



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

METROPOLITAN EDISON COMPANY
JERSEY CENTRAL POWER AND LIGHT COMPANY
PENNSYLVANIA ELECTRIC COMPANY

DOCKET NO. 50-289

THREE MILE ISLAND NUCLEAR STATION, UNIT NO. 1

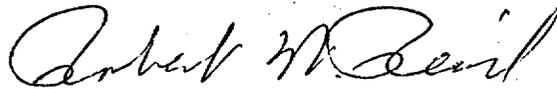
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 20
License No. DPR-50

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Metropolitan Edison Company, Jersey Central Power and Light Company, and Pennsylvania Electric Company (the licensees) dated June 3, 1976, as amended August 10, 1976, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment.

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

FOR THE NUCLEAR REGULATORY COMMISSION



Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 23, 1976

ATTACHMENT TO LICENSE AMENDMENT NO. 20

FACILITY OPERATING LICENSE NO. DPR-50

DOCKET NO. 50-289

Revise Appendix B as follows:

Remove pages 57, 61, 62, 63, and 64 and insert attached pages 57, 61, 62, 63, 63(a), and 64.

Changes on the revised pages are shown by marginal lines.

Pages 62 and 64 are unchanged and are included for convenience only.

will be reported, with associated calculated error, as picocuries of I-131 per liter of milk at the time of sampling, in accordance with Reporting Requirements for Environmental Radiological Monitoring.

Special attention will be paid to those locations where milk is produced for direct consumption by humans - e.g., the family farm.

- d. A census will be conducted every six months (during the beginning and midpoint of the grazing season) to determine the location of cows in potentially affected areas.

If it is learned via the census that there are a considerable number of additional locations where milk is produced in the vicinity of the plant, the location(s) may be chosen which serves as a valid indicator of other locations in that meteorological sector, rather than sampling every location.

Bases

The number and distribution of sampling locations and the various types of measurements described in Table 3, together with the pre-operational background data, will provide verification of the effectiveness of plant effluent control and indication of measurable changes in the activity of the environment.

Weekly samples may be missed in the event of adverse conditions such as weather, equipment failure, etc. It is not intended that these missed samples be resampled prior to the next scheduled sample date. Monthly and longer period samples, if missed due to these conditions, will be taken within a reasonable time after the adverse condition no longer exists. All deviations from the sampling schedule shall be described in the annual report.

- A. Coordination of Environmental Technical Specifications development with the Safety Technical Specifications to avoid conflicts and maintain consistency.
- B. Proposed changes to the Environmental Technical Specifications and the evaluated impact of the change.
- C. Evaluation of proposed changes conducted in compliance with 5.1B and 5.1C.
- D. Results of the Environmental Monitoring Programs prior to their submittal in each Annual Environmental Monitoring Report.
- E. Reports of investigations of reported instances of violation of Environmental Technical Specifications and associated corrective action.

5.4 Action to be Taken if a Limiting Condition for Operation is Exceeded

Follow any remedial action permitted by the Technical Specification until the limiting condition can be met.

All instances of exceeding a Limiting Condition for Operation will be promptly investigated.

A report of each occurrence of a violation of the provisions in specifications of the Limiting Conditions for Operation of these Environmental Technical Specifications will be prepared as specified in Section 5.6.2.

5.5 Procedures

5.5.1 The following written procedures will be prepared to ensure compliance with various activities involved in carrying out the Environmental Technical Specifications. Procedures will include applicable check lists and instructions, sampling, instrument calibration, analysis, and actions to be taken when limits are approached or exceeded. Testing frequency of any alarms will be included. These frequencies will be determined from experience with similar instruments in similar environments and from manufacturers' technical manuals.

- a. Operation of mechanical draft cooling towers.
- b. Operation of chlorination system.
- c. Discharge of neutralized regenerant wastes.

- d. Release of radioactive liquids and gases.
- e. Analysis for chlorine concentration, dissolved solids concentration, suspended solids concentration and pH at the plant discharge.
- f. Calibration of chlorine monitor, liquid effluent radiation monitor (RM-L6), auxiliary and fuel handling building exhaust monitor (RM-A8), reactor building exhaust monitor (RM-A9).
- g. Testing interlocks associated with RM-L6, RM-A7 and RM-A8.
- h. Analysis of radioactive liquid waste according to Table 1.
- i. Analysis of radioactive gaseous waste according to Table 2.
- j. Analysis of background and indicator station air samples for I-131 and radioactive particulates.

5.5.2 The following plant operating procedures shall include provisions to ensure the related systems and components are operated in compliance with the Limiting Conditions for Operation established as part of the Environmental Technical Specifications.

