

METROPOLITAN EDISON COMPANY
JERSEY CENTRAL POWER & LIGHT COMPANY

AND

PENNSYLVANIA ELECTRIC COMPANY
THREE MILE ISLAND NUCLEAR STATION UNIT 1

Operating License No. DPR-50
Docket No. 50-289
Technical Specification Change Request No. 42

This Technical Specification Change Request is submitted in support of
Licensee's request to change Operating License No. DPR-50
for Three Mile Island Nuclear Station Unit 1. As a part of this request,
proposed replacement pages for Operating License No. DPR-50 are also
included.

METROPOLITAN EDISON COMPANY

By *R. L. H.*

Vice President-Generation

Sworn and subscribed to me this 30th day of December, 1976.

L. L. Sawyer
Notary Public

NOTARY PUBLIC

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Metropolitan Edison Company (Met-Ed)
Three Mile Island Nuclear Station Unit 1 (TMI-1)
Docket No. 50-289
Operating License No. DPR-50

Technical Specification Change Request No. 42

The Licensee requests that the attached pages 3-15, and 66 replace the corresponding existing Technical Specification pages.

Reasons for the Proposed Change

The change on page 3-15 will delete a reference which is in error. The change on page 66 should help to eliminate any ambiguity concerning Environmental Technical Specification monitoring requirements.

Environmental Analysis Justifying Change Request

These changes, if implimented, will neither cause an undue risk to the health and safety of the public nor will it adversely effect the environment.

Cost-Benefit Analysis Justifying Change

There is no cost associated with implimentation of the change other than the administrative costs associated with processing it. The benefits that would be derived are the elimination of a discrepancy (page 3-15) and elimination of an ambiguity (page 66).

If reactor coolant leakage is to the containment, it may be identified by one or more of the following methods:

- a. The containment air particulate monitor is sensitive to low leak rates. The rate of leakage to which the instrument is sensitive is 0.054 gpm within sixty minutes, assuming the presence of corrosion product activity.
- b. The containment radioactive gas monitor is less sensitive but can be used as a backup to the air particulate monitor. The sensitivity range of the instrument is approximately 2 gpm to greater than 10 gpm.
- c. A leakage detection system which determines leakage losses from water and steam systems within the containment. This system collects and measures moisture condensed from the containment atmosphere by cooling coils of the main recirculation units. This system provides a dependable and accurate means of measuring total leakage, including leaks from the cooling coils themselves which are part of the containment boundary.
- d. Indication of leakage from the above sources shall be cause to require a containment entry and limited inspection at power of the reactor coolant system. Visual inspection means, i.e., looking for steam, floor wetness, or boric acid crystalline formations, will be used. Periodic inspections for indications of leakage within the containment will be conducted to enhance early detection of problems and to assure best online reliability.

If reactor coolant leakage is to the Auxiliary Building, it may be identified by one or more of the following methods:

- a. The auxiliary and fuel handling building vent radioactive gas monitor is sensitive to very low activity levels and would show an increase in activity level shortly after a reactor coolant leak developed within the Auxiliary Building.
- b. Water inventories around the Auxiliary Building sump.
- c. Periodic equipment inspections.
- d. In the event of gross leakage, in excess of 13 \pm 2 gpm, the individual cubicle leak detectors in the makeup and decay heat pump cubicles will alarm in the Control Room to backup "a", "b", and "c", above.

When the source and location has been identified, the situation can be evaluated to determine if operation can safely continue. Under these conditions, an allowable leakage rate of 30 gpm has been established.

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A failure to comply with the monitoring requirements does not, in itself, constitute exceeding a limiting condition for operation and is not, therefore, necessarily reportable in accordance with section 5.6.2.3. In the event monitoring requirements are not met and it is not possible to prove compliance with the applicable specifications, this would constitute exceeding a limiting condition for operation and would, therefore, be reportable.

5.6.2.4 Changes

- 1) When a change to the plant design, to the plant operation or to the procedures described in Section 5.5 is planned which would have a significant adverse effect on the environment or which involves an environmental matter or question not previously reviewed and evaluated by the NRC, a report on the change will be made to the NRC prior to implementation. The report will include a description and evaluation of the change including a supporting benefit-cost analysis.
- 2) Changes or additions to permits and certificates required by Federal, State, local and regional authorities for the protection of the environment will be reported. When the required changes are submitted to the concerned agency for approval, they will also be submitted to USNRC for information. The submittal will include an evaluation of the environmental impact of the change.
- 3) Requests for changes in Environmental Technical Specifications will be submitted to the USNRC for prior review and authorization. The request will include an evaluation of the impact of the change, including a supporting benefit-cost analysis.

5.6.2.5 Other

If harmful effects or evidence of irreversible damage are detected by the monitoring programs, the licensee shall provide an analysis of the problem and shall develop a course of action to be taken to alleviate the problems. If the ecology of the river significantly changes at a future date as, for example, by major changes in water chemistry or reintroduction of shad, the licensee shall provide an analysis of expected impacts and a course of action to minimize the impacts.

5.7 Records Retention

- 5.7.1 Records and logs relative to the following areas will be retained for the life of the plant.
 - a. Records and drawing changes reflecting plant design changes made to systems and equipment as described in Section 5.6.2.4.
 - b. Records of environmental surveillance data.
 - c. Records to demonstrate compliance with the Limiting Conditions for Operation in Section 2.
- 5.7.2 All other records and logs relating to the Environmental Technical Specifications shall be retained for 5 years.