

#### UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 70666 0001

September 14, 1993

Ducket No. 50-320

Or. Robert L. Long Director, Corporate Services/ Director TMI-2 GPU Nuclear Corporation Post Office Box 480 Middletown, Pennsylvania 17057

Dear Dr. Long:

SUBJECT: ISSUANCE OF AMENDMENT NO. 45 FOR FACILITY OPERATING LICENSE NO. DPR-73 TO POSSESSION ONLY LICENSE FOR THREE MILE ISLAND NUCLEAR

STATION UNIT 2 (TAC NO. M69115)

The Commission has issued the enclosed Amendment No. 45 to Facility Operating License No. DPR-73 for the Three Mile Island Nuclear Station Unit 2 (TMI-2). This amendment is in response to your application of August 16, 1988 as amended.

This amendment modifies facility Operating License No. DPR-73 to a possession only license (POL).

This amendment incorporates the current TMI-2 Appendix A and B Technical Specifications without modification. The staff plans to issue the Post-Defueling Manitored Storage (PDMS) Technical Specifications after you have sub-tantially satisfied the PDMS commitments and requirements contained in your letter of January 15. 1993, and just before you are ready to enter PDMS.

A copy of the related Safety Evaluation supporting this amendment is enclosed. Notice of Issuance will be included in the Commission biweekly Federal Register notice.

Sincerely.

Michael T. Masnik, Senior Project Manager Non-Power Reactors and Decommissioning

Project Directorate

Division of Operating Reactor Support ffice of Nuclear Reactor Regulation

Inclosures:

1. Amendment No. 45 to License No. DPR-73

2. Safety Evaluation

cc w/enclosures: See next page

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: 23

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# UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20066-0001

METROPOLITAN EDISON COMPANY

JERSEY CENTRAL POWER AND LIGHT COMPANY

PENNSYLVANIA ELECTRIC COMPANY

GPU NUCLEAR CORPORATION

DOCKET NO. 50-320

THREE MILE ISLAND NUCLEAR STATION, UNIT NO. 2

POSSESSION ONLY LICENSE

Amendment No. 45 License No. DPR-73

- 1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for the possession only license filed by Metropolitan Edison Company, Jersey Central Power and Light Company, Pennsylvania Electric Company, and GPU Nuclear Corporation (the Licensee) 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, and all required notifications to other agencies or bodies have been duly made;
  - B. The facility will be maintained in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission except for those exemptions from specific portions of the regulations, previously granted by the Commission, and still applicable;
  - There is reasonable assurance: (i) that the activities authorized by this possession only license can be conducted without endangering the health and safety of the public; and (ii) that such activities will be conducted in compliance with the rules and regulations of the Commission:
  - D. The licensee is technically qualified to engage in the activities authorized by this possession only license in accordance with the rules and regulations of the Commission;

- The licensee is financially qualified to engage in the activities authorized by this possession only license in accordance with the rules and regulations of the Commission;
- f. The licensee 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 possession only 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, and other costs and considering available alternatives, the issuance of Possession Only License No. DPR-73 subject to the conditions for protection of the environment set forth herein is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied; and
- 1. The possession of byproduct and special nuclear material and receipt, possession, and use of source material as authorized by the license will be in accordance with the Commission regulations in 10 CFR Parts 30, 40, and 70, including 10 CFR Sections 30.33, 40.32, 70.23, and 70.31.
- Possession Only License No. DPR-73 is hereby issued to Metropolitan Edison Company, Jersey Central Power and Light Company, Pennsylvania Electric Company, and GPU Nuclear Corporation to read as follows:
  - A. This license applies to the Three Mile Island Nuclear Station, Unit 2, (the facility) owned by the Metropolitan Edison Company, Jersey Central Power and Light Company, and Pennsylvania Electric Company, and mairtained by the GPU Nuclear Corporation. The facility is located on Three Mile Island in the Susquehanna River, in Londonderry Township, Dauphin County, Pennsylvania, about ten miles southeast of Harrisburg. Prior to entry into Post-Defueling Monitored Storage (PDMS), the facility is described in the Final Safety Analysis Report as supplemented and amended, the various Recovery System Descriptions and Technical Evaluation Reports, and the Environmental Report as supplemented and amended. Upon entry into PDMS, the facility is described in the PDMS Safety Analysis Report as supplemented and amended.

