April 12, 1999

Mr. T. Gary Broughton, President
and Chief Executive Off
GPU Nuclear, Inc.
One Upper Pond Road
Parsippany, NJ 07054

Mr. Dickinson M. Smith
Chief Executi Officer
AmerGen Energy Company, LLC
965 Chesterbrook Blvd. 63C-3
Wayne, PA 19087-5691

SUBJECT: ORDER APPROVING TRANSFER OF LICENSE FOR THREE MILE ISLAND NUCLEAR STATION, UNIT 1, FROM GPU NUCLEAR, INC., ET AL., TO AMERGEN ENERGY COMPANY, LLC AND APPROVING CONFORMING AMENDMENT (TAC NO. MA3307)

See Report C

Dear Messrs. Broughton and Smith:

The staff has completed its review of your application dated December 3, 1998, as supplemented on January 11, February 4, March 4, March 10, and March 15, 1999, requesting approval of the transfer of the license for the Three Mile Island Nuclear Station, Unit 1, held by GPU Nuclear, Inc., et al., to AmerGen Energy Company, LLC and approval of a conforming amendment pursuant to Sections 50.80 and 50.90 of Title 10 of the Code of Federal Regulations. The enclosed Order approves the proposed transfer, subject to the conditions described therein. The Order also approves a conforming license amendment which will be issued and made effective at the time the transfer is completed. Enclosures 3 and 4 contain the non-proprietary and proprietary versions, respectively, of the staff's safety evaluation related to the preceding action.

The Order has been forwarded to the Office of the Federal Register for publication.

Sincerely,

/s/
Timothy G. Colburn, Senior Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

1/1

Docket No. 50-289

DF12

Enclosures: 1. Order
2. Conforming Amendment
3. Safety Evaluation (non-proprietary)
4. Safety Evaluation (proprietary)

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

April 12, 1999

Mr. T. Gary Broughton, President
and Chief Executive Officer
GPU Nuclear, Inc.
One Upper Pond Road
Parsippany, NJ 07054

Mr. Dickinson M. Smith
Chief Executive Officer
AmerGen Energy Company, LLC
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Sincerely,

Timothy G. Colburn, Senior Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-289

Enclosures: 1. Order
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Three Mile Island Nuclear Station, Unit No. 1

cc: w/enclosures 1, 2 & 3

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UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
GPU NUCLEAR, INC.,	)	Docket No. 50-289
et al.,	)	
	)	
(Three Mile Island, Unit No. 1)	)	

ORDER APPROVING TRANSFER OF LICENSE
AND CONFORMING AMENDMENT

I.

GPU Nuclear, Inc., (GPUN or the licensee), Metropolitan Edison Company (Met-Ed), Jersey Central Power and Light Company (JCP&L), and Pennsylvania Electric Company (Penelec) are the holders of Facility Operating License No. DPR-50, which authorizes operation of Three Mile Island Nuclear Station, Unit No. 1 (TMI-1 or the facility) at steady-state power levels not in excess of 2568 megawatts thermal. The facility is located at the licensee's site in Dauphin County, Pennsylvania. The license authorizes GPUN to maintain and operate the facility and Met-Ed, JCP&L, and Penelec to possess but not operate TMI-1. GPUN is authorized to act as agent for Met-Ed, JCP&L, and Penelec in connection with the license. Met-Ed, JCP&L, and Penelec do business as GPU Energy and are wholly owned subsidiaries of GPU, Inc., which is also the parent of GPUN.

II.

Under cover of a letter dated December 3, 1998, GPUN and AmerGen Energy Company, LLC, jointly submitted an application requesting approval of the proposed transfer of

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the TMI-1 facility operating license to AmerGen Energy Company, LLC. The licensee and AmerGen also jointly submitted an application for a conforming amendment to reflect the transfer. Supplemental information was provided under cover of letters dated January 11, February 4, March 4, March 10, and March 15, 1999. Hereinafter, the December 3, 1998, license transfer application and supplemental information will be referred to collectively as the "application." GPUN stated that it was acting on behalf of itself and Met-Ed, JCP&L, and Penelec, co-owners of TMI-1, in submitting the application. AmerGen is a limited liability company that was formed to acquire and operate nuclear power plants in the United States. PECO Energy Company (PECO) and British Energy, Inc., each owns a 50 percent interest in AmerGen. The conforming amendment would remove the current licensees from the facility operating license and would add AmerGen in their place. After completion of the proposed transfer, AmerGen will be the sole owner and operator of TMI-1.

Approval of the transfer of the facility operating license and conforming license amendment was requested by GPUN and AmerGen pursuant to 10 CFR 50.80 and 50.90. Notice of the applications for approval and an opportunity for a hearing was published in the *Federal Register* on December 21, 1998 (63 FR 70436). Pursuant to such notice, the Commission received a request for hearing dated January 11, 1999, from Camille "Bud" George, a Pennsylvania State representative. Mr. George also submitted a February 11, 1999, supplemental letter. The Commission issued a Memorandum and Order[1] on February 11, 1999, denying Mr. George's request for a hearing. The Commission received one comment postmarked January 15, 1999, from H. E. Williams, Jr. and forwarded that comment and Mr. George's two letters to the staff for its consideration. The comments contained in these letters are addressed in the staff's safety evaluation dated April 12, 1999 .

---

[1] *GPU Nuclear, Inc., et al.* (Three Mile Island, Unit No. 1), CLI-99-02, 49 NRC_____ slip. op. (February 11, 1999).

Under 10 CFR 50.80, no license, or any right thereunder, shall be transferred, directly or indirectly, through transfer of control of the license, unless the Commission shall give its consent in writing. Upon review of the information in the application by GPUN and AmerGen, and other information before the Commission, and relying upon the representations and agreements contained in the application, the NRC staff has determined that AmerGen is qualified to hold the license, and that the transfer of the license to AmerGen is otherwise consistent with applicable provisions of law, regulations, and orders issued by the Commission, subject to the conditions set forth below. The NRC staff has further found that the application for the proposed license amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended, and the Commission's rules and regulations set forth in 10 CFR Chapter 1; the facility will operate in conformity with the application, the provisions of the Act and the rules and regulations of the Commission; there is reasonable assurance that the activities authorized by the proposed license amendment can be conducted without endangering the health and safety of the public and that such activities will be conducted in compliance with the Commission's regulations; the issuance of the proposed license amendment will not be inimical to the common defense and security or to the health and safety of the public; and the issuance of the proposed amendment will be in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

III.

Accordingly, pursuant to Sections 161b, 161i, and 184 of the Atomic Energy Act of 1954, as amended; 42 USC §§ 2201(b), 2201(i), and 2234; and 10 CFR 50.80, IT IS HEREBY ORDERED that the transfer of the license as described herein to AmerGen is approved, subject to the following conditions:

(1) The AmerGen Limited Liability Company Agreement dated August 18, 1997, may not be modified in any material respect concerning decision-making authority over "safety issues" as defined therein without the prior written consent of the Director, Office of Nuclear Reactor Regulation.

(2) At least half of the members of AmerGen's Management Committee shall be appointed by a non-foreign member group, all of which appointees shall be U.S. citizens.

(3) The Chief Executive Officer (CEO), Chief Nuclear Officer (CNO) (if someone other than the CEO), and Chairman of the Management Committee of AmerGen shall be U.S. citizens. These individuals shall have the responsibility and exclusive authority to ensure, and shall ensure, that the business and activities of AmerGen with respect to the TMI-1 license are at all times conducted in a manner consistent with the protection of the public health and safety and common defense and security of the United States, as set forth in Title 10 of the Code of Federal Regulations and Operating License No. DPR-50, including the Technical Specifications attached thereto.

(4) AmerGen shall cause to be transmitted to the Director, Office of Nuclear Reactor Regulation within 30 days of filing with the Securities and Exchange Commission, any Schedules 13D or 13G filed pursuant to the Securities and Exchange Act of 1934 that disclose beneficial ownership of a registered class of PECO stock.

(5) For purposes of ensuring public health and safety, AmerGen shall provide decommissioning funding assurance of no less than $303 million, after payment of any taxes, to be held in the decommissioning trust(s) for TMI-1 following the transfer of the TMI-1 license to AmerGen, including any amounts held in any

decommissioning trust(s) that may continue to be maintained by GPU Energy for TMI-1 after such license transfer.

(6) AmerGen shall take all necessary steps to ensure that the decommissioning trust is maintained in accordance with the application for the transfer of the TMI-1 license and the requirements of this order and the safety evaluation.

(7) If the assets of any decommissioning trust maintained by GPU Energy for TMI-1 are retained in such trust following the transfer of the TMI-1 license to AmerGen instead of being transferred to any trust established by AmerGen, GPU Energy shall maintain the assets as retained in such trust in accordance with the application for the transfer of the TMI-1 license. In addition, the trust agreement shall contain the following provisions or be consistent with the following:

(a) In Article II of the trust agreement, Section 2.01 shall include provisions to limit the use of assets in both the qualified and non-qualified funds, in the first instance, to the expenses related to decommissioning of TMI-1 as defined by the NRC in its regulations and issuances, and as provided in the TMI-1 license and any amendments thereto.

(b) In Article II, Section 2.01(c) shall be deleted or the term "property" therein shall be limited to liquid assets.

(c) In Articles II and V, investments in the securities or other obligations of GPU Nuclear, Inc., PECO Energy, British Energy, plc, AmerGen, or affiliates thereof, or their successors or assigns shall be prohibited. 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.

(d) In Article II, Section 2.02 shall be amended to contain a provision that no disbursements or payments from the trust shall be made by the trustee until the trustee has first given the NRC 30 days notice of the payment. The section shall be further amended to contain a provision that no disbursements or payments from the trust shall be made if the trustee receives prior written notice of objection from the Director, Office of Nuclear Reactor Regulation.

(e) Article IV shall provide that the trust agreement cannot be modified in any material respect without the prior written consent of the Director, Office of Nuclear Reactor Regulation.

(f) Section 4 of the Special Terms shall specify that assets cannot be withdrawn from the decommissioning trust funds, but may be transferred between the qualified and non-qualified funds for the purposes specified in this section.

(g) The appropriate section of the trust agreement shall reflect that the trustee, investment advisor, or anyone else directing the investments made in the trust must adhere to a "prudent investor" standard as specified in 18 CFR § 35.32(a)(3) of the Federal Energy Regulatory Commission regulations.

(8) AmerGen, shall take no action to cause PECO or British Energy, plc to void, cancel, or diminish the $65 million contingency fund commitment from PECO and British Energy for TMI-1, the existence of which is represented in the application, or cause them to fail to perform or impair their performance under the commitment, or remove or interfere with AmerGen's ability to draw upon the commitment. Further, AmerGen shall inform the Director, Office of Nuclear Reactor Regulation, in writing, at such time that it draws upon the $65 million

contingency fund. This provision does not affect the NRC's authority to assure that adequate funds will remain available to fund the transition to safe shutdown, should any question arise regarding availability of funds for such a purpose.

(9) AmerGen shall, prior to completion of the sale and transfer of TMI-1 to it, provide the Director, Office of Nuclear Reactor Regulation, satisfactory documentary evidence that AmerGen has obtained the appropriate amount of insurance required of licensees under 10 CFR Part 140 of the Commission's regulations.

(10) After receipt of all required regulatory approvals of the transfer of TMI-1, GPU Nuclear, Inc., and AmerGen shall inform the Director, Office of Nuclear Reactor Regulation, in writing of such receipt within five business days, and of the date of the closing of the sale and transfer of TMI-1 no later than seven business days prior to the date of closing. Should the transfer of the license not be completed by December 31, 1999, this Order shall become null and void, provided, however, on written application and for good cause shown, such date may in writing be extended.

IT IS FURTHER ORDERED that, consistent with 10 CFR 2.1315(b), a license amendment that makes changes, as indicated in enclosure 2 to the cover letter forwarding this Order, to conform the license to reflect the subject license transfer is approved. The amendment shall be issued and made effective at the time the proposed license transfer is completed.

This Order is effective upon issuance.

For further details with respect to this Order, see the application dated December 3, 1998, and supplemental submittals dated January 11, February 4, March 4, March 10, and March 15, 1999, which are available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, and at the local public document room located at the Law/Government Publications Section, State Library of Pennsylvania (REGIONAL DEPOSITORY), Walnut Street and Commonwealth Avenue, Box 1601, Harrisburg, PA 17105.

Dated at Rockville, Maryland, this 12th day of April 1999.

FOR THE NUCLEAR REGULATORY COMMISSION

Roy P. Zimmerman, Acting Director
Office of Nuclear Reactor Regulation

For further details with respect to this Order, see the application dated December 3, 1998, and supplemental submittals dated January 11, February 4, March 4, March 10, and March 15, 1999, which are available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, and at the local public document room located at the Law/Government Publications Section, State Library of Pennsylvania (REGIONAL DEPOSITORY), Walnut Street and Commonwealth Avenue, Box 1601, Harrisburg, PA 17105.

Dated at Rockville, Maryland, this 12th day of April 1999.

FOR THE NUCLEAR REGULATORY COMMISSION

Roy P. Zimmerman, Acting Director
Office of Nuclear Reactor Regulation

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

METROPOLITAN EDISON COMPANY

JERSEY CENTRAL POWER & LIGHT COMPANY

PENNSYLVANIA ELECTRIC COMPANY

GPU NUCLEAR, INC.

DOCKET NO. 50-289

THREE MILE ISLAND NUCLEAR STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No.
License No. DPR-50

1. The Nuclear Regulatory Commission (the Commission or NRC) has found that:

   A. The application for amendment by GPU Nuclear, Inc., et al. (the licensee) and AmerGen Energy Company, LLC, dated, December 3, 1998, as supplemented January 11, February 4, March 4, March 10, and March 15, 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 by changes to the Technical Specifications as also indicated in the attachment to this license and paragraph 2.C.(2) of Facility Operating License No. DPR-50 is hereby amended to read as follows:

   (2) Technical Specifications

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

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

FOR THE NUCLEAR REGULATORY COMMISSION

Samuel J. Collins, Director
Office of Nuclear Reactor Regulation

Attachment: Operating License Pages 1-8* and
Technical Specifications

Date of Issuance:

*Pages 1-8 are attached, for convenience, for the composite license to reflect these changes.

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

AMERGEN ENERGY COMPANY, LLC

(Three Mile Island Nuclear Station, Unit 1)

DOCKET NO. 50-289

FACILITY OPERATING LICENSE

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

   a. The application for license filed by the applicant 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 1 and all required notifications to other agencies or bodies have been duly made;

   b. Construction of the Three Mile Island Nuclear Station, Unit 1 (the facility) has been substantially completed in conformity with Construction Permit No. CPPR-40, the application, as amended, the provisions of the Act and the rules and regulations of the Commission;

   c. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;

   d. There is reasonable assurance: (1) that the activities authorized by this operating license can be conducted without endangering the health and safety of the public, and (2) that such activities will be conducted in compliance with the rules and regulations of the Commission;

   e. AmerGen Energy Company, LLC 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;

f. AmerGen Energy Company, LLC has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;

g. The issuance of this operating license will not be inimical to the common defense and security or to the health and safety of the public;

h. After weighing the environmental, economic, technical, and other benefits of the facility against environmental costs and considering available alternatives, the issuance of Facility Operating License No. DPR-50 is in accordance with 10 CFR Part 50, Appendix D, of the Commission's regulations and all applicable requirements of said Appendix D have been satisfied; and

i. The receipt, possession, and use of source, byproduct and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40 and 70, including 10 CFR Section 30.33, 40.32, 70.23 and 70.31.

