September 9, 1985

Docket No. 50-289

Mr. Henry D. Hukill, Vice President
and Director - TMI-1
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Dear Mr. Hukill:

SUBJECT: AMENDMENT NO.110 TO FACILITY OPERATING LICENSE NO. DPR-50

The Commission has issued the enclosed Amendment No.110to Facility Operating License No. DPR-50 for the Three Mile Island Nuclear Station, Unit No. 1 (TMI-1). This amendment consists of changes to the Technical Specifications (TSs) in response to your Technical Specification Change Request (TSCR) 105, Rev. 1, dated March 5, 1985.

This amendment incorporates editorial changes to your submittal dated February 17, 1984, dealing with shock suppressors (snubbers) which was issued as Amendment 106 on March 21, 1985.

A copy of our Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's next Biweekly Federal Register Notice.

Sincerely,
"ORIGINAL SIGNED BY
JOHN F. STOLZ"

John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing

Enclosures:
1. Amendment No. 110
2. Safety Evaluation

cc w/enclosures:
See next page

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Three Mile Island Nuclear Station
Unit No. 1

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Atomic Safety & Licensing Appeal
Board Panel (8)
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Docketing and Service Section
Office of the Secretary
U.S. Nuclear Regulatory Commission
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

METROPOLITAN EDISON COMPANY

JERSEY CENTRAL POWER AND LIGHT COMPANY

PENNSYLVANIA ELECTRIC COMPANY

GPU NUCLEAR CORPORATION

DOCKET NO. 50-289

THREE MILE ISLAND NUCLEAR STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 110
License No. DPR-50

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

   A. The application for amendment by GPU Nuclear Corporation, et al (the licensees) dated March 5, 1985, 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.

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2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.c.(2) of Facility Operating License No. DPR-50 is hereby amended to read as follows:

   Technical Specifications

   The Technical Specifications contained in Appendix A, as revised through Amendment No. 110, are hereby incorporated in the license. GPU Nuclear Corporation shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: September 9, 1985

ATTACHMENT TO LICENSE AMENDMENT NO. 110

FACILITY OPERATING LICENSE NO. DPR-50

DOCKET NO. 50-289

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

Remove	Insert
4-60	4-60
4-61	4-61
4-64	4-64
4-66	4-66

4.17 SHOCK SUPPRESSORS (SNUBBERS)

SURVEILLANCE REQUIREMENTS

4.17.1 Each snubber shall be demonstrated OPERABLE by performance of the following inspection program.

a. Snubber Types
As used in this specification, type of snubber shall mean snubbers of the same design and manufacturer, irrespective of capacity.

b. Visual Inspections
Snubbers are categorized as inaccessible or accessible during reactor operation and may be treated independently. The TMI-1 Manager, Radiological Controls, will ensure that a review is performed for ALARA considerations on all snubbers which are located in radiation areas for the determination of their accessibility. This review shall be in accordance with the recommendations of Regulatory Guides 8.8 and 8.10. The determination shall be based upon the known or projected radiation levels at each snubber location which would render the area inaccessible during reactor operation and based upon the expected time to perform the visual inspection. Snubbers may also be determined to be inaccessible because of their physical location due to an existing industrial safety hazard at the specific snubber location. This determination shall be reviewed and approved by the Supervisor of Safety and Health.

Snubbers accessible during reactor operation shall be inspected in accordance with the schedule stated below. Snubbers scheduled for inspection that are inaccessible during reactor operation because of physical location or radiation levels shall be inspected during the next reactor shutdown greater than 48 hours where access is restored* unless previously inspected in accordance with the schedule stated below.

Visual inspections shall include all safety related snubbers and shall be performed in accordance with the following schedule:

No. Inoperable Snubbers of Each Type Per Inspection Period	Subsequent Visual Inspection Period **#
0	18 months ± 25%
1	12 months ± 25%
2	6 months ± 25%
3, 4	124 days ± 25%
5, 6, 7	62 days ± 25%
8 or more	31 days ± 25%

* Snubbers may continue to be inaccessible during reactor shutdown greater than 48 hours (e.g. if purging of the reactor building is not permitted).

** The inspection interval for each type of snubber shall not be lengthened more than one step at a time unless a generic problem has been identified and corrected; in that event the inspection interval may be lengthened one step the first time and two steps thereafter if no inoperable snubbers of that type are found.

\# The provisions of Table 1.2 are not applicable.

SURVEILLANCE REQUIREMENTS (Continued)

c. Refueling Outage Inspections

At least once each refueling interval during shutdown, a visual inspection shall be performed of all safety related snubbers attached to sections of safety system piping that have experienced unexpected, potentially damaging transients as determined from a review of operational data and a visual inspection of the system.

d. Visual Inspection Acceptance Criteria

Visual inspections shall verify: (1) that there are no visible indications of damage or impaired operability and (2) attachments to the foundation or supporting structure are secure. Snubbers which appear inoperable as a result of visual inspections may be determined OPERABLE for the purpose of establishing the next visual inspection interval, provided that: (1) the cause of the rejection is clearly established and remedied for that particular snubber and for other snubbers that may be generically susceptible, and (2) the affected snubber is functionally tested in the as found condition and determined OPERABLE per Specification 4.17-1f. When the reservoir outlet port of a snubber is found to be uncovered by fluid, the snubber shall only be declared operable if functional testing in both extension and retraction directions is satisfactory and an engineering evaluation concludes that this snubber is operable.