- B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
  - (1) GPU Nuclear Corporation, pursuant to Section 103 of the Atomic Energy Act ("Act") and 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," to possess but not operate the facility;
  - (2) GPU Nuclear Corporation, Metropolitan Edison Company, Jersey Central Power and Light, and Pennsylvania Electric Company to possess the facility at the designated location in Dauphin County, Pennsylvania, in accordance with the procedures and limitations set forth in this license;
  - (3) GPU Nuclear Corporation, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use at any time any sealed sources for radiation monitoring equipment calibration;
  - (4) GPU Nuclear Corporation, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
  - (5) GPU Nuclear Corporation, pursuant to the Act and 10 C/R Parts 30, 40, and 70, to possess, but no! separate, such byproduct and special nuclear materials which remain at the facility subsequent to the cleanup following the March 28, 1979, accident.
- C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations in 10 CFR Chapter 1, and is subject to all applicable provisions of the Act and to the Commission's rules and regulations, except for those exemptions from specific portions of the regulations granted by the Commission and still applicable, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

### (1) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 45, are hereby incorporated in the license. The licensee shall maintain the facility in accordance with the Technical Specifications and all Commission Orders issued subsequent to the date of the possession only license.

#### (2) Physical Protection

The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and under 10 CFR 50.90 and 10 CFR 50.54(p). The licensee maintains a combined site physical security, guard training and qualification, and safeguards contingency plans with Unit 1. These plans are administered under IMI-1 license condition 2.C.(3), and shall apply to TMI-2.

- D. Special Auxiliary and Fuel Handling Building Ventilation Study: Prior to terminating continuous operation of the auxiliary and fuel handling buildings (AFHB) ventilation systems, the special moniforing program of AFHB airborne levels shall be completed. The program shall include at least one year of data prior to entry into PDMS and at least one year of data after entry into PDMS. A report shall be submitted to the NRC containing the results of the program and containing sufficient data and analyses to demonstrate that the release rate of particulates with half-lives greater than eight days from the AHFB will be less than 0.00024  $\mu$ Ci/sec when averaged over any calendar quarter. Not included in the calculation of the particulate release rate shall be those periods of time (designated in advance) prior to entry into PDMS during which aggressive decontamination operations were performed in preparation for PDMS. The report shall be submitted to the NPC staff at least 60 days prior to terminating continuous operation of the AFHB ventilation systems.
- E. Unfiltered Leak Rate Test: Prior to entry of the facility into Post-Defueling Monitored Storage, the licensee will develop an NRC approved surveillance requirement for the reactor building unfiltered leak rate test that, upon staff approval, will be incorporated as Section 4.1.1.2 of the proposed PDMS Technical Specifications.
- f. Additional Submittals Prior to Post-Defueling Monitored Storage: Prior to entry of the facility into Post-Defueling Monitored Storage, the licensee will submit and implement a Site Flood Protection Plan, a site Radiation Protection Plan, an Dffsite Dose Calculation Manual, a Post-Defueling Monitored Storage Fire Protection Program Evaluation, a Post-Defueling Monitored Storage Quality Assurance Plan, and a Radiological Environmental Monitoring Plan. Additionally, the licensee will submit to the NRC the results of the completed plant radiation and contamination surveys prior to entry into PDMS.

G. This license is effective as of the date of issuance and shall expire at midnight. November 4, 2009.

FOR THE NUCLEAR REGULATORY COMMISSION

Brian K. Grimes, Director

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Division of Operating Reactor Support Office of Nuclear Reactor Regulation

Enclosure:
Appendices A & B
Technical Specifications

Date of Issuance: September 14, 1993



## UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON D C 20066-0001

# SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION SUPPORTING AMENDMENT NO. 45 TO POSSESSION ONLY LICENSE NO. DPR-73