2. Facility Operating License No. DPR-50 is hereby issued to the AmerGen Energy Company, LLC to read as follows:

a. This license applies to the Three Mile Island Nuclear Station, Unit 1, a pressurized water reactor and associated equipment (the facility), owned and operated by AmerGen Energy Company, LLC. The facility is located in Dauphin County, Pennsylvania, and is described in the "Final Safety Analysis Report" as supplemented and amended (Amendments 1 through 47) and the Environmental Report as supplemented and amended (Amendments 1 and 2).

b. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:

(1) AmerGen Energy Company, LLC pursuant to Section 104b of the Act and 10 CFR Part 50, "Licensing of Production and Utilization Facilities," to possess, use, and operate the facility in accordance with the procedures and limitations set forth in this license;

(2) AmerGen Energy Company, LLC, pursuant to the Act and 10 CFR Parts 30, 40 and 70 to receive, possess and use at any time any byproduct, source and special nuclear material as reactor fuel, sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required for reactor operation;

(3) AmerGen Energy Company, LLC, 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, testing, instrument calibration, or associated with radioactive apparatus or components;

(4) AmerGen Energy Company, LLC, 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.

(c) This license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Section 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; 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

AmerGen Energy Company, LLC is authorized to operate the facility at steady state reactor core power levels not in excess of 2568 megawatts thermal.

(2) Technical Specifications

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

(3) Physical Protection

The license 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 10 CFR 73.55 (51 FR 27817 and 27822) and 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: "Three Mile Island, Units 1 and 2, Modified Amended Physical Security Plan," with revisions submitted through July 8, 1988; "Three Mile Island, Units 1 and 2, Security Personnel Training and Qualification Plan," with revisions submitted through November 28, 1986; and "Three Mile Island, Units 1 and 2, Safeguards Contingency Plan," with revision submitted through June 20, 1986. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein.

(4) Fire Protection

AmerGen Energy Company, LLC shall implement and maintain in effect all provisions of the Fire Protection Program as described in the Updated FSAR for TMI-1.

Changes may be made to the Fire Protection Program without prior approval by the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire. Temporary changes to specific fire protection features which may be necessary to accomplish maintenance or modifications are acceptable provided that interim compensatory measures are implemented.

(5) The licensee shall implement a secondary water chemistry monitoring program to inhibit steam generator tube degradation. This program shall include:

a. Identification of a sampling schedule for the critical parameters and control points for these parameters;

b. Identification of the procedures used to measure the values of the critical parameters;

c. Identification of process sampling points;

d. Procedure for the recording and management of data;

e. Procedures defining corrective actions of off control point chemistry conditions; and

f. A procedure identifying (1) the authority responsible for the interpretation of the data, and (2) the sequence and timing of administrative events required to initiate corrective action.

(6) Inservice Testing - DELETED

(7) Aircraft Movements

Sixty (60) days following the report on aircraft movements at the Harrisburg International Airport for the calendar year 1984 pursuant to Technical Specification 6.9.1.B.2.b, a report shall be submitted updating the air crash probability analysis presented by Metropolitan Edison Company to the Atomic Safety and Licensing Appeal Board in the Three Mile Island, Unit No. 2 operation license proceeding (Docket No. 50-320). Such report shall utilize current data on aircraft movements at the Harrisburg International Airport and updated national aerial crash rates and shall be based on the same methodology presented by Metropolitan Edison Company as accepted by the Appeal Board in ALAB-692. Following receipt of such report NRC will, after discussion with the licensee, determine the need for further periodic air crash probability analyses.

(8) Repaired Steam Generators

In order to confirm the leak-tight integrity of the Reactor Coolant System, including the steam generators, operation of the facility shall be in accordance with the following:

1. Prior to initial criticality, the licensee shall submit to NRC the results of the steam generator hot test program and a summary of its management review.

2. The licensee shall confirm baseline primary-to-secondary leakage rate established during the steam generator hot test program. If leakage exceeds the baseline leakage rate by more than 0.1 gpm*, the facility shall be shut down and leak tested. If any increased leakage above baseline is due to defects in the tube free span, the leaking tube(s) shall be removed from service. The baseline leakage shall be re-established, provided that the leakage limit of Technical Specification 3.1.6.3 is not exceeded.

3. The licensee shall complete its post-critical test program at each power range (0-5%, 5%-50%, 50%-100%) in conformance with the program described in Topical Report 008, Rev. 3, and shall have available the results of that test program and a summary of its management review, prior to ascension from each power range and prior to normal power operation.

4. The licensee shall conduct eddy-current examinations, consistent with the extended inservice inspection plan defined in Table 3.3-1 of NUREG-1019, either 90 calendar days after reaching full power, or 120 calendar days after exceeding 50% power operation, whichever comes first. In the event of plant operation for an extended period at less than 50% power, the licensee shall provide an assessment at the end of 180 days of operation at power levels between 5% and 50%, such assessment to contain recommendations and supporting information as to the necessity of a special eddy-current testing (ECT) shutdown before the end of the refueling cycle. (The NRC staff will evaluate that assessment and determine the time of the next eddy-current examination, consistent with the other provisions of the license conditions.) In the absence of such an assessment, a special ECT shutdown shall take place before an additional 30 days of operation at power above 5%.

*If leakage exceeds the baseline leakage rate by more than 0.1 gpm during the remainder of the Cycle 8 operation, the facility shall be shutdown and leak tested. Operation at leakage rates of up to 0.2 gpm above the baseline leakage rate shall be acceptable during the remainder of Cycle 8 operation. After the 9R refueling outage, the leakage limit and accompanying shutdown requirements revert to 0.1 gpm above the baseline leakage rate.

5. The licensee shall provide routine reporting of the long-term corrosion "lead tests" test results on a quarterly basis as well as more timely notification if adverse corrosion test results are discovered.

(9) Long Range Planning Program

The revised "Plan for the Long Range Planning Program for the Three Mile Island Nuclear Station - Unit 1" (the Plan) submitted by GPUN letter C311-94-2124 dated September 26, 1994 is approved.

a. The Plan shall be followed by the Licensee from and after November 28, 1994.

b. The Category A schedule shall not be changed without prior approval from the NRC. Categories B and C schedules may be changed without prior approval by NRC.

Sale and License Transfer Conditions

(10) The Limited Liability Company Agreement dated August 18, 1997, may not be modified in any material respect concerning decision-making authority over "safety issues" as defined therein without the prior written consent of the Director, Office of Nuclear Reactor Regulation.

(11) At least half of the members of AmerGen's Management Committee shall be appointed by a non-foreign member group, all of which appointees shall be U.S. citizens.

(12) The Chief Executive Officer (CEO), Chief Nuclear Officer (CNO) (if someone other than the CEO), and Chairman of the Management Committee of AmerGen shall be U.S. citizens. These individuals shall have the responsibility and exclusive authority to ensure, and shall ensure, that the business and activities of AmerGen with respect to the TMI-1 license are at all times conducted in a manner consistent with the protection of the public health and safety and common defense and security of the United States.

(13) AmerGen shall cause to be transmitted to the Director, Office of Nuclear Reactor Regulation within 30 days of filing with the Securities and Exchange Commission, any Schedules 13D or 13G filed pursuant to the Securities and Exchange Act of 1934 that disclose beneficial ownership of a registered class of PECO stock.

(14) AmerGen shall provide decommissioning funding assurance of no less than $303 million, after payment of any taxes, to be held in the decommissioning trust(s) for TMI-1 at the time of the transfer of the TMI-1 license to AmerGen, including any amounts held in any decommissioning trust(s) that may continue to be maintained by GPU Energy for TMI-1 after such license transfer.

(15) AmerGen shall take all necessary steps to ensure that the decommissioning trust is maintained in accordance with the application, the requirements of the Order Approving Transfer of License and Conforming Amendment, dated April 12, 1999, and the related Safety Evaluation dated April 12, 1999.

(16) AmerGen shall take no action to cause PECO or British Energy, plc to void, cancel, or diminish the $65 million contingency fund commitment from PECO and British Energy for TMI-1, the existence of which is represented in the application, or cause them to fail to perform or impair their performance under the commitment, or remove or interfere with AmerGen's ability to draw upon the commitment. Further, AmerGen shall inform the Director, Office of Nuclear Reactor Regulation, in writing, at such time that it draws upon the $65 million contingency fund. This provision does not affect the NRC's authority to assure that adequate funds will remain available to fund the transition to safe shutdown, should any question arise regarding availability of funds for such a purpose.

6. This license is effective as of the date of issuance and shall expire at midnight, April 19, 2014.

FOR THE ATOMIC ENERGY COMMISSION

Original Signed by A. Giambusso

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

Attachment: Appendix A Technical Specifications

Date of Issuance: April 19, 1974

ATTACHMENT TO LICENSE AMENDMENT NO. ___

FACILITY OPERATING LICENSE NO. DPR-50

DOCKET NO. 50-289

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 areas of change.

Remove	Insert
1-7	1-7
4-55a	4-55a
4-55c	4-55c
4-55e	4-55e
4-55g	4-55g
5-1	5-1
Fig. 5-1	Fig. 5-1
Fig. 5-2	Fig. 5-2
Fig. 5-3	Fig. 5-3
6-1	6-1
6-3	6-3
6-4	6-4
6-5	6-5
6-6	6-6
6-7	6-7
6-8	6-8
6-9	6-9
6-10	6-10
6-11	6-11
6-23	6-23
6-24	6-24
6-25	6-25

1.18 VENTILATION EXHAUST TREATMENT SYSTEM

A VENTILATION EXHAUST TREATMENT SYSTEM is any system designed and installed to reduce gaseous radioiodine or radioactive material in particulate form in effluent by passing ventilation or vent exhaust gases through charcoal absorbers and/or HEPA filters for the purpose of removing iodine or particulates from the gaseous exhaust system prior to the release to the environment. Engineered Safety Feature (ESF) atmospheric cleanup systems are not considered to be VENTILATION EXHAUST TREATMENT SYSTEMS.

1.19 PURGE - PURGING

PURGE or PURGING is the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration or other operating conditions in such a manner that replacement air or gas is required to purify the confinement.

1.20 VENTING

VENTING is the controlled process of discharging air as gas from a confinement to maintain temperature, pressure, humidity, concentration or other operating conditions in such a manner that replacement air or gas is not provided. Vent used in system name does not imply a VENTING process.

1.21 REPORTABLE EVENT

A REPORTABLE EVENT shall be any of those conditions specified in 10 CFR 50.73.

1.22 MEMBER(S) OF THE PUBLIC

MEMBER(S) OF THE PUBLIC shall include all persons who are not occupationally associated with the plant. This category does not include employees of the AmerGen Energy Company, LLC, AmerGen Energy Company, LLC contractors or vendors. Also excluded from this category are persons who enter the site to service equipment or to make deliveries.

1.23 SUBSTANTIVE CHANGES

SUBSTANTIVE CHANGES are those which affect the activities associated with a document or the document's meaning or intent. Examples of non-substantive changes are: (1) correcting spelling; (2) adding (but not deleting) sign-off spaces; (3) blocking in notes, cautions, etc.; (4) changes in corporate and personnel titles which do not reassign responsibilities and which are not referenced in the Appendix A Technical Specifications; and (5) changes in nomenclature or editorial changes which clearly do not change function, meaning or intent.

Bases

Pressure drop across the combined HEPA filters and charcoal adsorbers of less than 6 inches of water at the system design flow rate will indicate that the filters and adsorbers are not clogged by excessive amounts of foreign matter. Pressure drop should be determined at least once per refueling cycle to show system performance capability.

The frequency of tests and sample analysis are necessary to show that the HEPA filters and charcoal adsorbers can perform as evaluated. Tests of the charcoal adsorbers with halogenated hydrocarbon shall be performed in accordance with approved test procedures. Replacement adsorbent should be qualified according to Regulatory Guide 1.52 March 1978. The charcoal adsorber efficiency test procedures should allow for the removal of one adsorber tray, emptying of one bed from the tray, mixing the adsorbent thoroughly and obtaining at least two samples. Each sample should be at least two inches in diameter and a length equal to the thickness of the bed. If test results are unacceptable all adsorbent in the system shall be replaced. Tests of the HEPA filters with DOP aerosol shall also be performed in accordance with approved test procedures. Any HEPA filters found defective should be replaced with filters qualified according to Regulatory Guide 1.52 March 1978.

Operation of the system for 10 hours every month will demonstrate operability of the filters and adsorber system and remove excessive moisture built up on the adsorber.

If significant painting, steam, fire or chemical release occurs such that the HEPA filter or charcoal adsorber could become contaminated from the fumes, chemicals or foreign materials, the same tests and sample analysis shall be performed as required for operational use. The determination of significance shall be made by the Vice President-TMI Unit 1.

Demonstration of the automatic initiation of the recirculation mode of operation is necessary to assure system performance capability.

Bases

Pressure drop across the combined HEPA filters and charcoal adsorbers of less than 6 inches of water at the system design flow rate will indicate that the filters and adsorbers are not clogged by excessive amounts of foreign matter. Pressure drop should be determined at least once every refueling interval to show system performance capability.

Tests and sample analysis assure that the HEPA filters and charcoal adsorbers can perform as evaluated. The charcoal adsorber efficiency test procedures should allow for the removal of one adsorber tray,emptying of one bed from the tray, mixing the adsorbent thoroughly and obtaining at least two samples. Each sample should be at least two inches in diameter and a length equal to the thickness of the bed. The in-place test criteria and laboratory test criteria for activated charcoal will meet the guidelines of ANSI-N510-1980. If test results are unacceptable, all absorbent in the system should be replaced with an absorbent qualified according to Regulatory Guide 1.52, March 1978 or ANSI- N509-1980. Any HEPA filters found defective should be replaced with filters qualified according to Regulatory Guide 1.52, March 1978 or ANSI-N509-1980.

If significant painting, steam, fire, or chemical release occurs such that the HEPA filter or charcoal adsorber could become contaminated from the fumes, chemicals or foreign material, the same tests and sample analysis shall be performed as required for operational use. The determination of what is significant shall be made by the Vice President-TMI Unit 1.

Operation of the Auxiliary and Fuel Handling Building Exhaust Fans each month for at least ten (10) hours will demonstrate operability of the fans.

Bases

The FHB ESF Air Treatment System is a system which is normally kept in a "standby" operating status. Tests and sample analysis assure that the HEPA filters and charcoal adsorbers can perform as evaluated. The charcoal adsorber efficiency test procedure should allow for the removal of a sample from one adsorber test canister. Each sample should be at least two inches in diameter and a length equal to the thickness of the bed. The in-place test criteria and laboratory test criteria for activated charcoal will meet the guidelines of ANSI-N510-1980. If test results are unacceptable, all adsorbent in the system shall be replaced with an adsorbent qualified in accordance with ANSI-N509-1980. Any HEPA filters found defective will be replaced with filters qualified in accordance with ANSI-N509-1980.

Pressure drop across the entire filtration unit of less than 7.0 inches of water at the system design flow rate will indicate that the filters and adsorbers are not clogged by excessive amounts of foreign matter.

Operation of the system for 10 hours every month will demonstrate operability of the filters and adsorber system and remove excessive moisture buildup on the adsorbers and HEPA filters.

