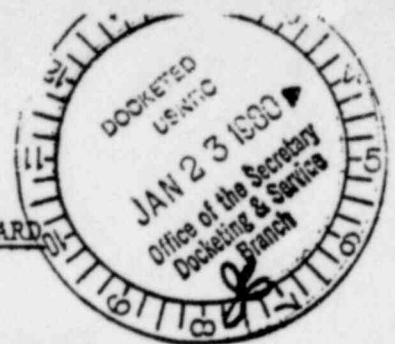


UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD



In the Matter of

METROPOLITAN EDISON COMPANY
(Three Mile Island
Nuclear Station, Unit One)

Docket No. 50-289
(Restart)

INTERROGATORIES OF INTERVENOR
ANGRY TO LICENSEE

Intervenor Anti-Nuclear Group Representing York (ANGRY) hereby propounds pursuant to 10 C.F.R. §2.740b the following interrogatories to Metropolitan Edison Company. These interrogatories are deemed to be continuing, and shall be supplemented in accordance with 10 C.F.R. 2.740(e).

1. Identify by name and location all gaseous and liquid effluent filtration devices which will be operational at the time of TMI-1's restart.
 - a. State the filtration capacity of each such device in terms of radionuclide(s), concentration of effluent, and saturation levels.
 - b. Identify each case in which the filtration capacity of equivalent devices at TMI-2 was exceeded during the March, 1979 accident. For each such case specify the amount by which such capacity was estimated to have been exceeded, and the duration of the inadequate filtration.
 - c. State the basis for the Licensee's belief that the devices listed under int. #1 will provide filtration capacity adequate to protect public health and safety.
 - d. What percentage of the total fission product inventory of the TMI-1 reactor core, assuming total release into effluent pathways, would such capacity be able to prevent reaching offsite areas? Provide breakdown by radio-isotope.
 - e. What percentage of the fission product releases estimated in the following accident scenarios from WASH 1400 would such capacity be able to prevent reaching offsite areas: (provide breakdown by radio-isotope):
 - 1) PWR 5
 - 2) PWR 4
 - 3) PWR 2
2. Identify the measures the Licensee has taken in response to the criticisms of reactor control room design found in NUREG 0560 (pp. 8-11, 8-12) and in the report of the President's Commission on the Accident at TMI (p. 29: #8(b)(i) and (ii) and p. 72: #1).
 - a. What is the basis for the Licensee's belief that the present TMI-1 control room design is adequate to assure safe operation of the facility.

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3. Identify the provisions in the Licensee's Emergency Plan which either singularly or collectively are intended to prevent damage to property such as livestock in the area surrounding the plant site. Explain how each contributes to the achievement of this goal.
4. Explain the difference between a "major radiation emergency drill" (EP §4.8.1.2(5)(a)) and a "joint exercise radiation emergency drill" (§4.8.1.2(5)(b)(1)).
 - a. State whether either or both will be performed before restart.
 - b. If a "joint exercise" is not so scheduled, give reason.
5. NUREG 0560, at p. 4-5, refers to a study performed by the Human Resources Research Organization which documents the poor performance of trained personnel under emergency conditions. In light of this study what is the basis for the Licensee's belief that persons with emergency response responsibilities will in fact discharge such responsibilities under the conditions of a nuclear accident which results in atmospheric releases.
6. Identify each step that must be taken from the time an offsite radiation monitoring survey team is dispatched to the time the findings of such a monitoring effort are made available for dose assessment calculations.
 - a. How much time is required for the above-described process to take place?
 - b. How would the answer to #6(a) be affected by the installation of offsite monitoring devices that could be remotely read onsite?
 - c. Explain the basis for the Licensee's belief that offsite monitoring devices that cannot be remotely read onsite provide adequate accident assessment capability.
7. How many "Radiological Analysis Support Engineers" will be onsite at any given time?
 - a. What is their training and background in the area of radiological assessment relative to that of the "Group Leader - Health Physics/Chemistry Support and his staff" identified as part of the Offsite Emergency Support Organization.
 - b. What capability does the offsite Health Physics/ Chemistry support group add that is not already present onsite?
 - c. What is the potential for erroneous dose projections and/or protective action recommendations prior to mobilization of offsite Health Physics/Chemistry Support personnel? Explain in detail.
8. Identify each of the "radiological and meteorological instrumentation readings" (EP §4.6.2.3(3)) that is required for dose assessment.
 - a. What is the time required for the gathering of this information?
 - b. Identify each step that must be taken to convert such information into a dose assessment/projection.
 - c. What is the time required for such conversion process,
 - d. How would the answer to #8(c) be affected by the installation of an Atmospheric Release Advisory Capability system (ARAC)?

- e. What information additional to that generated by the process described in answers to #8-8(c) would ARAC provide?
- f. Explain the basis for the Licensee's belief that an ARAC system is not necessary for adequate dose assessment/projection capability.
9. State whether an ARAC system was placed into operation at Three Mile Island during the accident.
- a. Who made the decision to install this system and what was the basis for such decision?
- b. What decisions were made on the basis of information provided by the ARAC system? Could such information have been generated in its (ARAC) absence?
10. Does the Licensee agree with the statement in NUREG 0475, p. 10, that "the calculation of doses to individuals at specific locations near the site are best carried out using environmental measurement data obtained at these locations." If no, explain. If yes, explain how this principle is incorporated into Licensee's dose assessment procedures.
11. What is the time required for the evacuation of each of the seven "hospitals located within a 10 mile radius of TMI" as listed in Table 3 of Licensee's Emergency Plan. Explain fully the reasons for the time given in each case.
12. Explain how the estimates provided by Licensee in answer to UCS interrogatory #171 would be affected by each of the following conditions:
- a. Inclement weather
- b. Rush-hour traffic congestion
- c. Traffic accidents
13. Identify all institutions other than hospitals containing non-ambulatory residents, such as prisons or nursing homes, within a 10 mile radius of TMI.
14. Identify all documents and studies relied upon by the Licensee in answering the foregoing interrogatories.

Respectfully Submitted,

Anti-Nuclear Group Representing York

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DATE: January 21, 1980

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