#### GPU NUCLEAR CORPORATION

### THREE MILE ISLAND NUCLEAR STATION, UNIT 2

#### DOCKET NO. 50-320

#### 1.0 INTRODUCTION

After the March 28, 1979 accident at TMI-2, the NRC issued an order on July 20, 1979, which suspended the authority of General Public Utilities Nuclear Corporation (GPUN or the licensee) to operate the facility and required that the licensee maintain the facility in a shutdown condition in accordance with approved operating and contingency procedures. On August 16, 1988, GPUN submitted a request to amend TMI-2 Operating License No. DPR-73 to a possession only license and to extensively modify the Technical Specifications consistent with licensee plans for long-term storage of the facility. The licensee termed such storage "post-defueling monitored storage" or "PDMS." In response to the licensee amendment request, the staff issued. in August 1989, Final Supplement 3 to the "Programmatic Environmental Impact Statement Dealing with Post-Defueling Monitored Storage and Subsequent Cleanup. On April 12, 1990, the licensee informed the staff that it had completed defueling efforts at the TMI-2 facility. On April 25, 1991, the staff published a notice of opportunity for a prior public hearing regarding the license amendment request for a POL and the proposed changes to the Technical Specifications (56 FR 19128). On February 20, 1992, the staff issued a safety evaluation (SE) that evaluated the licensee amendment request.

In response to the staff notice of opportunity for a prior public hearing, Hr. [ric [pstein petitioned to intervene. Upon the encouragement of the Atomic Safety and Licensing Board Panel (ASLBP) assigned to this docket, a settlement agreement was filed with the ASLBP, on September 25, 1992, between the petitioner, the licensee, and the NRC staff. In response to the settlement agreement, the ASLBP dismissed the proceedings on October 16, 1992.

The licensee is currently in the final phases of readying TM1-2 for PDMS. In October 1992, the licensee completed PDMS preparations within the reactor building. Currently, the licensee is readying the auxiliary and fuel-handling buildings for long-term storage. On January 15, 1993, the licensee forwarded for staff review a proposed list of remaining PDMS requirements and commitments. This list was generated from (1) the safety analysis report submitted by the licensee in support of its license amendment request, (2) the february 20, 1992, safety evaluation issued by the staff, and (3) from several

meetings at TM1-2 that were attended by members of the public. The staff has reviewed this list and in a letter dated May 19, 1993, found it acceptable. The current licensee schedule is to be ready to enter PDMS by the end of calendar year 1993.

As stated above, the licensee amendment request included both a request for a possession only license and for extensive modifications to the Technical Specifications for IMI-2. The original intent of the staff was to issue both the possession only license and the changes to the Technical Specifications concurrently just before the licensee entered PDMS. The current Technical Specifications are not compatible with PDMS, and conversely, the PDMS Technical Specifications could not be implemented during the final phases of the cleanup until after the licensee implements the list of remaining requirements and commitments. The licensee has proposed, and the staff agrees, that the POL amendment could be issued separately from the changes to the Technical Specifications.

The staff has not acted on the licensee request for a PDL until now, because the staff was aware of ongoing licensee efforts to make additional measurements of the fuel remaining in the reactor vessel. During July and August of 1991, the reactor vessel was drained to make final measurements of the residual fuel remaining in the vessel. The final measurement technique made use of an array of helium-filled detectors to measure fast neutrons produced by the residual fuel.

On February 1, 1993, GPUN submitted its current best estimate of 925 kilograms (± 40 percent) of residual fuel in the reactor vessel based on the data from the fast neutron measurements. This estimate was derived from calculations made by onsite staff and received an independent review by an offsite group headed by Dr. Norman Rasmussen of the Massachusetts Institute of Technology. Three additional independent reviewers from national laboratories reviewed this estimate for the licensee. Both the staff and Battelle Pacific Northwest laboratories (PNI), under contract with the staff, reviewed the licensee estimate and found it acceptable. Additionally, the licensee has conducted and submitted a revised criticality analysis to the NRC for review. The staff reviewed the licensee analysis and funded PNL to conduct independent criticality analysis for both steady-state and accident conditions. The results of the staff analyses were forwarded to the licensee in a letter dated July 6, 1993. The staff found that the fuel remaining in the reactor vessel would be subcritical under both steady state and accident conditions. Thus, a criticality involving the fuel remaining in the TMI-2 reactor vessel is precluded.

for the balance of the facility external to the reactor vessel, earlier licensee estimates based on measurements, sample analyses, and visual observations indicated that no more than 174.6 kgs (385 lbs) of residual fuel remains. The NRC staff and its consultants from PNL have performed independent evaluations of these earlier fuel measurements and have made independent measurements in the auxiliary and reactor buildings. The staff also finds that there are insufficient discrete quantities of fuel in areas other than the reactor vessel to sustain a criticality.