If significant painting, steam, fire, or chemical release occurs such that the HEPA filter or charcoal adsorber could become contaminated from the fumes, chemicals or foreign material, the same tests and sample analysis shall be performed as required for operational movement of irradiated fuel. The determination of what is significant shall be made by the Vice President-TMI Unit 1.

5.0 DESIGN FEATURES

5.1 SITE

Applicability

Applies to the location and extent of the exclusion boundary, restricted area, and low population zone.

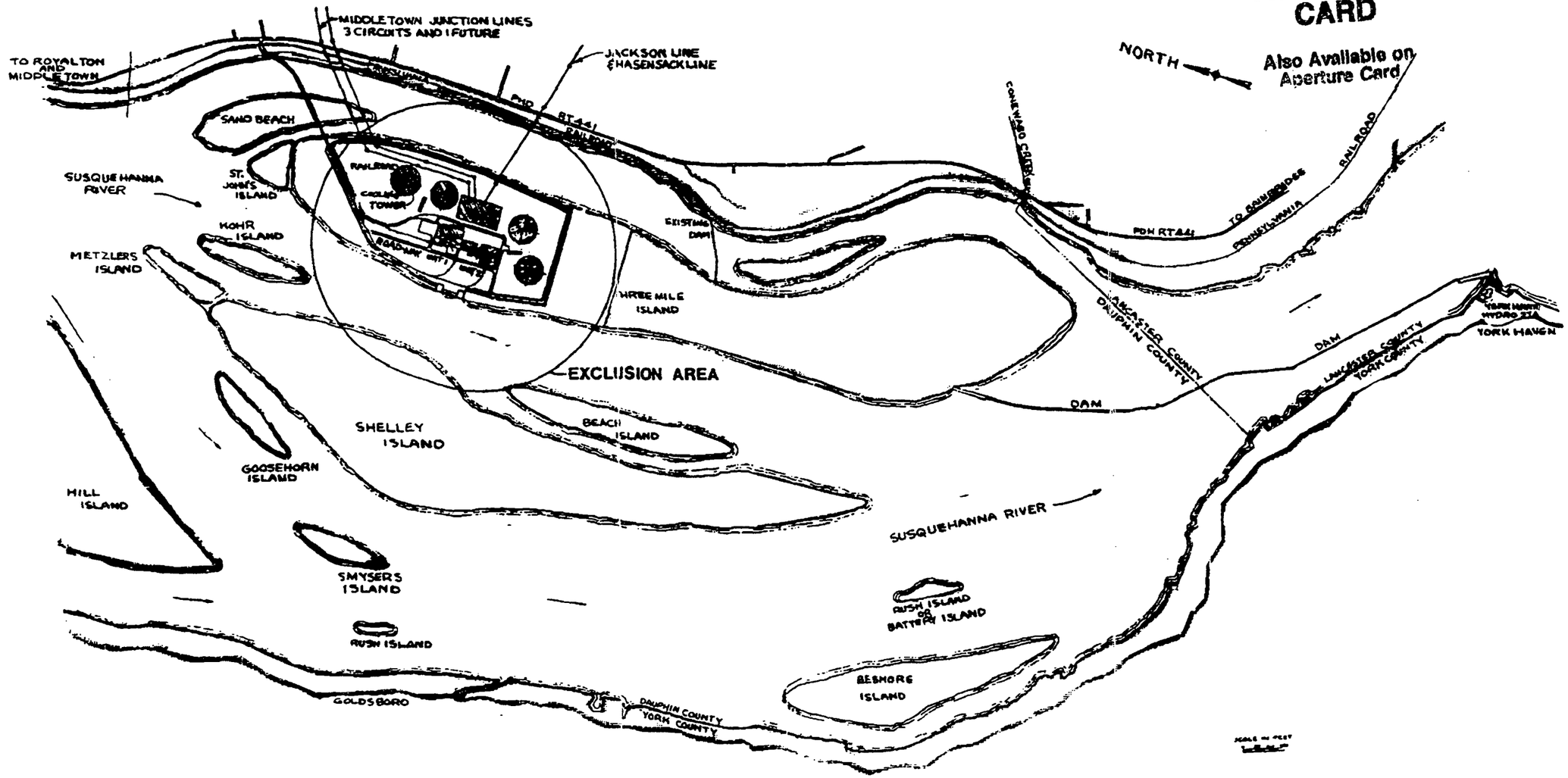
Objective

To define the above by location and distance description.

Specification

5.1.1 The Three Mile Island Nuclear Station Unit 1 is located in an area of low population density about ten miles southeast of Harrisburg, PA. It is in Londonderry Township of Dauphin County, Pennsylvania, about two and one-half miles north of the southern tip of Dauphin County, where Dauphin is coterminal with York and Lancaster Counties. The station is located on an island approximately three miles in length situated in the Susquehanna River upstream from York Haven Dam. Figure 5.1 is an extended plot plan of the site showing the plant orientation and immediate surroundings. The Exclusion Area as defined in 10 CFR 100.3, is a 2,000 ft. radius, including portions of Three Mile Island, the river surface around it, and a portion of Shelley Island, which is owned by AmerGen Energy Company, LLC. The minimum distance of 2,000 ft. occurs on the shore of the mainland in a due easterly direction from the plant as shown on Figure 5.1 for the Exclusion Area. Figure 5-3 showing the physical location of the fence defines the "Restricted Area" surrounding the plant. The minimum distance of the "Restricted Area" is approximately 560 feet and is from the centerline of the TMI Unit 2 Reactor Building to a point on the westerly shoreline of Three Mile Island. The minimum distance to the outer boundary of the low population zone is two miles as shown on T.S. Figure 5-2, which also depicts the site topography for a radius of five miles. T.S. Figure 5-3 depicts the locations of gaseous effluent release points and liquid effluent outfalls (as tabularized on page 5-10), and the meteorological tower location (designated as 'weather tower' on the figure).

APERTURE CARD
Also Available on Aperture Card



AmerGen

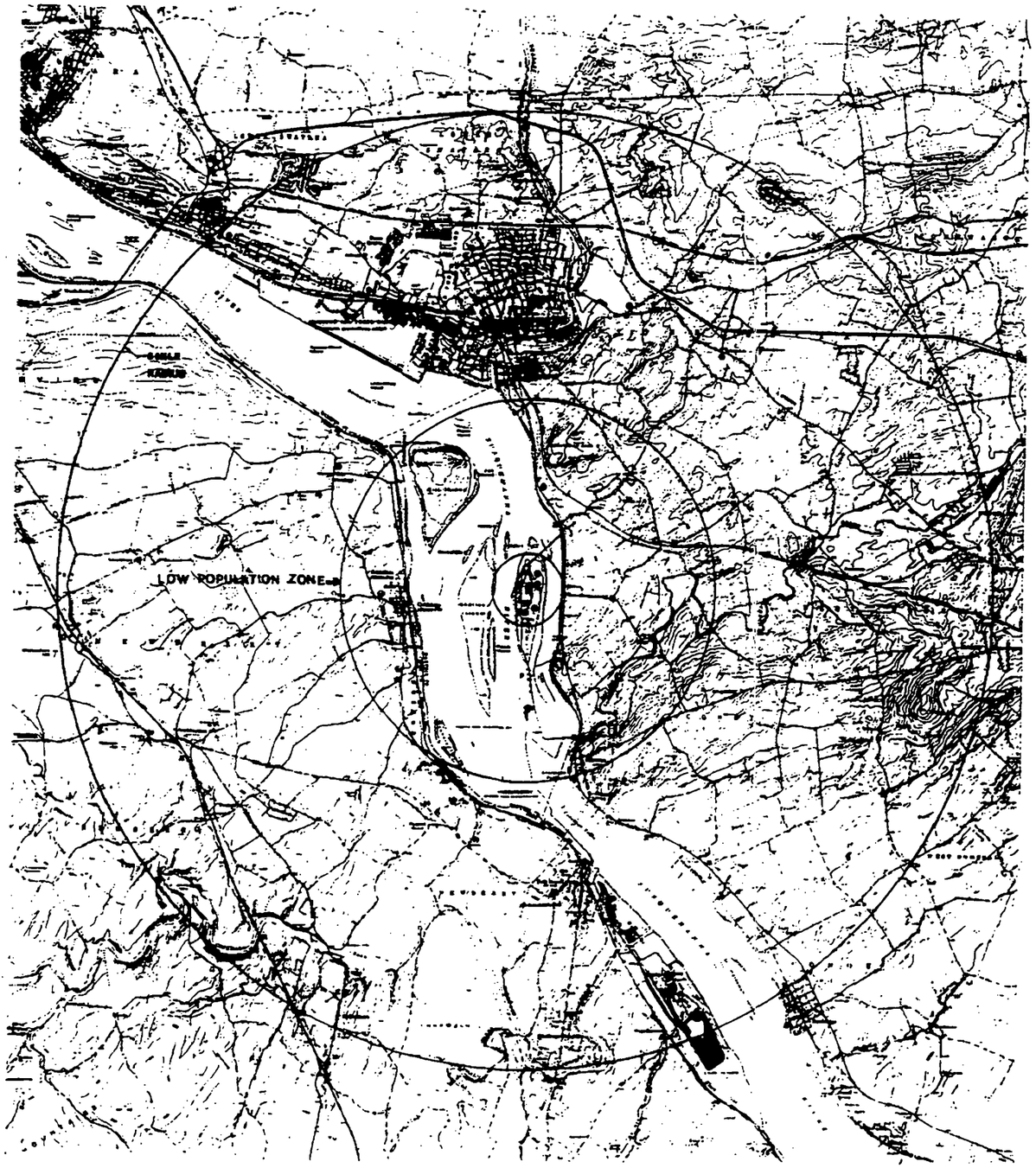
Extended Plot Plan

Three Mile Island Nuclear Station

Fig. 5-1

Amendment No. ~~149~~

9904280204-01



CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL

APERTURE CARD

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9904280204-02

AmerGen

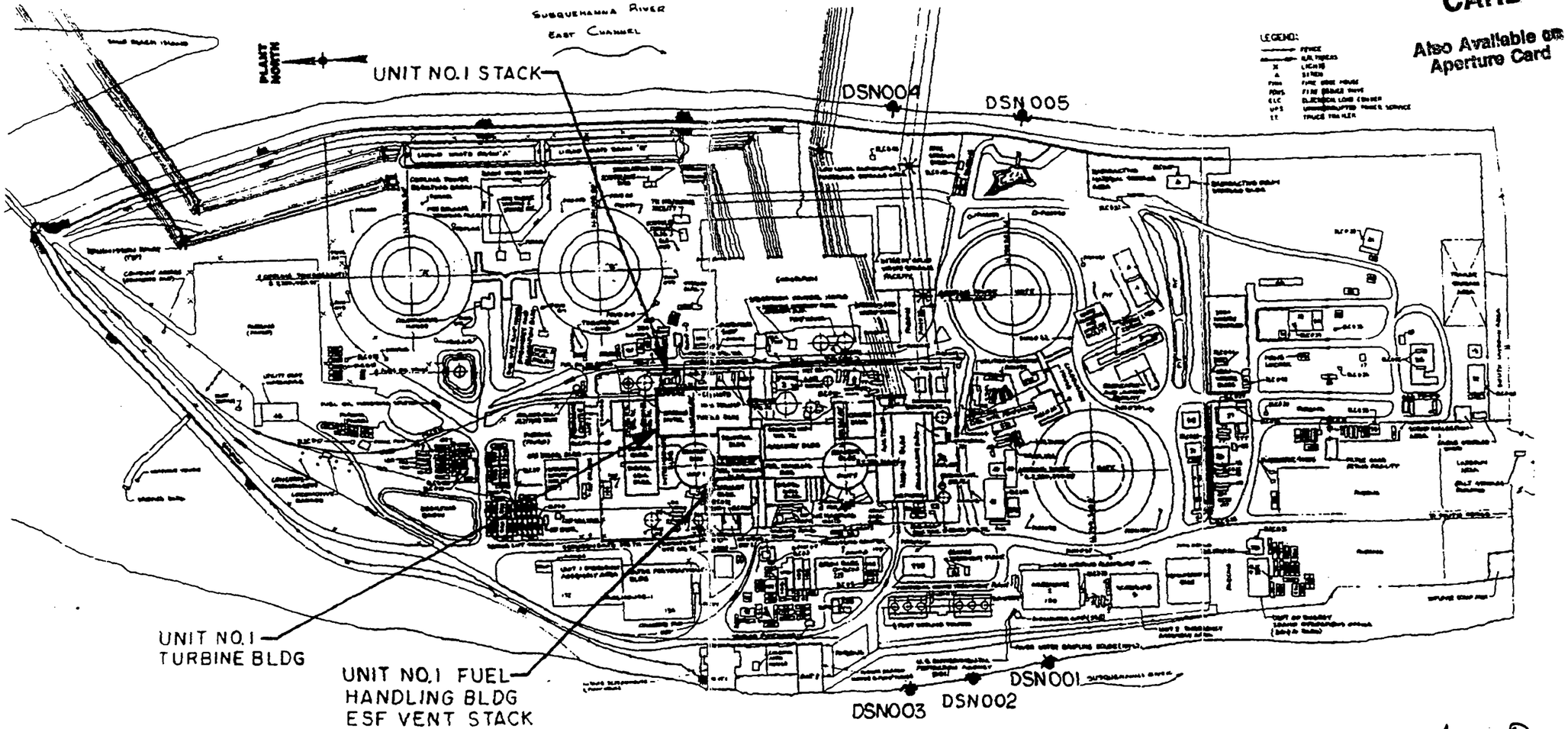
Site Topography
5 Mile Radius

Three Mile Island Nuclear Station

Fig. 5-2

APERTURE CARD

Also Available on Aperture Card



9904280204-03

AmerGen

Gaseous Effluent Release Points and Liquid Effluent Outfall Locations

Three Mile Island Nuclear Station

Fig. 5-3

6.0 ADMINISTRATIVE CONTROLS

6.1 RESPONSIBILITY

6.1.1 The Vice President-TMI Unit 1 shall be responsible for TMI-1 operations and may, at any time, delegate his responsibilities in writing to the Director, Operations and Maintenance, TMI. He shall delegate the succession of his responsibilities in writing during his absence.

6.1.2 The Shift Supervisor (or during his absence from the Control Room, a designated individual), shall be responsible for the Control Room command function. A management directive to this effect signed by the Chief Nuclear Officer shall be reissued to all unit personnel on an annual basis.

6.2 ORGANIZATION

6.2.1 CORPORATE

6.2.1.1 An onsite and offsite organization shall be established for unit operation and corporate management. The onsite and offsite organization shall include the positions for activities affecting the safety of the nuclear power plant.

6.2.1.2 Lines of authority, responsibility and communication shall be established and defined from the highest management levels through intermediate levels to and including operating organization positions. These relationships shall be documented and updated as appropriate, in the form of organizational charts. These organizational charts will be documented in the Updated FSAR and updated in accordance with 10 CFR 50.71e.

6.2.1.3 The Chief Nuclear Officer shall have corporate responsibility for overall plant nuclear safety and shall take measures to ensure acceptable performance of the staff in operating, maintaining, and providing technical support so that continued nuclear safety is assured.

6.2.2 UNIT STAFF

6.2.2.1 The Vice President-TMI Unit 1 shall be responsible for overall site safe operation and shall have control over those on site activities necessary for safe operation and maintenance of the site.