e. Functional Tests*

At least once each refueling interval during shutdown, a representative sample of snubbers shall be tested using one of the following sample plans. The sample plan shall be selected prior to the test period and cannot be changed during the test period. The NRC Regional Administrator shall be notified in writing of the sample plan selected prior to the test period, or the sample plan used in the prior test period shall be used:

1) At least 10% of the total of each type of snubber in use in the plant shall be functionally tested either in-place or in a bench test. For each snubber of a type that does not meet the functional test acceptance criteria of Specification 4.17.1f, an additional 10% of that type of snubber shall be functionally tested until no more failures are found or until all snubbers of that type have been functionally tested; or

*The four 550,000 lb reactor coolant pump snubbers are not included. However, a functional test program for reactor coolant pump snubbers will be developed by Cycle 6 refueling or July 1, 1985, whichever is earlier. The functional test program for reactor coolant pump snubbers will be implemented in accordance with the schedule and other requirements of that program.

SURVEILLANCE REQUIREMENTS (Continued)

i. Snubber Seal Service Life Program

A snubber seal service life program shall be developed whereby the seal service life of hydraulic snubbers is monitored to ensure that the service life is not exceeded between surveillance inspections. The designated service life for the various seals shall be established based on engineering information. The seals shall be replaced so that the indicated service life will not be exceeded during a period when the snubber is required to be OPERABLE. The seal replacements shall be documented and the documentation shall be retained in accordance with Specification 6.10.2.m. The program shall be fully implemented by startup following Cycle 7 refueling.

Snubber seal service life is evaluated via manufacturer input and information through consideration of the snubber service conditions and associated installation and maintenance records. The requirement to monitor the snubber seal service life is included to ensure that the seals periodically undergo a performance evaluation in view of their age and operating conditions. These records will provide statistical bases for future consideration of snubber seal service life. The requirements for the maintenance of records and the snubber seal service life are not intended to affect plant operation.

A technique and method for functional testing of the 550,000 lb. reactor coolant pump snubbers is currently under development. The functional test program shall be developed by Cycle 6 refueling or July 1, 1985, whichever is earlier. The functional test program shall be implemented in accordance with the schedule and other requirements of the program.

A list of individual snubbers with appropriate detailed information is maintained at the plant site. As a basis for permanent deletion of a snubber from the list of safety related snubbers, an engineering analysis must be performed to verify that the original safety analysis design criteria are either met or exceeded. Snubber additions and deletions are reported to the NRC in accordance with 10 CFR 50.59 requirements.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 110 TO FACILITY OPERATING LICENSE NO. DPR-50

METROPOLITAN EDISON COMPANY
JERSEY CENTRAL POWER AND LIGHT COMPANY
PENNSYLVANIA ELECTRIC COMPANY
GPU NUCLEAR CORPORATION

THREE MILE ISLAND NUCLEAR STATION, UNIT NO. 1

DOCKET NO. 50-289

1. INTRODUCTION

On March 21, 1985, the Commission issued Amendment 106 to Facility Operating License No. DPR-50, covering limiting conditions for operation and surveillance requirements for the plant snubbers installed on reactor safety systems.

During the course of the review of Amendment 106, the NRC staff and licensee discussed various wording changes to clarify the intent of the Technical Specifications (TSs). These wording changes were submitted by the licensee's letter dated March 5, 1985. The changes had to be noticed in the Federal Register, and the licensee needed other parts of Amendment 106 before the 30-day notice period would have expired. Accordingly, Amendment 106 was issued, and this amendment request clarifies wording previously agreed to by the staff and licensee.

2. EVALUATION

The proposed changes to the TSs are as follows:

1. TS 4.17.1.a. The title is changed from "Inspection Types" to "Snubber Types" to correctly reflect the contents of the paragraph.

2. TS 4.17.1.b. The title of the Radiological Controls Manager is changed to Manager, Radiological Controls to reflect the correct title for the position. The wording of this section is changed to more clearly describe accessibility and inaccessibility of snubbers. Also, rescheduling of inspections for inaccessible snubbers is changed from "... each reactor shutdown greater than 48 hours ..." to "... the next reactor shutdown greater than 48 hours ..." which is clearly the licensee's intent.

3. TS 4.17.1.e. The footnote specifically excludes the reactor coolant pump snubbers from testing until Cycle 6 refueling or July 1, 1985, whichever is earlier. As stated in our Safety Evaluation in support of Amendment 106, the exclusion of reactor coolant pump snubbers was implicit; the proposed change to the TSs makes the exclusion explicit.

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4. TS 4.17.1.i. This paragraph changes the terminology "Seal Replacement Program" to "Seal Service Life Program" to improve clarity. Also "maximum expected service life" is changed to "designated service life" and "indicated service life", as appropriate to avoid any confusion that might arise using the original words.

5. TS 4.17.1. BASES. This section restates the licensee's commitment to develop a functional test program for reactor coolant pump snubbers by July 1, 1985, and states that the test program will be implemented in accordance with the schedule and other requirements of the program. Also, the bases section verifies that a list of snubbers is maintained at the plant site.

All the changes discussed above are considered to be editorial or administrative type changes which improve the clarity of the TSs or explicitly state requirements that are implied in the existing TSs. Therefore, the staff finds the proposed changes acceptable.

4. ENVIRONMENTAL CONSIDERATION

This amendment involves changes in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes in surveillance requirements. We have determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

5. CONCLUSION

We have 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, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: September 9, 1985

This Safety Evaluation was prepared by O. Thompson