#### 2.0 DISCUSSION AND EVALUATION

As noted in Section 1.0 above, the reactor has been defueled to the extent reasonably achievable and the fuel has been shipped offsite. GPUN, in their request of August 16, 1988, as amended, requested changes to the TMI-2 Operating License No. DPR-73 that would permit the licensee to maintain and possess, but not operate, the facility. On July 20, 1979, the U.S. NRC issued an order suspending the authority of the licensee to operate the facility and requiring that the licensee maintain the facility in a shutdown condition in accordance with approved operating and contingency procedures. Although its authority to operate the facility was suspended by the shutdown order, the licensee retained an operating license, possessing a Class 103 (10 CFR Part 50.22) license.

The requested changes to the license, contained in the August 16, 1988 submittal, as amended, are consistent with the post-accident, inoperable, and essentially defueled condition of the facility.

The staff safety evaluation of the requested license changes was originally contained in the Safety Evaluation (SE) and Technical Evaluation Report (TER) that were transmitted by a letter dated February 20, 1992 to GPUN. The SE and TER evaluated both the changes to the license as well as changes to the Technical Specifications. The portion of the SE that pertained to the POL license amendment request by the licensee is reprinted below.

On January 18, 1993 the licensee submitted Amendment 16 to their Post-Defueling Monitored Storage Safety Analysis Report. In their submittal the licensee provided an updated version of their proposed POL. The POL was updated to be applicable to both the current Mode 3 plant condition and to FDMS. The original proposed POL, submitted by the licensee on August 16, 1988, contained language that specified requirements only during PDMS. The January 18, 1993 licensee submittal extends the requirements in the license to be applicable to both the current plant status as well as PDMS. The staff has evaluated the proposed changes below and has indicated changes to the original February 20, 1992 SE with change bars in the right margin.

The proposed changes to facility Operating License DRP-73 and evaluations of the changes are presented below:

 Change: License DPR-73, title, delete "FACILITY OPERATING" and replace with "POSSESSION ONLY".

Evaluation: This license change removes the implication that the licensee is authorized to operate the facility. The staff finds this change acceptable considering the post-accident, inoperable, and essentially defueled condition of the facility.

2. Change: License DPR-73, paragraph 1.A. change "license" to "the possession only license."

Evaluation: This license change removes the implication that the licensee is authorized to operate the facility. The staff finds this change acceptable considering the post-accident, inoperable and essentially defueled condition of the facility.

3. Change: License DPR-73, paragraph 1.B., delete this entire paragraph.

Evaluation: This license change deletes reference that the construction of the Three Mile Island Nuclear Station, Unit 2 has been substantially completed in conformity with Construction Permit No. CPPR-66, etc. The staff finds this change acceptable considering the post-accident, inoperable and essentially defueled condition of the facility.

4. Change: License DPR-73, paragraph 1.C. delete "operate" and replace with "be maintained," add the following at the end of the sentence, "except for those exemptions from specific portions of the regulations, previously granted by the Commission, and still applicable;" and renumber this paragraph 1.B.

Evaluation: These license changes remove the licensee authority to operate the facility, specifies management of the facility, and recognizes that exemptions to the regulations have been granted. The staff finds there changes acceptable considering the post-accident, inoperable and essentially defueled condition of the facility.

5. Change: License DPR-73, paragraph 1.D, delete "operating" and replace with "possession only" and renumber this paragraph 1.C.

Evaluation: This license change removes the implication that the licensee is authorized to operate the facility. The staff finds this change acceptable considering the post-accident, inoperable and essentially defueled condition of the facility.

6. Change: License DPR-73, raragraph 1.E, delete "operating" and replace with "possession only," and conumber this paragraph 1.D.

Evaluation: This license change removes the implication that the licensee is authorized to operate the facility. The staff finds this change acceptable considering the post-accident, inoperable and essentially defueled condition of the facility.