6.2.2.2 The unit staff organization shall meet the following:

a. Each on-duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1.

b. At least one licensed Reactor Operator shall be present in the control room when fuel is in the reactor.

6.3 UNIT STAFF QUALIFICATIONS

6.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI/ANS 3.1 of 1978 for comparable positions unless otherwise noted in the Technical Specifications. Licensed operators shall also meet the requirements of 10 CFR Part 55. Individuals who do not meet ANSI/ANS 3.1 of 1978, Section 4.5, are not considered technicians or maintenance personnel for purposes of determining qualifications but are permitted to perform work for which qualification has been demonstrated.

6.3.2 The management position responsible for radiological controls shall meet or exceed the qualifications of Regulatory Guide 1.8 of 1977. Each radiological controls technician/supervisor shall meet or exceed the qualifications of ANSI-N 18.1-1971, paragraph 4.5.2/4.3.2, or be formally qualified through an NRC approved TMI-1 Radiation Controls training program. All radiological controls technicians will be qualified through training and examination in each area or specific task related to their radiological controls functions prior to their performance of those tasks.

6.3.3 The Shift Technical Advisors shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in unit design, response and analysis of transients and accidents.

6.4 TRAINING

6.4.1 A retraining and replacement training program for the unit staff shall be maintained under the direction of the plant training manager and shall meet or exceed the requirements and recommendations of Regulatory Guide 1.8 of 1977. Licensed operator training shall also meet the requirements of 10 CFR Part 55.

6.4.2 A training program for the Fire Brigade shall be maintained and shall meet or exceed the requirements of Section 27 of the NFPA Code - 1976.

6.5 REVIEW AND AUDIT

6.5.1 TECHNICAL REVIEW AND CONTROL

The director of each department shall be responsible for ensuring the preparation, review, and approval of documents required by the activities described in 6.5.1.1 through 6.5.1.5 within his functional area of responsibility as assigned in the Review and Approval Matrix. Implementing approvals shall be performed at the cognizant manager level or above.

ACTIVITIES

6.5.1.1 Each procedure required by Technical Specification 6.8 and other procedures which affect nuclear safety, and substantive changes thereto, shall be prepared by a designated individual(s)/group knowledgeable in the area affected by the procedure. Each such procedure, and substantive changes thereto, shall be reviewed for adequacy by an individual(s)/group other than the preparer, but who may be from the same organization as the individual who prepared the procedure or change.

6.5.1.2 Proposed changes to the Appendix "A" Technical Specifications shall be reviewed by a knowledgeable individual(s)/group other than the individual(s) group who prepared the change.

6.5.1.3 Proposed modifications that affect nuclear safety to unit structures, systems and components shall be designed by an individual/organization knowledgeable in the areas affected by the proposed modification. Each such modification shall be reviewed by an individual/group other than the individual/group which designed the modification but may be from the same division as the individual who designed the modification.

6.5.1.4 Proposed tests and experiments that affect nuclear safety shall be reviewed by a knowledgeable individual(s)/group other than the preparer but who may be from the same division as the individual who prepared the tests and experiments.

6.5.1.5 Investigation of all violations of the Technical Specifications including the preparation and forwarding of reports covering evaluation and recommendations to prevent recurrence, shall be reviewed by a knowledgeable individual(s)/group other than the individual/group which performed the investigation.

6.5.1.6 All REPORTABLE EVENTS shall be reviewed by an individual/group other than the individual/group which prepared the report.

6.5.1.7 Special reviews, investigations or analyses and reports thereon as requested by the Vice President-TMI Unit 1shall be performed by a knowledgeable individual(s)/group.

6.5.1.8 The Security Plan and implementing procedures shall be reviewed by a knowledgeable individual(s)/group other than the individual(s)/group which prepared them.

6.5.1.9 The Emergency Plan and implementing procedures shall be reviewed by a knowledgeable individual(s)/group other than the individual(s)/group which prepared them.

6.5.1.10 A knowledgeable individual(s)/group shall review every unplanned onsite release of radioactive material to the environs including the preparation and forwarding of reports to the Vice President-TMI Unit 1 covering evaluations, recommendations and disposition of the corrective action to prevent recurrence.

6.5.1.11 Major changes to radwaste systems shall be reviewed by a knowledgeable individual(s)/group other than the individuals(s)/group which prepared them.

6.5.1.12 Individuals responsible for reviews performed in accordance with 6.5.1.1 through 6.5.1.4 shall include a determination of whether or not additional cross-disciplinary review is necessary. If deemed necessary, such review shall be performed by the appropriate personnel. Individuals responsible for reviews considered under 6.5.1.1, 6.5.1.3, and 6.5.1.4 shall render determinations in writing with regard to whether or not 6.5.1.1, 6.5.1.3, and 6.5.1.4 constitute an unreviewed safety question.

RECORDS

6.5.1.13 Written records of activities performed under Specifications 6.5.1.1 through 6.5.1.11 shall be maintained.

QUALIFICATIONS

6.5.1.14 Responsible Technical Reviewers shall meet or exceed the qualifications of ANSI/ANS 3.1 of 1978 Section 4.6, or 4.4 for applicable disciplines, or have 7 years of appropriate experience in the field of his specialty. Credit toward experience will be given for advanced degrees on a one-to-one basis up to a maximum of two years. Responsible Technical Reviewers shall be designated in writing.

6.5.2 INDEPENDENT SAFETY REVIEW FUNCTION

6.5.2.1 The director of each department shall be responsible for ensuring the independent safety review of the subjects described in 6.5.2.5 within his assigned area of safety review responsibility, as assigned in the Review and Approval Matrix.

6.5.2.2 Independent safety review shall be completed by an individual/group not having direct responsibility for the performance of the activities under review, but who may be from the same functionally cognizant organization as the individual/group performing the original work.

6.5.2.3 The licensee shall collectively have or have access to the experience and competence required to independently review subjects in the following areas:

a. Nuclear power plant operations
b. Nuclear engineering
c. Chemistry and radiochemistry
d. Metallurgy
e. Nondestructive testing
f. Instrumentation and control
g. Radiological safety
h. Mechanical engineering
i. Electrical engineering
j. Administrative controls and quality assurance practices
k. Emergency plans and related organization, procedures and equipment
l. Other appropriate fields associated with the unique characteristics of TMI-1.

6.5.2.4 Consultants may be utilized as determined by the cognizant department director to provide expert advice.

RESPONSIBILITIES

6.5.2.5 The following subjects shall be independently reviewed by the functionally assigned divisions:

a. Written safety evaluations of changes in the facility as described in the Safety Analysis Report, of changes in procedures as described in the Safety Analysis Report, and of tests or experiments not described in the Safety Analysis Report, which are completed without prior NRC approval under the provisions of 10CFR50.59(a)(1). This review is to verify that such changes, tests or experiments did not involve a change in the Technical Specifications or an unreviewed safety question as defined in 10CFR 50.59(a)(2). Such reviews need not be performed prior to implementation.

b. Proposed changes in procedures, proposed changes in the facility, or proposed tests or experiments, any of which involves a change in the Technical Specifications or an unreviewed safety question as defined in 10CFR 50.59(c). Matters of this kind shall be reviewed prior to submittal to the NRC.

c. Proposed changes to Technical Specifications or license amendments related to nuclear safety shall be reviewed prior to submittal to the NRC for approval.

d. Violations, deviations, and reportable events which require reporting to the NRC in writing. Such reviews are performed after the fact. Review of events covered under this subsection shall include results of any investigations made and the recommendations resulting from such investigations to prevent or reduce the probability of recurrence of the event.

e. Written summaries of audit reports in the areas specified in Section 6.5.3 and involving safety related functions.

f. Any other matters involving safe operation of the nuclear power plant which a reviewer deems appropriate for consideration, or which is referred to the independent reviewers.

6.5.2.6 QUALIFICATIONS

The independent reviewer(s) shall either have a Bachelor's Degree in Engineering or the Physical Sciences and five (5) years of professional level experience in the area being reviewed or have 9 years of appropriate experience in the field of his specialty. An individual performing reviews may possess competence in more than on specialty area. Credit toward experience will be given for advanced degrees on a one-for-one basis up to a maximum of two years.

RECORDS

6.5.2.7 Reports of reviews encompassed in Section 6.5.2.5 shall be prepared, maintained and transmitted to the cognizant department director and the Vice President-TMI Unit 1.

6.5.3 AUDITS

6.5.3.1 Audits of unit activities shall be performed in accordance with the TMI-1 Operational Quality Assurance Plan. These audits shall encompass:

a. The conformance of unit operations to provisions contained within the Technical Specifications and applicable license conditions.

b. The performance, training and qualifications of the entire unit staff.

c. The verification of the non-conformances and corrective actions program to be properly implemented and documented as related to action taken to correct deficiencies occurring in unit equipment, structures, systems or methods of operation that affect nuclear safety.

d. The performance of activities required by the Operational Quality Assurance Plan to meet the criteria of Appendix "B" 10 CFR 50.

e. The Emergency Plan and Implementing procedures.

f. The Security Plan and implementing procedures.

g. The Fire Protection Program and implementing procedures.

h. The Offsite Dose Calculation Manual (ODCM) and implementing procedures.

i. The Process Control Program and implementing procedures for solidification of radioactive wastes.

j. The performance of activities required by the Quality Assurance Program to meet criteria of Regulatory Guide 4.15, December, 1977.

k. Any other area of unit operation considered appropriate by the IOSRG or the Chief Nuclear Officer

6.5.3.2 Audits of the following shall be performed under the cognizance of the department director responsible for technical support:

a. An independent fire protection and loss prevention program inspection and audit shall be performed utilizing either qualified licensee personnel or an outside fire protection firm.

b. An inspection and audit of the fire protection and loss prevention program, by an outside qualified fire consultant.

RECORDS

6.5.3.3 Audit reports encompassed by sections 6.5.3.1 and 6.5.3.2 shall be forwarded for action to the management positions responsible for the areas audited within 60 days after completion of the audit. Upper management shall be informed per the Operation Quality Assurance Plan.

6.5.4 INDEPENDENT ONSITE SAFETY REVIEW GROUP (I0SRG) STRUCTURE

6.5.4.1 The I0SRG shall be a full-time group of engineers, experienced in nuclear power plant engineering, operations and/or technology, independent of the unit staff, and located on site.

ORGANIZATION

6.5.4.2 a. The I0SRG shall consist of a manager and a minimum staff of 3 members who meet the qualifications of 6.5.4.5. Group expertise shall be multi-disciplined.

b. In the event of an unanticipated vacancy in the IOSRG staff, the number of staff can be two (2) members for a period of not to exceed six (6) months while the vacancy is being filled.

c. The IOSRG shall report to the director responsible for nuclear quality assurance.

FUNCTION

6.5.4.3 The periodic review functions of the IOSRG shall include the following on a selective and overview basis:

1) Evaluation for technical adequacy and clarity of procedures important to the safe operation of the unit.

2) Evaluation of unit operations from a safety perspective.

3) Assessment of unit nuclear safety programs.

4) Assessment of the unit performance regarding conformance to requirements related to safety.

5) Any other matter involving safe operations of the nuclear power plant that the onsite IOSRG manager deems appropriate for consideration.

AUTHORITY

6.5.4.4 The IOSRG shall have access to the unit and unit records as necessary to perform its evaluations and assessments. Based on its reviews, the IOSRG shall provide recommendations to the management positions responsible for the areas reviewed.

QUALIFICATIONS

6.5.4.5 The IOSRG engineers shall have either: (1) a Bachelor's Degree in Engineering or the Physical Sciences and three years of professional level experience in the nuclear power field including technical supporting functions, or (2) eight years of appropriate experience in nuclear power plant operations and/or technology. Credit toward experience will be given for advance degrees on a one-to-one basis up to a maximum of two years.

RECORDS

6.5.4.6 Reports of evaluations and assessments encompassed in Section 6.5.4.3 shall be prepared, approved, and transmitted to the director responsible for nuclear quality assurance, the Vice President-TMI Unit 1, the Chief Nuclear Officer and the management positions responsible for the areas reviewed.

6.6 REPORTABLE EVENT ACTION

6.6.1 The following actions shall be taken for REPORTABLE EVENTS:

a. The Nuclear Regulatory Commission shall be notified and a report submitted pursuant to the requirements of Section 50.73 to 10 CFR 50, and

b. Each REPORTABLE EVENT shall undergo an independent safety review pursuant to Specification 6.5.2.5.d.

6.7 SAFETY LIMIT VIOLATION

6.7.1 The following actions shall be taken in the event a safety limit is violated:

a. The reactor shall be shutdown and operation shall not be resumed until authorized by the Nuclear Regulatory Commission.

b. An immediate report shall be made to the Director, Operations and Maintenance and Vice President-TMI Unit 1, and the event shall be reported to NRC in accordance with 10 CFR 50.72.

c. A complete analysis of the circumstances leading up to and resulting from the occurrence shall be prepared by the unit staff. This report shall include analysis of the effects of the occurrence and recommendations concerning operation of the unit and prevention of recurrence. This report shall be submitted to the Director, Operations and Maintenance and the Vice President-TMI Unit 1. The safety limit violation report shall be submitted to NRC in accordance with 10 CFR 50.73.

6.8 PROCEDURES AND PROGRAMS

6.8.1 Written procedures shall be established, implemented and maintained covering the items referenced below:

a. The applicable procedures recommended in Appendix "A" of Regulatory Guide 1.33, Revision 2, February 1978.

b. Surveillance and test activities of equipment that affects nuclear safety and radioactive waste management equipment.

c. Refueling Operations.

d. Security Plan Implementation.

e. Fire Protection Program Implementation.

f. Emergency Plan Implementation.

g. Process Control Program Implementation.

h. Offsite Dose Calculation Manual Implementation.

i. Quality Assurance Program for effluent and environmental monitoring using the guidance in Regulatory Guide 4.15, Revision 1.

j. Plant Staff Overtime, to limit the amount worked by staff performing safety-related functions in accordance with NRC Policy Statement on working hours (Generic Letter No. 82-12).

6.8.2 Further, each procedure required by 6.8.1 above, and substantive changes thereto, shall be reviewed and approved as described in 6.5.1 prior to implementation and shall be reviewed periodically as set forth in administrative procedures.

6.8.3 Temporary changes to procedures of 6.8.1 above may be made provided:

a. The intent of the original procedure is not altered;

b. The change is approved by two members of the licensee's management staff qualified in accordance with 6.5.1.14 and knowledgeable in the area affected by the procedure. For changes which may affect the operational status of unit systems or equipment, at least one of these individuals shall be a member of unit management or supervision holding a Senior Reactor Operator's License on the unit.

c. The change is documented, reviewed and approved as described in 6.5.1 within 14 days of implementation.

6.13 PROCESS CONTROL PROGRAM (PCP)

6.13.1 Licensee initiated changes to the PCP:

1. Shall be submitted to the NRC in the Annual Radioactive Effluent Release Report for the period in which the changes were made. This submittal shall contain:

   a. sufficiently detailed information to justify the changes without benefit of additional or supplemental information;

   b. a determination that the changes did not reduce the overall conformance of the solidified waste product to existing criteria for solid wastes; and,

   c. documentation that the changes have been reviewed and approved pursuant to 6.8.2.