- a. Reactor building purge and vent operating procedure.
- b. Auxiliary and fuel handling building air supply and exhaust operating procedure.
- c. Circulating water and natural draft cooling tower operating procedure.
- d. Mechanical draft cooling tower operating procedure.
- e. Circulating water chlorination and chemical feed operating procedure.
- f. River water chlorination system operating procedure.
- g. Discharge of neutralized regenerant wastes operating procedure.
- h. Industrial waste treatment plant operating procedure.
- i. Sump pump and drainage system operating procedure.

- j. Liquid and gaseous release operating procedure.
- k. Reactor trip emergency procedure.
- l. Loss of reactor coolant or reactor coolant pressure emergency procedure.
- m. Post accident H₂ purge procedure.

5.5.3 All procedures described above and all changes thereto will be reviewed periodically under the cognizance of the Manager-Generation Engineering; however, temporary changes to these procedures which do not change the intent of the original procedure may be made providing such changes are approved by two members of the Plant Management Staff. Such procedure change approval will be documented.

5.6 Plant Reporting Requirements

5.6.1 Routine Reports

a. Annual Environmental Operating Report

Part A: Nonradiological Report. A report on the environmental surveillance programs for the previous 12 months of operation shall be submitted to the Director of the NRC Regional Office (with a copy to the Director, Office of Nuclear Reactor Regulation) as a separate document within 90 days after January 1 of each year. The report shall include summaries, interpretations, and statistical evaluation of the results of the nonradiological environmental surveillance activities as deemed appropriate by the licensee and the environmental monitoring programs required by limiting conditions for operation for the report period, including a comparison with preoperational studies, operational controls (as appropriate), and previous environmental surveillance reports and an assessment of the observed impacts of the plant operation on the environment. If harmful effects or evidence of irreversible damage are detected by the monitoring, the licensee shall provide an analysis of the problem and a proposed course of action to alleviate the problem.

Part B: Radiological Report. A report on the radiological environmental surveillance programs for the previous 12 months of operation shall be submitted to the Director of the NRC Regional Office (with a copy to the Director, Office of Nuclear Reactor Regulation) as a separate document within 90 days after January 1 of each year. The reports shall include summaries, interpretations, and statistical evaluation of the results of the radiological environmental surveillance activities for the report period as deemed appropriate by the licensee including a comparison with preoperational studies, operational controls (as appropriate), and previous environmental surveillance reports and an assessment of the observed impacts of the plant operation on the environment. The reports shall also include the results of land use censuses required by the specifications. If harmful effects or evidence of irreversible damage are detected by the monitoring, the licensee shall provide an analysis of the problem and a proposed course of action to alleviate the problem.

Results of all radiological environmental samples taken shall be summarized and tabulated on an annual basis. In the event that some results are not available within the 90-day period, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted as soon as possible in a supplementary report.

b. Radioactive Effluent Release Report

A report on the radioactive discharges released from the site during the previous 6 months of operation shall be submitted to the Director of the NRC Regional Office (with a copy of the Director, Office of Nuclear Reactor Regulation) within 60 days after January 1 and July 1 of each year. The report shall include a summary of the quantities of radioactive liquid and gaseous effluent and solid waste released from the plant as outlined in Regulatory Guide 1.21 "Measuring, Evaluating, and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Material in Liquid and Gaseous Effluents from Light-Water-Cooled Nuclear Power Plants," with data summarized on a quarterly basis following the format of Appendix B thereof.

The report shall include a summary of the meteorological conditions concurrent with the release of gaseous effluents during each quarter as outlined in Regulatory Guide 1.21 with data summarized on a quarterly basis following the format of Appendix B thereof.

5.6.2 Non Routine Reports

a. Radioactive Discharge

The reporting requirements for radioactive discharges are specified in Section 2.3 of the Technical Specifications.

b. Radiological Environmental Monitoring

Reporting will be routine in nature as described in Regulatory Guide 1.42 and 4.1, whichever is appropriate to the plant, except under the circumstances described below:

- 1) If individual milk samples show I-131 concentrations of 10 picocuries per liter or greater, a plan will be submitted within one week advising the AEC of the proposed action to ensure the plant related annual doses will be within the design objective of 15 mrem/yr to the thyroid of any individual.
- 2) If milk samples collected over a calendar quarter show average concentrations of 4.8 picocuries/liter or greater, a plan shall be submitted within 30 days advising the AEC of the proposed action to limit conditions so that the annual dose to an individual will not exceed 15 mrem/yr.
- 3) If, during any six-month report period, a measured level of radioactivity in any environmental medium other than those associated with gaseous radioiodine releases exceeds ten times the control station value, a written notification will be submitted within one week advising the AEC of this condition. This notification should include an evaluation of any release conditions, environmental factors, or other aspects necessary to explain the anomalous result.
- 4) If, during any six-month report period, a measured level of radioactivity in any environmental medium other than those associated with gaseous radioiodine releases exceeds four times the control station value, a written notification will be submitted within 30 days advising the AEC of this condition. This notification should include an evaluation of any release conditions, environmental factors, or other aspects necessary to explain the anomalous result.