7. Change: License DPR-73, paragraph 1.F. delete "operating" and replace with "possession only," and renumber the paragraph 1.E.

Evaluation: This license change removes the implication that the licensee is authorized to operate the facility. The staff finds this change acceptable considering the post-accident, inoperable and essentially defueled condition of the facility.

8. Change: License OPR-73, paragraph I.G. change paragraph to 1.F.

Evaluation: This is an administrative change that improves the readability and clarity of the license. The staff finds this change acceptable.

9. Change: License DPR-73, paragraph 1.H, delete "operating" and replace with "possession only," and renumber this paragraph 1.G.

Evaluation: This change removes the implication that the licensee is authorized to operate the facility. The staff finds this change acceptable considering the post-accident, inoperable and essentially defueled condition of the facility.

10. Change: License DPR-73, paragraph 1.1, delete "Facility Operating" and replace with "Possession Only," renumber this paragraph 1.4, and delete "Appendix D to 10 CFR Part 50 (currently known as 10 CFR Part 51)" and replace with "10 CFR Part 51."

Evaluation: This initial change removes the implication that the licensee is authorized to operate the facility. In addition, these changes improve the readability and clarity of the license and reflect current NRC regulations. The staff finds these changes acceptable considering the post-accident, inoperable and essentially defueled condition of the facility.

11. Change: License DPR-73, paragraph 1.J, delete "The receipt, possession, and use of source, byproduct and special nuclear material" and replace with "The possession of byproduct and special nuclear material and receipt, possession, and use of source material." Replace "this license" with "the license." Renumber this paragraph to 1.1.

Evaluation: This change eliminates authority to receive and use byproduct or special nuclear materials to reflect the post-accident, inoperable and essentially defueled condition of the facility during PDMS. The staff finds this change acceptable.

12. Change: License DPR-73, paragraph 2., delete "Pursuant to the Initial Decision of the Atomic Safety and Licensing Board dated December 19, 1977, and the amendment dated December 1, 1981, Facility Operating License No. DPR-73," and delete the words "Facility Operating" and replace with the words "possession only."

Evaluation: This change removes requirements pertinent to the prior operating license for TMI-2 which are not applicable to the POL or POMS. The change also removes the implication that the licensee is authorized to operate the facility. The staff finds this change acceptable considering the post-accident, inoperable and essentially defueled condition of the facility.

13. Change: License DPR-73, paragraph 2.A, delete "a pressurized water nuclear reactor and associated equipment" with no replacement and replace "operated" with "maintained."

Evaluation: This change removes reference to operation. The staff finds this administrative change acceptable considering the post-accident, inoperable and essentially defueled condition of the facility.

14. Change: License DPR-73, paragraph 2.A, delete "and is described in the final Safety Analysis Report" as supplemented and amended (Amendments 17 through 62)" and replace with "Prior to entry into Post-Defueling Monitored Storage (PDMS), the facility is described in the Final Safety Analysis Report as supplemented and amended, the various Recovery System Descriptions and Technical Evaluation Reports, and the Environmental Report as supplemented and amended. Upon entry into PDMS, the facility is described in the PDMS Safety Analysis Report as supplemented and amended and the Environmental Report as supplemented and amended."

Evaluation: This change provides the correct reference for the documents that contain the licensee's description of the facility before and after entry into PDMS. The staff finds this change acceptable considering the post-accident, inoperable and essentially defueled condition of the facility.

15. Change: License DPR-73, paragraph 2.B.(1), delete "use, and" and replace with "but not," insert the word "Domestic" before the word "Licensing."

Evaluation: This license change specifies that the licensee is not to operate the reactor and improves the clarity of the license. The staff finds these changes acceptable considering the post-accident, inoperable and essentially defueled condition of the facility.

Change: License DPR-73, paragraph 2.B.(3), delete "GPU Nuclear Corporation, pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;"

Evaluation: This license change removes the licensee's authorization to possess and use special nuclear material as reactor fuel. The staff finds this change acceptable considering the post-accident, inoperable and essentially defueled condition of the facility.

17. Change: License DPR-73, paragraph 2.B.(4), delete "byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;" and replace with "sealed sources for radiation monitoring equipment calibration;" Renumber as 2.B(3).