2. Shall become effective upon review and approval by licensee management.

6.14 OFFSITE DOSE CALCULATION MANUAL (ODCM)

6.14.1 Licensee initiated changes to the ODCM:

1. Shall be submitted to the NRC in the Annual Radioactive Effluent Release Report for the period in which the changes were made. This submittal shall contain:

   a. sufficiently detailed information to justify the changes without benefit of additional or supplemental information;

   b. a determination that the changes did not reduce the accuracy or reliability of dose calculations or setpoint determinations; and

   c. documentation that the changes have been reviewed and approved pursuant to 6.8.2.

2. Shall become effective upon review and approval by licensee management.

6.15 DELETED

6.16 POST-ACCIDENT SAMPLING PROGRAMS NUREG 0737 (II.B.3, II.F.1.2)

Program which will ensure the capability to accurately sample and analyze vital areas under accident conditions have been implemented.

The following programs have been established:

1. Iodine and Particulate Sampling
2. Reactor Coolant System
3. Containment Atmosphere Sampling

Each program shall be maintained and shall include the following:

1. Training of personnel,
2. Procedures, and
3. Provisions for maintenance of sampling and analysis equipment.

6.17 MAJOR CHANGES TO RADIOACTIVE WASTE TREATMENT SYSTEMS

6.17.1 Licensee initiated safety related changes to the radioactive waste system (liquid, gaseous and solid):

1. Shall be reported to the Commission in the Annual Report (Specification 6.9.1B) for the period in which the evaluation was reviewed. The discussion of each change shall contain:

   a. A summary of the evaluation that led to the determination that the change could be made in accordance with 10 CFR 50.59;

   b. Sufficient detailed information to totally support the reason for the change without benefit of additional or supplemental information;

   c. A detailed description of the equipment, components and processes involved and the interfaces with other plant systems;

   d. An evaluation of the change which shows the predicted releases of radioactive materials in liquid and gaseous effluents and/or quantity of solid waste that differ from those previously predicted in the license application and amendments thereto;

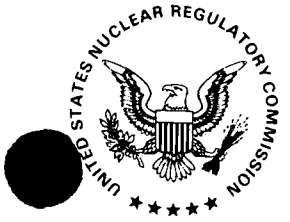
   e. An evaluation of the change which shows the expected maximum exposures to individuals in the unrestricted area and to the general population that differ from those previously estimated in the license application and amendments thereto;

   f. A comparison of the predicted releases of radioactive materials, in liquid and gaseous effluents and in solid waste, to the actual releases for the period prior to when the changes are to be made;

   g. An estimate of the exposure to plant operating personnel as a result of the change; and

   h. Documentation of the fact that the change was reviewed and approved.

2. Shall become effective upon review and approval in accordance with Section 6.5.1.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

TRANSFER OF FACILITY OPERATING LICENSE

FROM GENERAL PUBLIC UTILITIES NUCLEAR, INC., ET AL.

TO AMERGEN ENERGY COMPANY, LLC

AND APPROVAL OF CONFORMING AMENDMENT

THREE MILE ISLAND NUCLEAR STATION, UNIT 1

DOCKET NO. 50-289

1.0 INTRODUCTION

By application dated December 3, 1998, AmerGen Energy Company, LLC (AmerGen) and GPU Nuclear, Inc. (GPUN), acting for itself and on behalf of the Metropolitan Edison Company (Met-ED), Jersey Central Power and Light Company (JCP&L), and Pennsylvania Electric Company (Penelec), requested that the U.S. Nuclear Regulatory Commission (NRC) consent to the transfer of Facility Operating License No. DPR-50 for Three Mile Island Nuclear Station, Unit 1 (TMI-1) from GPUN to AmerGen. The application also requested the approval of a conforming license amendment to reflect the proposed transfer. The NRC staff reviewed the initial application and determined that additional information was needed to complete the review. On December 21, 1998, a request for additional information (RAI) was sent to GPUN and AmerGen related to technical and financial qualification issues. GPUN and AmerGen sent supplemental information dated January 11, 1999, in response to the NRC staff's RAI. Additional supplemental information was received on February 4, 1999. The supplemental information did not expand the scope of the application as originally noticed in the *Federal Register.*

Met-Ed, JCP&L, and Penelec (doing business as, and hereinafter referred to collectively as, GPU Energy) are wholly owned electric utility subsidiaries of GPU, Inc. (GPU), an electric utility holding company registered under the Public Utility Holding Company Act of 1935. GPUN, which is also a wholly owned subsidiary of GPU, is the licensed operator of TMI-1, and the GPU Energy companies are the licensed owners of TMI-1. Met-Ed owns 50% of TMI-1, and JCP&L and Penelec each own 25%; these three companies own the same respective shares of Three Mile Island Nuclear Station, Unit 2 (TMI-2). Upon completion of the proposed transfer, AmerGen will become the sole licensed owner and operator of TMI-1. The application does not propose any transfer of the TMI-2 license to AmerGen.

ENCLOSURE 3

AmerGen is a limited liability company (LLC) formed to acquire and operate nuclear power plants in the United States; its principal office is located in Wayne, Pennsylvania. AmerGen is organized under the laws of the State of Delaware pursuant to the AmerGen LLC Agreement among PECO Energy Company (PECO Energy, or PECO), a Pennsylvania company; British Energy plc (British Energy, or BE, plc), a Scottish corporation; and British Energy, Inc. (BE, Inc.), a Delaware corporation that is a wholly owned subsidiary of British Energy. British Energy is a party to the AmerGen LLC Agreement, but only PECO Energy and BE, Inc., are members of AmerGen, with each holding a 50% ownership interest in AmerGen.

In October 1997, GPU announced its intention to begin divesting its generation assets through an auction process (divestiture process), reflecting GPU's emerging strategy of concentrating on its core business of electricity delivery to customers rather than continuing to use some of its resources to expand generation capacity. GPU's decision to divest also was in response to the ongoing restructuring of the U.S. electric utility industry and to State restructuring legislation and orders requiring the unbundling of utility functions and the transition to full retail competition in both Pennsylvania and New Jersey. The sale of TMI-1 to AmerGen is part of the divestiture process, and the Pennsylvania Public Service Commission has stated its approval of this sale, pursuant to a final order dated October 20, 1998, approving a joint petition for settlement, dated September 23, 1998.

Appendix A to the application states that as of October 15, 1998, GPU Energy, GPUN, and AmerGen had executed the TMI-1 asset purchase agreement, under which GPU Energy and GPUN will transfer their interests in TMI-1 and rights under the license to AmerGen. Subject to certain adjustments, GPU Energy and GPUN's consideration for the sale of TMI-1 will be as follows: AmerGen's payment of $23 million at the closing date of the sale; AmerGen's payment of a total of approximately $77 million in nuclear fuel payments spread over the 5 years following the closing; and AmerGen's possible additional payments from 2002 through 2010 based upon the market price of electricity as discussed in the asset purchase agreement. The closing date of the sale is dependent upon receiving all required regulatory approvals and is scheduled to occur promptly once all precedent conditions are satisfied and after receipt of the necessary approvals.

Pursuant to 10 CFR 50.80, no license shall be transferred, directly or indirectly, through the transfer of control of the license, unless the Commission shall give its consent in writing. Such action is contingent upon the Commission's determination that the transferee is qualified to hold the license, and that the transfer is otherwise consistent with applicable provisions of law, regulations, and orders of the Commission.

2.0 FINANCIAL QUALIFICATIONS ANALYSIS

A. Background

In the application for transfer of the TMI-1 license, AmerGen submits that "it qualifies as an electric utility for purposes of the exemption from demonstrating financial qualifications" pursuant to 10 CFR 50.33(f). In its supplemental submittal to the NRC dated January 11, 1999, AmerGen states that it will sell power to GPU Energy through 2001 under terms of a power purchase agreement subject to jurisdiction by the Federal Energy Regulatory

Commission (FERC). Thus, throughout the duration of this power purchase agreement, AmerGen claims it will be a "public utility" with rates subject to regulation by FERC under the Federal Power Act and believes also that it should be considered an "electric utility" within the meaning of the term's definition in 10 CFR 50.2 for purposes of 10 CFR 50.33(f). After the power purchase agreement expires, AmerGen states that it intends to recover its cost of generating electricity by selling power at market-based rates accepted by FERC.

The staff finds that AmerGen does not qualify as an "electric utility" as defined in the Commission's regulations (10 CFR 50.2). However, the staff has determined that AmerGen meets the financial qualifications requirements for a non-electric utility pursuant to 10 CFR 50.33(f). AmerGen, as both a newly formed entity and a non-electric utility applying to own and to operate a nuclear power plant, is subject to a more detailed financial qualifications review by the NRC than an established electric utility. Specifically, AmerGen must meet the requirements of 10 CFR 50.33(f) by providing information that shows the following:

(1) As a non-electric utility applicant for an operating license, it possesses or has reasonable assurance of obtaining the funds necessary to cover estimated operation costs for the period of the license. Also, it must submit estimated total annual operating costs for the first 5 years of facility operation and indicate the source(s) of funds to cover these costs.

(2) As a newly formed entity organized primarily for the purpose of operating a nuclear power plant, it must show (a) the legal and financial relationships it has or proposes to have with its stockholders or owners; (b) its financial ability to meet any contractual obligation to the entity which they have incurred or proposed to incur; and (c) any other information considered necessary by the Commission to enable it to determine the applicant's financial qualification.

Also, 10 CFR 50.33(k)(1) requires that AmerGen must provide information as described in 10 CFR 50.75 indicating reasonable assurance that funds will be available to decommission the facility.

B. Discussion

In support of AmerGen's claim that it has reasonable assurance of obtaining the necessary funds to operate TMI-1, the application contains two proprietary versions of TMI-1 projected income statements for the period from January 2000 until the end of the current TMI-1 license in the spring of 2014. The first version is based on assumptions developed primarily by GPU Energy and adapted by AmerGen for the application; the second version reflects the lower market price projections used by AmerGen in evaluating the TMI-1 acquisition. (AmerGen refers to the second version as the "deal strike price" version.) The application states that, under either set of assumptions, the projected operating revenues for TMI-1 show a sufficient source of funds to meet its ongoing operating expenses and, therefore, should satisfy this aspect of NRC financial qualifications requirements.

For both versions, some significant year-to-year variations occur within each of the categories of operating revenues, operating expenses, and net income, primarily because of the impact of planned outage schedules. But generally, AmerGen's forecast trend for all three of these financial variables is upward over the 14 full years of operation (from 2000 through 2013).

As shown in the following table, the first version of the projected income statement (with higher market price projections) forecasts annual operating revenues in a [ ] range for the first 4 years of the period (2000-2003), increasing to a range of [ ] in the last 4 full years (2010-2013). The trend in annual operating expenses from 2000-2013 generally increases also, from being in the range of [ ] per year early in the period, to [ ] per year during the last 4 years. Since revenues in the first version are projected to increase faster than expenses over the period, the projected net income range also increases over time--from a range of about [ ] per year from 2000-2003 (averaging about [ ] per year for this 4-year period), compared to about [ ] from 2010-2013 (averaging about [ ] per year for these 4 years).

SUMMARY OF PROJECTED INCOME STATEMENTS (STATED IN $MILLIONS PER YEAR)

	FIRST VERSION		SECOND VERSION	
	2000-2003	2010-2013	2000-2003	2010-2013
Operating Revenues Range	[			]
Operating Expenses Range	[			]
Net Income Range	[			]
Average Annual Net Income	[			]

The table shows that in the second version both projected revenues and net income are lower than in the first version. Annual operating expense projections in both versions are identical. The table shows net income ranging from [ ] for 2010-2013 (averaging about [ ] per year), compared to [ ] for these same years of the first version (with its average of about [ ] per year). Within the second version, as in the first, revenues increase faster than expenses and annual net income is forecast to increase.

In further support of its claim that it will have reasonable assurance of adequate funding to own and to operate TMI-1, AmerGen provides (1) a proprietary version of its projected opening balance sheet (showing its anticipated assets, liabilities, and capital as of the closing date); and (2) letter agreement commitments by PECO and British Energy each to make $11.5 million in capital contributions sufficient to make the $23 million in closing payments as defined in the asset purchase agreement. AmerGen states that it expects its revenues from the sale of electricity to provide it with working capital on a continuing basis.

The line items in the projected balance sheet and income statements, as well as AmerGen's explanation of its treatment of these items, are generally acceptable to the staff. Certain line items, such as capital additions, fuel amortization, and depreciation, required some

supplemental explanation to the NRC upon request, and this was supplied satisfactorily by AmerGen in its submittal of January 11, 1999.

The staff found only one line item requiring extensive review, the projected revenues from 2000-2013 in both versions of the income statements. Projected revenues are the product of expected kilowatt-hour sales multiplied by AmerGen's market price assumptions as stated in the supporting schedules for the income statements. Projected revenues and net income in both versions are more than adequate to cover expected TMI-1 expenses and to provide AmerGen's owners with favorable returns on their expected investment in the facility. However, in a competitive market, the possibility exists that prices, revenue, and net income levels could be significantly lower than anticipated by AmerGen during some portions of the 14-year projection period and that this could mean less funding available for TMI-1 operations. Such a possibility requires analysis regarding the potential implications for public health and safety, especially since the AmerGen request is the first of its kind in the United States in which an unregulated non-electric utility is seeking to acquire full ownership of a nuclear power reactor.

The staff analysis focuses on how sensitive the AmerGen revenue forecasts are to lower market prices for the purpose of establishing a projected market price "floor" below which AmerGen would begin to have difficulty covering its TMI-1 operating expenses by relying on TMI-1 revenues. This was done by determining the average annual simple growth rate for the TMI-1 market price that would produce virtually zero net income (or a breakeven level) over the period from 2000 through 2013, and comparing this growth rate to the higher average annual growth rates in the market prices in AmerGen's two forecasts. The breakeven growth rate was calculated by assuming that revenues equal operating expenses for TMI-1 during its last 4 full years of operation (2010 - 2013), and then dividing the assumed revenues by the power expected to be generated by TMI-1 from 2010 - 2013. The resulting quotient was the breakeven price per kwh, which was divided by the initial price per kwh in the year 2000. The growth rate was then calculated. If AmerGen were to experience this lower (or floor) level of prices for an extended period, AmerGen or its owners might decide to continue operating TMI-1 without profits or, at a certain point, to cease TMI-1 operations permanently.

The base market price in the two AmerGen forecasts is approximately [ ] cents per kilowatt-hour (kwh) in the year 2000, which increases at a simple growth rate averaging about [ ] per year for the first version and about [ ] per year for the second version. Staff calculations indicate that the average growth rate for TMI-1 to break even (the floor price) is about [ ] per year, which is significantly lower than the growth rates for the two versions.

The next step in the staff's analysis is to try to determine how reasonable or probable these various growth rates might be for the forecast period 2000-2013. Forecasts of electric rates in competitive markets are subject to many unknown factors that make such predictions highly speculative at best, but the reasonableness of various growth rates may be assessed by considering various factors that could provide some indication of future electricity prices. For example, recent trends in electricity prices could allow some inferences concerning how such prices might continue to change in the more competitive environment expected in the electric power industry in the future.

Data on U.S. retail electricity prices from the Energy Information Administration (EIA) indicate that the overall price (all sales categories) has declined from its highest level in 1993 (at 6.93 cents per kwh) to 6.88 cents per kwh by 1997. The average retail price for the industrial category declined from 4.85 cents per kwh in 1993 to 4.56 cents per kwh in1997. Considering this downward trend in retail prices and increasing competition in the electric power industry, the general trend of electricity prices at the retail level is likely to continue downward.

