u>Additional Conditions</u>	<u>Implementation Date</u>
177	The licensee is authorized to relocate certain Technical Specifications requirements to licensee-controlled documents. Implementation of this amendment shall include relocation of various sections of the technical specifications to the appropriate documents as described in the licensee's application dated September 19, 1997, and in the staff's safety evaluation attached to this amendment.	The amendment shall be implemented within 30 days from July 31, 1998, except that the licensee shall have until the next scheduled Updated Final Safety Analysis Report (UFSAR) update to incorporate the UFSAR relocations.

4.0 DESIGN FEATURES

4.1 Site Location

Pilgrim Nuclear Power Station is located on the western shore of Cape Cod Bay in the Town of Plymouth, Plymouth County, Massachusetts and contains approximately 517 acres owned by Entergy Nuclear as shown on FSAR Figures 2.2-1 and 2.2-2. The site boundary is posted and a perimeter security fence provides a distinct security boundary for the protected area of the station.

The reactor (center line) is located approximately 1800 feet from the nearest property boundary.

4.2 Reactor Core

The reactor vessel core design shall be as described in the CORE OPERATING LIMITS REPORT and shall be limited to those fuel assemblies which have been analyzed with NRC approved codes and methods and approved by the NRC in its acceptance of Amendment 22 of GESTAR II.

4.3 Fuel Storage

4.3.1 Criticality

4.3.1.1 The spent fuel storage racks are designed and shall be maintained with:

- a. Fuel assemblies having a maximum k-infinity of 1.32 for standard core geometry, calculated at the burnup of maximum bundle reactivity, and an average U-235 enrichment of 4.6 % averaged over the axial planar zone of highest average enrichment; and
- b. $K_{eff} \leq 0.95$ if fully flooded with unborated water, which includes an allowance for uncertainties as described in Section 10.3.5 of the FSAR.

(continued)

5.0 ADMINISTRATIVE CONTROLS

5.2 Organization

5.2.1 Onsite and Offsite Organizations

Onsite and offsite organizations shall be established for unit operation and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting safety of the nuclear power plant.

- a. Lines of authority, responsibility, and communication shall be defined and established throughout highest management levels, intermediate levels, and all operating organization positions. These relationships shall be documented and updated, as appropriate, in organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements shall be documented in the Pilgrim Station Final Safety Analysis Report (FSAR);
- b. The Station Director shall be responsible for overall safe operation of the plant and shall have control over those onsite activities necessary for safe operation and maintenance of the plant;
- c. The Vice President - Operations for Pilgrim shall have corporate responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the plant to ensure nuclear safety; and
- d. The individuals who train the operating staff, carry out health physics, or perform quality assurance functions may report to the appropriate onsite manager; however, these individuals shall have sufficient organizational freedom to ensure their independence from operating pressures

5.2.2 Unit Staff

The unit staff organization shall include the following:

- a. A non-licensed operator shall be on site when fuel is in the reactor and an additional non-licensed operator shall be assigned when the reactor is in an operational mode other than Cold Shutdown or Refueling.

(continued)



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


Docket No. 50-293

AMENDMENT TO INDEMNITY AGREEMENT NO. B-48
AMENDMENT NO. 11

Effective July 13, 1999, Indemnity Agreement No. B-48, between Boston Edison Company and the Atomic Energy Commission dated November 20, 1970, as amended, is hereby further amended, as follows:

Delete the name "Boston Edison Company" wherever it appears in the indemnity agreement and substitute the name "Entergy Nuclear Generation Company."

FOR THE UNITED STATES NUCLEAR REGULATORY COMMISSION


Cynthia A. Carpenter, Chief
Generic Issues, Environmental, Financial
and Rulemaking Branch
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Accepted _____, 1999
Boston Edison Company

Accepted _____, 1999
Entergy Nuclear Generation
Company



UNITED STATES
NUCLEAR REGULATORY COMMISSION
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FOR THE UNITED STATES NUCLEAR REGULATORY COMMISSION

A handwritten signature in cursive script, reading "Cynthia A. Carpenter", is written over a horizontal line.

Cynthia A. Carpenter, Chief
Generic Issues, Environmental, Financial
and Rulemaking Branch
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Accepted _____, 1999
Boston Edison Company

Accepted _____, 1999
Entergy Nuclear Generation
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