Evaluation: This license change removes the licensee's authorization to possess and use radioactive material sources only required for reactor startup and operation and only permits possession of sealed sources for radiation monitoring equipment calibration. The staff finds this change acceptable considering the post-accident, inoperable and essentially defueled condition of the facility.

18. Change: License DPR-73, paragraph 2.B(5), renumber paragraph to 2.B(4).

Evaluation: This is an administrative change that improves the readability and clarity of the license. The staff finds this change acceptable.

19. Change: Lizense DPR-73, paragraph 2.8.(6), add "40" to the 10 CFR Parts and delete "as may be produced by the operation of the facility." and replace with "which remain at the facility subsequent to the cleanup following the March 28, 1979, accident." Renumber as 2.8(5).

Fvaluation: This license change removes the licensee's authorization to possess and use radioactive material produced by reactor operation and authorizes the licensee to possess radioactive material which may remain in the facility after the cleanup activities. The staff finds this change acceptable considering the post-accident, inoperable and essentially defueled condition of the facility.

20. Change: License DPR-73, paragraph 2.C., delete after "10 CFR Chapter I," through "Section 70.32 of Part 70;", add after "rules, regulations" the following phrase in parenthesis "(except for those exemptions from specific portions of the regulations, previously granted by the Commission, and still applicable)."

Evaluation: 10 CFR Chapter I includes all previously listed sections. The proposed change also recognizes that exemptions to the regulations have been granted. The staff finds this change acceptable since it eliminates redundancy and improves clarity.

21. Change: License DPR-73, paragraph 2.C. Following the phrase, "incorporated below;" delete the remaining sections of part C and replace it with:

#### (1) Technical Specification

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 45, are hereby incorporated in the license. The licensee shall maintain the facility in accordance with the Technical Specifications and all Commission Orders issued subsequent to the date of the possession only license.

Evaluation: This license change removes requirements related to operation of the facility such as maximum power level, number of coolant pumps required operational, Reactor Protection System and Engineered Safeguards Features instrument information, modifications required for startup following the first refueling, and safe shutdown analyses. The change retains a single section that pertains to the facility Technical Specifications, and makes reference to the possession only license. The staff finds these changes acceptable considering the post-accident, inoperable and essentially defueled condition of the facility.

further, since the plant is essentially defueled and is not to operate, there are no safety systems nor safe shutdown systems for the facility. Thus, controls and modifications to assure protection of safety systems and safe shutdown systems are not necessary.

22. Change: License DPR-73, paragraph 2.D., renumber as 2.C.(2), delete this paragraph in its entirety and replace with:

#### 2.C.(2) Physical Protection

"The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and under 10 CFR 50.90 and 10 CFR 50.54(p). The licensee maintains a combined site physical security, guard training and qualification, and safeguards contingency plans with Unit 1. These plans are administered under TMI-license condition 2.C.(3), and shall apply to TMI-2."

Evaluation: This license change removes the specific references for the commission-approved physical security, guard training and qualification, and safeguards contingency plans from the TMI-2 license and states that the licensee now maintains a site security program that is administered under the TMI-1 license. The proposed change does not eliminate the requirements for a Commission-approved program for TMI-2 but transfers the specifics of that program to the TMI-1 license. The staff finds the proposed change acceptable.

23. Change: License DPR-73, paragraph 2.E., delete this paragraph in its entirety.

Evaluation: This license change removes specific conditions added to the license for protection of the environment such as environmental evaluation prior to additional construction or operational activities and the processing of intermediate-level waste water through the EPICOR-11 system. The requirement for an environmental evaluation for construction activities is contained in 10 CFR Part 51 and no construction activities are permitted at the TMI-2 site during PDMS. The requirements for processing of all waste waters are provided in Amendment 35 issued September 11, 1989, for the disposal of the Accident Generated Water. Therefore, the staff finds that these changes are acceptable.

24. Change: License DPR-73, paragraph 2.f., delete this paragraph in its entirety.

Evaluation: This license change removes the specific requirement that this license be subject to the outcome of certain Federal court rulings. The staff finds this license change acceptable because the court ruling pertains to operating reactors and TMI-2 is a defueled, non-operating reactor.