However, it is difficult to predict the direction of prices likely to be paid for TMI-1 power in its market area. AmerGen expects to be selling power primarily at market-based prices. Such prices can vary significantly from one region to another and may not correlate with changes in retail prices. Thus, the recent downward trend in U.S. retail prices may not necessarily produce a significant downward influence on TMI-1 prices, although this trend is not a positive indicator for future TMI-1 prices, especially since competition in the industry is expected to intensify. As a contrary trend, the North American Electric Reliability Council (NERC) projects that capacity margins will decline substantially in the Mid-Atlantic Area Council (MAAC) region in which TMI-1 operates from 1998 to 2007. (See NERC's Reliability Assessment 1998-2007, October 1998, page 11.) This trend would tend to cause market prices of electricity to increase, other factors remaining equal.

After reviewing several forecasts of U.S. electricity prices and other relevant information (such as a forecast of regional capacity margins), the staff concludes that attempting to forecast the growth rate, or even the direction of change, for market-based prices in the TMI-1 market area is too speculative to be useful for its contingency analysis. The staff's most important conclusion from this analysis, however, is that, even if prices for TMI-1 power were to change at an average annual rate much lower than that anticipated by AmerGen, this does not preclude AmerGen from operating and maintaining TMI-1 in a manner that would protect public health and safety. Also, AmerGen's owners have committed to provide additional funds to cover operating expenses as necessary to maintain adequate safety conditions during any periods in which operating revenues from TMI-1 might not cover operating expenses. Furthermore, if TMI-1 profits were inadequate for the owners, they could decide to cease TMI-1 operations; and, if this were to occur, AmerGen states that it would have the right to obtain adequate funding to ensure safe conditions at TMI-1 in a transition to decommissioning (as is noted in the application and as is discussed in more detail below).

PECO and British Energy each, through additional letter agreements with AmerGen, have entered into financial arrangements that provide further assurance that AmerGen will have sufficient funds available to meet its operating expenses for TMI-1. Pursuant to the terms of these agreements, PECO and British Energy will provide funds up to a certain specified amount at any time that the AmerGen Management Committee determines that, in order to protect public health and safety or to comply with NRC requirements, or both, such funds are necessary to meet the ongoing operating expenses of TMI-1 or such funds are necessary to safely maintain TMI-1.

These letter agreements state, however, that the liability to provide funding under each agreement shall not exceed the lesser of either (1) 50 percent of the total funding required by AmerGen from time to time pursuant to the two letter agreements or (2) $32.5 million cumulatively over the life of the agreements. Thus, AmerGen will be able to call upon resources of up to $65 million if such funds are necessary to meet its TMI-1 expenses or to meet its safety obligations, or both. AmerGen states that, on the basis of the average estimated operating and maintenance (O&M) costs for TMI-1 of approximately $130 million per year, the likely estimated fixed operating cost of a 6-month outage at TMI-1 should be approximately $65 million. AmerGen concludes that the combined commitment of up to $65 million by PECO and British Energy would provide funds sufficient to pay the fixed costs of an outage lasting 6 months, as suggested in the guidance provided in the NRC's "Standard Review Plan (SRP) on Power Reactor Licensee Financial Qualifications and Decommissioning Funding Assurance" (NUREG-1577).

These funding arrangements are subject to the understanding that PECO Energy or British Energy shall have the right to demand that AmerGen permanently cease TMI-1 operations rather than use funds available under these agreements for continued operations, provided that, in such an event, AmerGen shall nevertheless have the right to continue to obtain the funds necessary to ensure the safe and orderly shutdown of TMI-1 and to continue the safe maintenance of TMI-1 until AmerGen can certify that the fuel has been permanently removed from the reactor vessel. AmerGen states that the financial ability of both PECO Energy and British Energy to meet their obligations under the two letter agreements is adequately demonstrated in the several recent years of financial statements for both companies as provided in Exhibit 2 of Appendix A of the application. The staff has examined these financial statements and concurs with AmerGen's opinion.

In its supplemental letter to the NRC dated January 11, 1999 (hereinafter referred to as "supplement"), AmerGen states that it does not anticipate that it will ever need to draw upon the $65 million commitment because it expects that both PECO Energy and British Energy will make adequate contributions to AmerGen, on an ongoing basis, as necessary to ensure AmerGen's ability to fund the operation and maintenance of TMI-1. AmerGen also states that if it ever were forced to draw upon the $65 million commitment, it would exercise care to ensure that it either maintains funds, or holds in reserve the right to draw upon funds, sufficient to ensure that AmerGen would be able to fund the transition to a safe shutdown. AmerGen states that it will inform the NRC in writing at any time that it draws upon the $65 million commitment and that it recognizes that the NRC has the authority to assure that adequate funds will remain available to fund the transition to safe shutdown, should a question arise regarding the availability of funds for such a purpose. (See supplement, page 3.)

As noted earlier, a newly formed entity organized primarily for the purpose of operating a nuclear power plant must provide certain information about its legal and financial relationships with its stockholders or owners and about its financial ability to meet any contractual obligation to the entity that it has incurred or proposed to incur. The application provides detailed information in Appendix A and its various exhibits regarding the legal and financial relationships between AmerGen and PECO Energy and BE, Inc., as its owners, including (1) various agreements that commit financial support from them to AmerGen (some of the information has already been discussed herein); (2) the Certificate of Formation of AmerGen

Energy Company, LLC, dated August 14, 1997; and (3) the Limited Liability Agreement of AmerGen Energy Company, LLC among PECO Energy Company, British Energy plc, and British Energy, Inc., dated August 18, 1997. The application contains extensive documentation of the financial ability of PECO Energy and British Energy to provide adequate funding to AmerGen and of AmerGen's forecast of revenues and profits from operating TMI-1 at levels that are expected to cover anticipated costs and provide adequate dividends to its owners as well. Furthermore, the application contains other important agreements necessary for the operation of TMI-1, such as the interconnection agreement between AmerGen and Metropolitan Edison Company.

C. Conclusion With Respect to Financial Qualifications

On the basis of information in the application for the transfer of the TMI-1 license as cited herein, the staff concludes that AmerGen has provided reasonable assurance of being able to obtain adequate funding to own TMI-1 and to cover estimated operation costs for the period of the current TMI-1 license, as well as sufficient documentation of specific legal and financial relationships that support this conclusion. However, to ensure that adequate funds are available as might be necessary to fund the transition to a safe shutdown, the NRC staff believes that the commitment stated in the application to allow AmerGen to draw up to $65 million from PECO Energy and BE, plc, should be made a condition of the Order approving Transfer of the License and the license, as follows: AmerGen shall take no action to cause PECO or British Energy, plc, to void, cancel, or diminish the $65 million contingency commitment from PECO Energy and BE, plc, the existence of which is represented in the application, or cause them to fail to perform or impair their performance under the commitment, or remove or interfere with AmerGen's ability to draw upon the commitment. Also, AmerGen shall inform the NRC in writing at any time that it draws upon the $65 million commitment.

3.0 DECOMMISSIONING FUNDING ASSURANCE

A. Amount of Decommissioning Funds

Pursuant to 10 CFR 50.75(b), each power reactor licensee must certify that it will provide decommissioning funding assurance in an amount that may be more but not less than the formulas in 10 CFR 50.75(c)(1) and (2). These formulas are based on the size and type of the reactor and on cost escalation factors for labor, energy, and low-level waste (LLW) disposal costs. The LLW disposal cost factor is to be derived from the latest version of NUREG-1307, "Report on Waste Burial Charges," which is currently Revision 8. Revision 8 allows licensees a variety of methods by which they may estimate disposal costs of LLW, including disposition by waste vendors. (See, for example, page 6, Example 3, in Revision 8.) In supplementary information filed on January 11, 1999, responding to an NRC request for additional information, AmerGen used Revision 8 and calculated the required funding using the formulas in 10 CFR 50.75(c) and Revision 8. On the basis of this calculation, AmerGen concludes that it currently must certify that it will provide at least $268.87 million to comply with the requirements of 10 CFR 50.75(b). The NRC staff has verified AmerGen's calculation and accepts this amount as accurate.

In its application for transfer of the TMI-1 operating license, AmerGen indicates that, as a condition of the sale, the current owners and licensees, GPU Nuclear (together with its affiliates Pennsylvania Electric Company, Metropolitan Edison Company, Jersey Central Power

and Light Company, which are doing business as GPU Energy) have agreed to fund the decommissioning trust fund for a total that will range, depending on sale closing date, between $303 million and $320 million (AmerGen application, December 3, 1998, Appendix A, page 20 and asset purchase agreement, p. 70). This amount is based on a site-specific cost estimate performed for TMI-1 in 1996. The NRC's regulations at 10 CFR 50.75(e) allow licensees to take a credit of up to a 2 percent annual real rate of return on decommissioning trust funds on deposit. This credit may be applied toward the current estimate of decommissioning funds needed for decommissioning at the time of permanent cessation of operations. At the time AmerGen expects TMI-1 to permanently cease operations in 2014, this 2 percent credit would cause the decommissioning trust fund to grow to a range from $402.2 million to $424.7 million, depending on the actual closing date.

NRC Staff Conclusion on Amount of Decommissioning Funds

Based upon the information contained in the application to transfer the TMI-1 license, the NRC staff concludes that AmerGen has complied with the requirements in 10 CFR 50.75(b) with respect to the amount of decommissioning funds that AmerGen must certify that it will provide. The amount that AmerGen proposes to have placed in the decommissioning fund is greater than the approximately $269 million that is required under the generic formulas in 10 CFR 50.75(c). Additionally, AmerGen will be required to adjust the amount required to be available for decommissioning funding on an annual basis, pursuant to 10 CFR 50.75(b). However, in view of GPU Nuclear's commitment, included in the terms of sale of TMI-1, to prefund the TMI-1 decommissioning trust from between $303 million and $320 million, the NRC staff believes that the following condition should be applied as a condition of the Order approving Transfer of the License and the license: AmerGen shall provide decommissioning funding assurance of no less than $303 million, after payment of any taxes, deposited in the decommissioning trust fund for TMI-1 at the time of the transfer of the TMI-1 license to AmerGen.

B. Decommissioning Funding Assurance Mechanism

Pursuant to 10 CFR 50.75(b), a reactor licensee is required to provide decommissioning funding assurance by one or more of the methods described in 10 CFR 50.75(e), as determined to be acceptable by the NRC. The NRC has determined that the requirement to provide assurance of decommissioning funding is necessary to ensure the adequate protection of public health and safety. AmerGen has selected the prepayment method, coupled with an external trust fund, as provided for in 10 CFR 50.75(e)(1)(i). However, because of concerns that transfer of decommissioning trust funds from GPU Energy to AmerGen would trigger Federal income tax on the transferred amount under U.S. Internal Revenue Service (IRS) requirements, AmerGen and GPUN have proposed that GPU Energy hold the TMI-1 decommissioning trust fund for the benefit of AmerGen's decommissioning obligations until such time as the tax issue is favorably resolved with the IRS. Further, GPU Energy acknowledges and voluntarily accepts that the NRC would retain jurisdiction over GPU Energy's actions with respect to this fund, but GPU Energy and other GPU affiliates decline to remain licensees of TMI-1 upon transfer of TMI-1 to AmerGen.

Because GPU Energy declines to remain a licensee with respect to decommissioning trust fund obligations under the TMI-1 license, the NRC staff does not believe that the requirements of the prepayment option, in and of itself, have been satisfied. The NRC staff believes that the provisions of 10 CFR 50.75(e)(1)(i) require that the licensee hold the decommissioning trust fund.

However, the NRC staff also believes that the proposal to have GPU Energy hold the trust for TMI-1 until IRS tax issues are resolved can be considered a form of another assurance mechanism provided in 10 CFR 50.75(e)(1)(vi). Provided that certain safeguards with respect to maintenance of the trust and disbursal of the decommissioning funds are included in the trust language, as described below, the NRC staff believes that AmerGen's and GPU Nuclear's proposal meets the standards outlined in 10 CFR 50.75(e)(1)(vi) -- namely, that another mechanism, or combination of mechanisms, provides, as determined by the NRC upon its evaluation of the specific circumstances of each licensee submittal, assurance of decommissioning funding equivalent to that provided by the mechanisms specified in 10 CFR 50.75(e)(1)(i) - (v). (AmerGen has appended a form of a Nuclear Decommissioning Fund Master Trust Agreement to its license transfer application as Exhibit J of Appendix D.) The reasons for this conclusion are as follows:

The NRC staff views GPU Energy's holding of the decommissioning trust fund for TMI-1 to be comparable to either a parent-company guarantee or a third-party guarantee in the degree of assurance provided by such mechanisms. The NRC has agreed to accept such guarantees, provided that specified financial and other tests are met, as giving reasonable assurance of decommissioning funding, even though the guarantors are not NRC licensees for the reactor facility whose decommissioning costs are being assured. In the case of a parent-company guarantee, the guarantor is obligated to pass a financial test as specified under Appendix A to 10 CFR Part 30. If GPU Energy were subject to that test, it would pass by virtue of the following factors:

(1) It has bond ratings of A3 or Baa1 from Moody's for its long-term debt issuances.

(2) It has tangible net worth at least six times the amount of decommissioning funds being assured by a parent company guarantee. (In this case, such amount is zero, since the trust has been pre-funded. GPU Energy's actual net worth, or stockholders' equity, based on its 1997 financial statements exceeds $3 billion. GPU would meet this test even if it were required to include the prefunded amount.)

(3) It has assets located in the U.S. of at least 90 percent of its total assets.

Similarly, a guarantee by a third party such as a surety bonding company requires the bonding company to issue a guarantee to the licensee that decommissioning funds will be paid by the surety company. Regulatory Guide 1.159, "Assuring the Availability of Funds for Decommissioning Nuclear Reactors," indicates that the surety company must be listed by the U.S. Department of the Treasury in the most recent version of *Circular 570* and must have a coverage limit sufficient to cover the cost estimates for which assurance is sought (Regulatory Guide 1.159, page 1.159-15, August 1990). GPU Energy is not a commercial surety bonding company and is not, therefore, listed in *Circular 570.* The NRC staff concludes that GPU Energy's absence from *Circular 570* is not relevant because the circular is meant to provide

some minimum criteria for evaluating the financial wherewithal of surety companies, and does not include non-surety companies such as GPU Energy. Because GPU Energy will have placed in an external trust all the money for which it is obligated under the terms of the TMI-1 sale, an estimate of its financial ability to pay such funds, as evidenced by inclusion in *Circular 570*, is not relevant. Additionally, surety bonding companies do not typically set aside funds to fulfill specific guarantee obligations under the bonds they have paid. Rather, their guarantees are based on their estimated future ability to pay under the bond. In this important sense, GPU Nuclear's provision of actual funds of at least $303 million provides a level of assurance that exceeds that of surety bonding companies.