25. Change: License DPR-73, add paragraph 2.D.; "Special Auxiliary and Fuel Handling Building Ventilation Study: Prior to terminating continuous operation of the auxiliary and fuel handling building (AFHB) ventilation systems, the special monitoring program of AFHB airborne levels shall be completed. The program shall include at least one year of data prior to entry into PDMS and at least one year of data after entry into PDMS. A report shall be submitted to the NRC containing the results of the program and containing sufficient data and analyses to demonstrate that the release rate of particulates with half-lives greater than eight days from the AFHB will be less than 0.00024 \(\nu(\text{c1/sec}\) when averaged over any calendar quarter. Not included in the calculation of particulate release rate shall be those periods of time (designated in advance) prior to entry into PDMS during which aggressive decontamination operations were performed in preparation for PDMS. The report shall be submitted to the NRC staff at least 60 days prior to terminating continuous operation of the AFHB ventilation system."

Evaluation: Since the AFHB is not a sealed containment structure and since the effluent from the AFHB, when not being actively ventilated, will not be monitored, the licensee shall demonstrate that the maximum potential release rate from the AFHB of particulate radionuclides with half-lives greater than eight days is a small fraction of the 10 CFR Part 50. Appendix I design objectives. The staff finds this change acceptable.

Change: License DPR-73, add paragraph 2.E.; "Unfiltered Leak Rate Test: Prior to entry of the facility into Post-Defueling Monitored Storage, the licensee will develop an NRC approved surveillance requirement for the reactor building unfiltered leak rate test that, upon staff approval, will be incorporated as Section 4.1.1.2 of the proposed PDMS Technical Specifications."

Evaluation: Since reactor building isolation is required to ensure containment and control of the major source of radioactive material at TMI-2, an NRC approved leak rate test is required to ensure that the HEPA filtered breather remains the most likely leak path from the reactor building. The staff finds this requirement acceptable.

27. Change: License DPR-73, add paragraph 2.F.; "Additional Submittals Prior to Post-Defueling Monitored Storage: Prior to entry of the facility into Post-Defueling Monitored Storage, the licensee will submit and implement a Site Flood Protection Plan, a site Radiation Protection Plan, an Offsite Dose Calculation Manual, a Post-Defueling Monitored Storage Fire Protection Program Evaluation, a Post-Defueling Monitored Storage Quality Assurance Plan, and a Radiological Environmental Monitoring Plan. Additionally, the licensee will submit to the NRC the results of the completed plant radiation and contamination surveys prior to entry into PDMS."

Evaluation: Many of the surveillance and requirements necessary for PDMS are specified in the cited documents. Thus, the documents must be submitted and the requirements implemented for entry into PDMS. The staff finds this requirement acceptable.

On this basis, the staff concludes that the changes requested by the licensee, in order to convert the operating license for the facility to a possession only license, are acceptable.

#### 3.0 STATE CONSULTATION

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

#### 4.0 ENVIRONMENTAL CONSIDERATION

Pursuant to 10 CFR Parts 51.20 and 51.92, an environmental impact statement, Supplement 3 of the Programmatic Environmental Impact Statement Related to Decontamination and Disposal of Radioactive Waste Resulting from the March 28. 1979 Accident[.] The Three Mile Island Nuclear Station. Unit 2 - final Supplement Dealing with Post Defueling Monitored Storage and Subsequent Cleanup (PEIS Final Supplement 3), was prepared and issued August 1989. That document concluded that the proposed long term storage of TMI-2 would not have a significant impact on the quality of the human environment. The staff prepared an Environmental Assessment in support of the February 20, 1992 SE and TER that evaluated amendments made by the licensee to their PDMS Safety Analysis Report since the August 1989 PEIS Supplement 3 was prepared. The purpose of the evaluation was to determine if the PEIS Supplement 3 was still valid. The staff concluded in the Environmental Assessment published on february 26, 1992 (57 FR 6625) that the PDMS proposal, and by incorporation the POL, is still within the scope of the impacts evaluated in PEIS Supplement 3 and will not have a significant impact on the environment.

#### 5.0 CONCLUSION

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

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Bale: September 14, 1993