The staff believes that there are additional considerations that support a conclusion that the proposed funding assurance mechanism provides reasonable assurance. First, with the placement of funds in a trust fund, the trustee of the fund has a fiduciary obligation to disburse funds only according to the terms of the trust. The NRC staff has reviewed the terms of the trust and believes that, with the addition of certain provisions, including notification of the NRC prior to disbursement of funds from the trust, prohibition against disbursement or payment if the trustee receives written notice of NRC objection, and written consent by the NRC for any material changes to the trust agreement, additional assurance will be provided. The trust provides, *inter alia*, that funds will be reserved for the exclusive purpose of decommissioning the TMI-1 reactor, will be divided into qualified and non-qualified funds pursuant to U.S. Internal Revenue Service regulations, and will be managed by a trustee whose fiduciary duty will be to preserve the value of the trust and disburse funds only for their intended purpose. The staff believes that modifications as described later in this section will strengthen the trust agreement and provide an acceptable level of reasonable assurance. Second, even though GPU Energy intends to sell all of its electric generating capacity (and not only its nuclear plants), it will remain an electric transmission and distribution utility regulated by the Pennsylvania Public Utility Commission (PUC) and the New Jersey Board of Public Utilities (and, to a small extent, the New York Public Service Commission). Each of these regulators has, in the past, allowed GPU Energy to collect decommissioning funds for TMI-1 from ratepayers. Staff experience has been that PUCs do not normally allow funds collected in rates for specified purposes to be used for other purposes. Also, in its deregulation legislation, Pennsylvania has explicitly recognized the importance of decommissioning funding assurance. (New Jersey has recently enacted deregulation legislation.) Thus, in the staff's view, it is unlikely that the Pennsylvania and New Jersey rate regulators will allow GPU Energy to use the TMI-1 decommissioning trust fund for other than decommissioning purposes. Third, as an NRC licensee, AmerGen will be required to provide assurance that adequate funds to decommission TMI-1 will remain available. Given AmerGen's contractual agreements with GPU Energy with respect to prepayment of decommissioning funds, AmerGen has significant incentive, and GPU Energy is contractually obligated, to ensure that these contractual obligations are fulfilled. (See pages 70 to 73 of the Asset Purchase Agreement between AmerGen and GPU Nuclear, et al.) Finally, the proposal for GPU Energy to hold the decommissioning trust is intended to be only temporary -- that is, when and if the IRS taxation issue is successfully resolved, the decommissioning trust for TMI-1 will be transferred to AmerGen, as the NRC licensee. At that point, any residual NRC concerns about a non-licensee holding these decommissioning funds will be mitigated. However, the staff concludes that, even if the tax issue with the IRS is not resolved, reasonable assurance of decommissioning funding will be provided by the method that AmerGen has proposed, provided that the trust instrument is changed as specified in this SE.

NRC Staff Modifications to the Trust Agreement: The NRC staff believes that the following modifications to the trust agreement need to be made:

(1) In Article II of the trust agreement, Section 2.01 shall include provisions to limit the use of assets in both the qualified and non-qualified funds, in the first instance, to the expenses related to decommissioning of TMI-1 as defined by the NRC in its regulations and issuances, and as provided in the TMI-1 license and any amendments thereto.
(2) In Article II, Section 2.01(c) shall be deleted or the term "property" therein shall be limited to liquid assets.
(3) In Articles II and V, investments in the securities or other obligations of GPU Nuclear, Inc., PECO Energy, British Energy, plc, AmerGen, or affiliates thereof, 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 shall be prohibited.
(4) In Article II, Section 2.02 shall be amended to contain a provision that no disbursements or payments from the trust shall be made by the trustee until the trustee has first given the NRC 30 days notice of the payment. The section shall be further amended to contain a provision that no disbursements or payments from the trust shall be made if the trustee receives prior written notice of objection from the Director, Office of Nuclear Reactor Regulation.
(5) Article IV must provide that the trust agreement cannot be modified in any material respect without the prior written consent of the Director, Office of Nuclear Reactor Regulation.
(6) Section 4 of the Special Terms must specify that assets cannot be withdrawn from the trust fund, but may be transferred between the qualified and non-qualified funds for the purposes specified in this section.
(7) The appropriate section of the trust agreement shall reflect that the trustee, investment advisor, or anyone else directing the investments made in the trust shall adhere to a "prudent investor" standard, as specified in 18 CFR 35.32(3) of the Federal Energy Regulatory Commission's regulations.

NRC Staff Conclusion on Decommissioning Funding Assurance Mechanism

Based on the information contained in the application to transfer the TMI-1 license, the NRC staff concludes that, given the considerations discussed above and subject to the modifications to the trust agreement discussed in the previous section, AmerGen's proposed interim decommissioning funding assurance mechanism meets the requirements of 10 CFR 50.75(e). The staff further concludes that in order to ensure that the decommissioning trust is maintained, the following condition shall be included in the Order approving Transfer of the License and in the license: AmerGen shall take all necessary steps to ensure that the decommissioning trust is maintained in accordance with the application for the transfer of the TMI-1 license, the requirements of the Order approving Transfer of the License and the safety evaluation.

4.0 ANTITRUST CONSIDERATIONS

Section 105 of the Atomic Energy Act of 1954, as amended (the AEA), requires the Commission to conduct an antitrust review in connection with an application for a license to construct or operate a facility under Section 103 of the AEA. TMI-1 was licensed under Section 104b and, as a result, is not subject to an antitrust review by the NRC in connection with the proposed transfer of the TMI-1 license to AmerGen.

5.0 FOREIGN OWNERSHIP, CONTROL, OR DOMINATION

A. Background

Section 104d of the AEA prohibits the Commission from issuing a license for a nuclear power plant under Section 104 to "any corporation or other entity if the Commission knows or has reason to believe it is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government." The Commission's regulations at 10 CFR 50.38 contain virtually identical language to implement this prohibition. The issue addressed in this section is whether, in the NRC staff's view, AmerGen is controlled by foreign interests such that it may not be issued a license under Section 104.

The NRC has developed a draft Standard Review Plan (SRP) to document the process that the staff uses to analyze whether an applicant is owned, controlled, or dominated by foreign interests within the meaning of Section 104d. The staff has used this SRP, which was approved by the Commission for interim use until made final, as guidance for evaluating the foreign ownership considerations of the proposed purchase of TMI-1 by AmerGen.

B. Discussion

AmerGen's Ownership and Organization

AmerGen is a limited liability company formed to acquire and operate nuclear power plants in the United States. AmerGen is organized under the laws of the State of Delaware pursuant to an agreement among PECO Energy Company (PECO) (a Pennsylvania corporation), British Energy, plc (BE, plc) (a Scottish corporation), and British Energy Inc. (BE Inc.) (a Delaware corporation that is a wholly-owned subsidiary of BE, plc). PECO and BE, Inc., each owns 50 percent of AmerGen. AmerGen's 50 percent indirect ownership by BE, plc, a foreign corporation, raises the issue of whether AmerGen is owned, controlled, or dominated by foreign interests within the meaning of the prohibition contained in Section 104d of the AEA.

Guidance Relevant to the Issue of Foreign Control

The Commission has had limited experience with license transfer applications that involve the issue of foreign ownership, domination, or control. The Commission has stated that, in the context of the other provisions of Section 104d, the foreign control limitation should be given an orientation toward safeguarding the national defense and security. Guidance in the SRP provides that an applicant that is partially owned by a foreign entity, for example, foreign ownership of 50 percent or greater, may still be eligible for a license if certain conditions are imposed, such as requiring that officers and employees of the applicant who are responsible

for special nuclear material must be U.S. citizens. In addition, partial ownership must be considered in light of all of the information that bears on who in the corporate structure exercises control over what issues and what rights may be associated with certain types of ownership interests or shares.

A 1973 Atomic Energy Commission decision, relating to the transfer of several licenses issued under Section 104d of the AEA, is somewhat analogous to the situation of AmerGen and provides further guidance. This decision was cited in Exhibit 3 of Appendix 4 of the TMI-1 license transfer application. The Commission approved a request by the Gulf Oil Corporation (Gulf) to transfer licenses for three TRIGA research reactors and the Barnwell spent fuel reprocessing plant then under construction to a newly formed partnership, the General Atomic Company, that was 50 percent owned by Gulf and 50 percent owned by Scallop Nuclear, Inc., a Delaware corporation that was in turn ultimately owned by both Royal Dutch Petroleum, a Netherlands company, and Shell Transport and Trading, a British Company. In approving these transfers, the Atomic Energy Commission imposed several conditions to ensure that there would not be foreign control over the licenses being transferred.[1]

Information Provided

AmerGen has provided the information required by 10 CFR 50.33(d) and specified in Section 2.2 of the draft SRP on Foreign Ownership, Control, and Domination. AmerGen has also submitted information that essentially describes a "negation action plan" as referred to in Section 4.4 of the SRP. In addition, Exhibit 3 of Appendix A of the TMI-1 license transfer application contains a discussion of "Foreign Ownership Issues Related to the Transfer of the TMI-1 License to AmerGen In Light of British Energy's Participation in AmerGen," (the foreign ownership discussion). The staff believes that this information is sufficient to conclude that AmerGen has taken, or has committed to take, sufficient mitigating steps to ensure that AmerGen is not owned, controlled, or dominated by an alien, foreign corporation, or foreign government for the purposes of the AEA and the NRC's regulations.

As stated earlier, AmerGen is a limited liability company. Its principal place of business is Wayne, Pennsylvania. Principal officers of AmerGen include both U.S. and British citizens, with the chief executive officer (CEO) and chief nuclear officer (CNO) being U.S. citizens, and the president being a British citizen. The management committee, which directs and controls

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[1] These conditions included the following:

(1) the president and any officers of the partnership having direct responsibility for the control, and any employees having direct custody of, special nuclear material must be U.S. citizens.
(2) a separate department of General Atomic must be responsible for special nuclear material, and the head of the department must report directly to the president.
(3) the president shall be charged with the responsibility and exclusive authority of ensuring that the business and activities of the partnership are at all times conducted in a manner consistent with the protection of the common defense and security of the United States.
(4) the foregoing conditions apply to the partnership and to any entities in which the partnership shall have voting control.
(5) General Atomic will not change any of the foregoing conditions without approval of the Director of Regulation of the AEC or of the person holding any equivalent successor position with the Commission or its successor.

the affairs of AmerGen, consists of at least 50 percent U.S. citizens, including the chairman. The chief executive officer "shall employ," subject to management committee approval, officers of the company "necessary or appropriate" to conduct AmerGen's business.

In its application of December 3, 1998, AmerGen indicated that, based on filings with the U.S. Securities and Exchange Commission (SEC), "as of June 30, 1998, no alien, foreign corporation, foreign government or foreign entity owns or controls more than 5% of the outstanding voting stock of PECO Energy." AmerGen indicated that PECO Energy is aware of one foreign entity that owns 2.27 percent of PECO Energy's stock. This entity is a U.K. subsidiary of a U.S. insurance company and, therefore, is ultimately under the control of a non-foreign entity. Additionally, on March 4, 1999, Michael J. Egan submitted a supplementary letter to the NRC under affirmation, which indicated that United Bank of Switzerland AG (UBS), AG, a Swiss bank, has filed a Form 13G with the SEC. This Form 13G indicates that UBS, AG, currently owns approximately 7 percent of PECO Energy voting stock. [

] The staff has evaluated this ownership in the context of AmerGen's management committee structure and mechanisms to ensure that control over decisions on safety issues remains in the hands of the non-foreign member group of AmerGen, and the conditions of approval of the transfer set forth below that require that certain officers of AmerGen and appointees to the management committee be U.S. citizens. The staff concludes that UBS, AG's ownership of 7 percent of PECO Energy voting stock, given the special circumstances and limitations regarding UBS, AG's holding of the stock described in the March 4, 1999, letter and the context described above, does not provide the staff reason to believe that AmerGen is controlled by foreign interests within the meaning of the prohibition in Section 104 of the AEA.

BE, plc, does not have securities registered with the SEC and thus beneficial owners of BE, plc, securities are not subject to SEC filing requirements. The NRC staff has no reason to believe that BE, plc, is other than a widely-held Scottish company as represented in its financial reports.

AmerGen's Proposed Measures To Address Foreign Control Concerns

AmerGen has developed a negation action plan to address foreign control issues. The foreign ownership discussion outlines several steps that AmerGen has taken and intends to take to ensure that "all [s]afety issues" will be under the control of U.S. citizens. Under the Limited Liability Company Agreement (LLC Agreement), included with the application the "property,

business, and affairs" of AmerGen are directed and controlled by a Management Committee pursuant to Article 6.3. Under Article 6.1(a) of the LLC Agreement, PECO, through the PECO Energy Member Group, appoints and may remove half of the members of the Management Committee, and BE, Inc., through the BE Member Group also appoints and may remove half of the members of the Management Committee. (AmerGen indicates that, currently, there are six members of the Management Committee, half of whom are appointed by PECO Energy and are U.S. citizens, and half of whom are appointed by BE, Inc., and are U.K. citizens.) Pursuant to Article 6.1(d) of the LLC Agreement, the PECO Energy Member Group appoints the Chairman of the Management Committee. The Chairman can only be removed by the PECO Energy Member Group. The Chairman of the Management Committee has a tie-breaking vote on the Management Committee regarding "all [s]afety issues."

"Safety Issue" is defined in Section 1.7 of the LLC Agreement to mean any matter that concerns any of the following:

(i) implementation or compliance with any Generic Letter, Bulletin, Order, Confirmatory Order or similar requirement issued by the NRC;
(ii) prevention or mitigation of a nuclear event or incident or the unauthorized release of radioactive material;
(iii) placement of the plant in a safe condition following any nuclear event or incident;
(iv) compliance with the Atomic Energy Act, the Energy Reorganization Act, or any NRC rule;
(v) compliance with a specific operating license and its technical specifications;
(vi) compliance with a specific Updated Final Safety Analysis Report, or other licensing basis document.[2]

The staff concludes that this definition broadly encompasses all issues involving common defense and security as well as public health and safety that are under NRC jurisdiction.

AmerGen indicates that Michael J. Egan, a U.S. citizen and Chief Financial Officer of PECO Energy, is the Chairman of the Management Committee. Additionally, the CEO of AmerGen, who is elected by the Management Committee and is responsible for the day-to-day operations of AmerGen, is Dickinson M. Smith, a U.S. citizen. The president of AmerGen is Dr. Robin Jeffrey, a U.K. citizen. AmerGen indicated in the September 17, 1998, meeting with NRC staff that the president will not have decision-making authority with respect to TMI-1 operations. Rather, the president's duties will be directed toward business decisions, such as future acquisitions by AmerGen and other financial matters. He will also monitor the performance of AmerGen's nuclear assets and will provide, from time to time, advice regarding operational matters. The NRC staff believes that the provisions of the LLC Agreement may not specifically require that AmerGen's CEO and Chairman of the Management Committee must be U.S. citizens in the future. However, AmerGen has indicated in its supplemental

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[2] The definition of "Safety Issue" also states, "Any matter on which the Management Committee shall vote in accordance with Section 6.3 that is not primarily one of nuclear safety shall not constitute a Safety Issue, so that, for purposes of illustration only, any plant expenditure of a material nature intended to extend the economic operational life or improve the economic performance of the power station in question shall not be considered a safety question." The staff believes that, for purposes of establishing whether safety decisions are subject to foreign ownership, domination, or control, this and analogous distinctions are acceptable and do not appear to compromise such safety decisions.

information that it commits to having the Chairman, as well as half the Management Committee, be U.S. citizens. As discussed below, the staff believes that such a requirement should be made a condition of the order issued to approve AmerGen's application to own and operate TMI-1.

AmerGen has also indicated that the current site personnel at TMI-1 (approximately 700 employees) and selected headquarters employees will be transferred to AmerGen from GPU Nuclear, Inc., the current TMI-1 licensee. These people will be augmented by qualified AmerGen employees and contractors. Additionally, AmerGen expects that both PECO Nuclear (a division of PECO) and British Energy will also provide various support services.

The foreign ownership discussion also recommends that substantial weight should be given to the fact that BE, plc, is a corporate citizen of the United Kingdom. The U.K. is, of course, a close ally of the United States to the degree that the U.S. and the U.K. have had an often-cited "special relationship" since at least World War II. The U.K. is also a signatory to the Treaty on Non-Proliferation of Nuclear Weapons, supports the International Atomic Energy Agency (IAEA) safeguards, is a member of the European Atomic Energy Community (EURATOM), and adheres to other international nuclear safety and safeguards guidelines. The MLB paper specifically cites a 1995 decision by the U.S. Secretary of Energy, which found that a U.S. -- EURATOM agreement of cooperation is not inimical to the common defense and security of the United States. BE, plc, as a U.K. corporation, is subject to the laws of the U.K. and the international conventions and treaties to which the U.K. adheres.

The staff believes that, as a matter of policy, these facts are consistent with making a non-inimicality finding with respect to protecting the common defense and security of the U.S. Such facts, though not dispositive of the prohibition of foreign ownership, control, or domination under Section 104d of the AEA, are also consistent with a favorable determination under that section, because, as the Commission has stated, in context with the other provisions of Section 104d, the foreign control limitation should be given an orientation toward safeguarding the national defense and security.

Staff Conclusions with Respect to Foreign Ownership Considerations

The staff has considered guidance contained in the Commission's previous decisions with respect to foreign ownership, domination, or control, and contained in the SRP. The staff has also evaluated AmerGen's proposed operating structure, and information concerning the management officials of the company. As a result, the staff concludes that the transfer of the operating license for TMI-1 to AmerGen would not violate the prohibitions in the AEA pertaining to foreign ownership, control, or domination, provided that AmerGen is subject to the following conditions. The staff believes that these conditions are consistent with Commission precedent.

Conditions of Approval/License Conditions:

1. The Limited Liability Company Agreement dated August 18, 1997, may not be modified in any material respect concerning decision-making authority over "safety issues" as defined therein without the prior written consent of the Director, Office of Nuclear Reactor Regulation.

2. At least half of the members of AmerGen's Management Committee shall be appointed by a non-foreign member group, all of which appointees shall be U.S. citizens.

3. The Chief Executive Officer (CEO), Chief Nuclear Officer (CNO) (if someone other than the CEO), and Chairman of the Management Committee of AmerGen shall be U.S. citizens. These individuals shall have the responsibility and exclusive authority to ensure, and shall ensure, that the business and activities of AmerGen with respect to the TMI-1 license are at all times conducted in a manner consistent with the protection of the public health and safety and common defense and security of the United States.

4. AmerGen shall cause to be transmitted to the Director, Office of Nuclear Reactor Regulation, within 30 days of filing with the U.S. Securities and Exchange Commission any Schedules 13D or 13G filed pursuant to the Securities and Exchange Act of 1934 that disclose beneficial ownership of any registered class of PECO Energy stock.

6.0 INSURANCE

The provisions of the Price-Anderson Act (Section 170 of the AEA) and 10 CFR Part 140 require that AmerGen be added to the current TMI indemnity agreement. Additionally, in accordance with these requirements, AmerGen must provide primary insurance of $200 million and participate in the secondary retrospective insurance pool once it becomes a licensee. These requirements can be met by purchasing insurance policies from the nuclear liability insurance pool, American Nuclear Insurers. AmerGen also will be required to maintain property insurance as specified in 10 CFR 50.54(w). The staff does not have any reason to believe that AmerGen will be unable to meet the statutory and regulatory insurance requirements applicable to all power reactor licensees.

Consistent with NRC practice, the staff will require AmerGen to provide satisfactory documentary evidence that AmerGen has obtained the appropriate amount of insurance required of licensees under 10 CFR Part 140 of the Commission's regulations, prior to the issuance of the amended license reflecting AmerGen as the licensee. Since the issuance of the amended license is directly tied to the consummation of the sale and transfer of TMI-1, the order approving the transfer should contain a condition providing that prior to consummation of the sale and transfer of TMI-1 to AmerGen, AmerGen shall provide satisfactory documentary evidence to the staff that AmerGen has obtained the appropriate amount of insurance required of licensees under 10 CFR Part 140 of the Commission's regulations.

7.0 TECHNICAL QUALIFICATIONS

The staff reviewed the December 3, 1998, application and determined that additional information was needed to complete the review of AmerGen's technical qualifications. The NRC staff's December 21, 1998, request for additional information (RAI) asked that GPUN and AmerGen describe (1) the new organizational structure for the integrated management of the facility, (2) the management controls and lines of communication and authority between the new management and the organizational units involved in the day-to-day operation of the

facility, and (3) the specific educational background and experience for the new management. On December 23, 1998, a conference call was held among representatives of AmerGen, GPUN, and the NRC to clarify the questions in the RAI. On January 11, 1999, GPUN and AmerGen responded to the RAI.

In general, the initial application and supplement stated that (1) the changes to the TMI-1 license and technical specifications involve the deletion of references to the current owners and licensed operator of TMI-1 to reflect the proposed owner/operator, (2) the current GPUN onsite employees would become AmerGen employees, and (3) AmerGen management is involved with, informed about, and dedicated to the safe operation of TMI-1 and sufficient technical resources will be provided to accomplish these objectives.

Evaluation of Technical Qualifications

The staff, in making its evaluation, reviewed those areas required by 10 CFR 50.40(b), "Common Standards," and for the review, applied the criteria provided in Section 13.1.1, of the Standard Review Plan (SRP) on "Management and Technical Support Organization," and Section 4.6.1 of American National Standards Institute (ANSI) N18.1-1971, "Selection and Training of Nuclear Power Plant Personnel," as endorsed by Regulatory Guide 1.8, Revision 2, April 1987, "Qualification and Training of Personnel for Nuclear Power Plants." For the review of the changes to the technical specifications, the staff applied the criteria given in NUREG 1430, Revision 1, "Standard Technical Specifications, Babcock and Wilcox Plants" (STS), Section 5.0, "Administrative Controls." For this review, only the corporate-level management and technical support structure are being evaluated because the current onsite management and technical structure are remaining in place and essentially unchanged. Some new managers and supervisors may join the site organization after the transfer is completed, but would be required to meet currently specified qualification requirements. The applicant has stated that personnel assigned to positions for which the current TMI-1 Final Safety Analysis Report (FSAR) provides qualification requirements, will meet or exceed those qualification requirements.

According to SRP Section 13.1.1, "Management and Technical Support Organization," submittals for operations-related reviews should contain the following information:

1. Organizational charts showing the corporate level management and technical support structure

2. The relationship of the corporate level management and technical support structure to onsite organization

3. The provisions that have been made for technical support for operations

4. The specific educational background and experience for individuals holding corporate-level management and technical support positions providing support to the onsite organization.

Using SRP Section 13.1.1, the technical qualifications of the AmerGen corporate management and technical support structure, as described in the transfer application, are considered to be acceptable for the transfer of the TMI-1 license if the organizational structures are capable of meeting the following criteria:

1. The corporate organizational groups responsible for implementation of technical support for operation of the facility are identified and described.

2. Implementation of responsibilities for dealing with technical support and operation of TMI-1 is described.

3. The corporate organizational structure provides for the integrated management of activities in support of operation and maintenance of TMI-1.

4. Clear management control and effective lines of authority and communications exist between the organizational units involved in the management, operations, and technical support for operation of TMI-1.

5. Substantive breadth and level of experience and availability of personnel off site exist to implement the responsibility for technical support for operation of TMI-1.

As indicated in the SRP, the corporate-level management and technical support structure should be free of ambiguous assignments of primary responsibility. A corporate officer should clearly be responsible for nuclear activities, without having ancillary responsibilities that might detract from the officer's attention to nuclear safety matters.

Using the guidance of SRP Section 13.1.1, the AmerGen/GPUN submittal was reviewed to evaluate the AmerGen corporate-level management and technical support structure, the AmerGen corporate-level personnel assigned to manage the operations of TMI-1, and the specific educational background and experience for those individuals holding corporate-level management and technical support positions.

The information submitted by GPUN and AmerGen describes (1) the corporate-level management and technical support organizations responsible for implementation of technical support for operation of the facility, (2) the relationship of the corporate-level management and technical support structure to the onsite organization, (3) how the responsibilities for dealing with technical support and operation of TMI-1 will be implemented, (4) how management of activities to support operation and maintenance of TMI-1 is to be integrated, (5) clear management control and effective lines of authority and communications between the organizational units involved in the management, operations, and technical support for operation of TMI-1, and (6) the extent and level of experience and availability of personnel to implement responsibility for the technical support for operation of TMI-1. In addition, the information submitted by GPUN and AmerGen regarding changes to the current TMI-1 position titles and owner name were reviewed against the relevant review criteria and adequately describe the proposed AmerGen management level and technical support organization.

The application dated December 3, 1998, and the supplement, dated January 11, 1999, were of sufficient detail to allow the staff to conduct a technical qualifications review using the guidance of SRP Section 13.1.1. The application and supplement, in addition to providing details related to the implementation of responsibilities for corporate-level technical support and operation of TMI-1, included a proposed organization chart that describes the relationships among the corporate-level management groups and the TMI-1 onsite organizations. The AmerGen corporate-level management and technical support structure is free of ambiguous assignments of primary responsibility. The TMI-1 CNO is the corporate-level officer responsible for nuclear activities at TMI-1.

The organization chart depicts the relationships of the corporate-level groups, reporting to the vice president, station support, that provide technical support for the implementation of and the integrated management of technical support for the operation and maintenance of TMI-1. The application and supplement contain the organization chart, and describe the management controls, lines of authority, and communications pathways that exist at the AmerGen corporate level between AmerGen and the onsite TMI-1 organizations involved with the management, operation, and maintenance of TMI-1.

Personnel presently assigned responsibilities in the AmerGen corporate structure exhibit sufficient experience to implement their individual responsibilities for technical support for the operation of TMI-1. Individuals assigned responsibilities, on average, have in excess of 16 years' experience in the management, operations, and maintenance of commercial nuclear power facilities. If nuclear military experience is included, the average increases to more than 28 years of experience associated with nuclear power.

Staff Conclusions With Respect to Technical Qualifications

In its application dated December 3, 1998, and the supplement dated January 11, 1999, AmerGen has described its organization for the management of, and its means for providing technical support for, the plant staff during operation of TMI-1. The staff has reviewed these measures and has concluded that AmerGen has an acceptable corporate-level management and technical support organization and adequate staffing resources to provide sufficient offsite technical support for the operation of TMI-1 under both normal and off-normal conditions. The licensee's application and supplement adequately address the relevant requirements of 10 CFR 50.40(b). The staff finds that AmerGen is technically qualified to operate a nuclear power plant and that AmerGen has the necessary managerial and technical resources to provide assistance to the plant staff in the event of an emergency.

8.0 CONFORMING AMENDMENT

A. Introduction

As stated previously, GPUN and AmerGen have requested approval of a proposed conforming amendment to the TMI-1 Facility Operating License, DPR-50. The requested changes replace references to GPU Nuclear, Inc., et al., or its organizations or officials in the license with references to AmerGen or its organizations or officials to reflect the proposed license transfer and change of ownership. Supplemental information received after the initial *Federal Register*

notice did not affect the applicability of the Commission's generic no significant hazards consideration determination set forth in 10 CFR 2.1315.[3]

B. Discussion

The changes to be made to the license are indicated in Enclosure 2. These changes do no more than accurately reflect the approved transfer action, which is subject to certain conditions set forth in the Order approving the transfer, and that were identified and discussed earlier in this Safety Evaluation. The amendment involves no safety questions and is administrative in nature. Accordingly, the proposed amendment is acceptable.

C. State Consultation

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

D. Conclusion With Respect to the Conforming Amendment

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 amendment will not be inimical to the common defense and security or to the health and safety of the public.

9.0 COMMENTS RECEIVED

On February 11, 1999, the Commission issued a memorandum and order (CLI-99-02) that, among other actions, directed the staff to consider comments from Mr. Camille George and Mr. H.E. Williams, Jr., in its evaluation of the TMI-1 license transfer application.

Mr. George requested a hearing regarding the license transfer, which the Commission denied in CLI-99-02. Mr. George also expressed three specific concerns with the application in a letter to the NRC dated February 11, 1999:

1) Will AmerGen possess the requisite technical and financial qualifications to own and operate TMI-1?
2) Does the proposed transfer raise any significant safety issues?
3) Will AmerGen be owned, controlled or dominated by an alien, foreign corporation, or foreign government?

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[3] Two changes of typographical errors which did not relate to the proposed license transfer were reflected in the proposed new pages of the license and the technical specifications submitted with the application. These two changes are not being approved at this time since they are not strictly changes to conform the license to reflect the transfer action.

Mr. George's concerns have been addressed in this safety evaluation. The staff determined that the proposed transfer does not raise any significant safety issues. Further, the staff determined that AmerGen is financially and technically qualified to own and operate TMI-1. The staff also addressed the issues of foreign ownership and determined that, with the conditions imposed by the Order approving the license transfer request, AmerGen will not be controlled by foreign interests within the meaning of the prohibition contained in Section 104d of the AEA. Because Mr. George neither expressed additional concerns nor provided any additional material for the NRC's evaluation not already considered, the staff concludes that this SE adequately addresses his concerns.

Mr. Williams' comments focus on the accident that occurred at the TMI, Unit 2, reactor, which is not the subject of the transfer application filed by AmerGen and GPUN. Mr. Williams states that he, among others, is a plaintiff in a lawsuit against GPU regarding alleged medical injuries Mr. Williams suffered from releases from TMI. He further alleges that there is a certain amount of contamination at both TMI units. In addition, he states that there are pending "federal charges" against GPU and Met-Ed, which have "contaminated our land, water, and air." Mr. Williams states his intention to "force" AmerGen to assume responsibility for damages being sought against GPU, and his objection to approval of the transfer until GPU and Met-Ed settle pending lawsuits, or AmerGen "assumes all liabilities."

Mr. Williams' comments do not raise any issues material to the NRC's approval of a license transfer, such as the technical or financial qualifications of the transferee. With respect to Mr. Williams' assertions of contamination at the TMI-1 site, AmerGen, as the licensee, would be responsible for decommissioning the site in accordance with NRC regulations. Approval of the transfer would not remove such responsibility.

In summary, Mr. Williams has raised no issues that would preclude the staff from approving the transfer of the TMI-1 license to AmerGen.

10.0 ENVIRONMENTAL CONSIDERATION

The subject application is for approval of a transfer of a license issued by the NRC and approval of a conforming amendment. Accordingly, the action involved meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(21). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with approval of the application.

11.0 CONCLUSION

In view of the foregoing discussion, the staff concludes that AmerGen has provided reasonable assurance of being able to obtain adequate funding to own, operate, and decommission TMI-1. The staff also concludes that AmerGen is technically qualified to operate TMI-1. Additionally, the staff concludes that there are no antitrust considerations associated with the proposed transfer and that, with the imposition of the conditions described elsewhere in this safety evaluation and contained within the Order approving the transfer, the foreign ownership prohibition contained in section 104d of the AEA does not bar AmerGen

from acquiring the TMI-1 license. Thus, the staff has determined that AmerGen is qualified to be the holder of the TMI-1 license, and that the transfer of the license to AmerGen is otherwise consistent with applicable provisions of law, regulations, and orders issued by the Commission pursuant thereto.

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Date: April 12, 1999