

U.S. GOVERNMENT
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20585

JAN 21 1980

Docket No. 50-289

MEMORANDUM FOR: T. D. Murphy, Chief
Radiological Assessment Branch, DSE

FROM: D. M. Collins, Leader
Radiation Protection Section, RAB

SUBJECT: SUMMARY OF MEETING WITH METROPOLITAN EDISON ON
DECEMBER 21, 1979

FACILITY: Three Mile Island Station, Unit No. 1
APPLICANT: Metropolitan Edison

On December 21, 1979, a meeting was held with representatives of Metropolitan Edison to discuss the Radiation Protection Plan. The name of the persons attending the meeting are listed in enclosure A. The NRC comments on the Plan, enclosure B, were discussed.

With regard to Article 1, comment 2, licensee representatives stated that they would commit to Regulatory Guide 8.8 as it is applicable to operating units and that they would commit to the guides in the SRP's or provide alternatives.

With regard to Article 1, comment 3, NRC representatives stated that the pertinent sections were 7e, 7f, 7g, 8.b(1)(aa), 8.b(1)(bb) and 8.b(1)(cc). Licensee representatives agreed to revise the plan accordingly.

With regard to Article 2, comment 2, NRC representatives clarified the comment to "...loss of dosimeter...etc.

With regard to Article 3, comment 1, licensee representative stated that rather than require PORC approval for all such procedures, such as the procedure for use of a GM survey meter, etc., they would prefer PORC review procedures that affected various departments and agreed to establish a protocol by procedure for what procedures would require PORC approval.

With regard to Article 4, comment 3, licensee representatives stated that this training was discussed in Article 5.

With regard to Article 5, comments 1 and 2, licensee representatives stated that such procedures and tracking were in place and that the words "...administrative radiation exposure control levels..." committed the licensee to such procedures.

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With regard to Article 5, comment 3, licensee representatives stated that RWP's would be issued for common jobs in such areas, but the job-specific procedures would be required for high dose rate, high contamination, high air-borne radioactivity or high man-rem jobs.

With regard to Article 5, comment 5, the NRC agreed that the first two sentences were repetitive with other sections of the plan..

With regard to Article 5, comment 6, the NRC clarified that the times specified were the longest period of time between calibrations. Licensee representatives stated that all instruments were now calibrated quarterly, that they would prefer that calibrations be based on equipment history but that they agreed to add the statement.

With regard to Article 6, comment 1, licensee representatives agreed to add words verifying that the periodic measurements would be of air that is representative of concentrations of radioactive material to which an individual is exposed rather than the use of the term "breathing zone".

With regard to Article 7, comment 3, licensee representatives stated that such procedures were developed and would be implemented.

With regard to Article 8, comment 1, licensee representatives proposed a release limit of 0.1 mrad/hr at one inch. The NRC concurred in this proposal.

With regard to Article 8, effluent release comments, licensee representatives agreed to add reference to Technical Specification in Article 1.

With regard to Article 9, comment 3, the licensee representatives stated that such descriptions would appear in procedures.

With regard to Unit 1 specific Article 9, licensee representatives stated that they could provide no additional information or personnel at that time, but it was explained that the experience listed for the Manager-Radiological Controls as Supervisor, Reactor Plant Services-Saxon, was in fact supervisor of health physics and chemistry. They stated that 5.2 of the SAR would be revised to show this.

Licensee representatives appeared to understand all comments and agreed to provide an updated radiation protection plan by January 18, 1980.

D M Collins

D. M. Collins, Leader
Radiation Protection Section, RAB
Division of Site Safety and
Environmental Analysis, NRR

Enclosures: as stated

cc: D. Muller
W. Kreger

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ATTENDEES

Metropolitan Edison

J.W. Heward, Manager, Radiological Controls, TMI-2
W. Potts, Manager, Radiological Controls for TMI-1
Beverly Good, Health Physicist
Paul Ruhter, Supervisor, Radiological Engineering

NRC

John Collins, Deputy Director, TMI Support
Tom Murphy, Chief, Radiological Assessment Branch, NRR
Doug Collins, Leader, Radiation Protection Section, NRR
Don Neely, Senior Radiation Specialist
John White, Senior Radiation Specialist
John Minns, Health Physicist, NRR

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NAC COMMENTS ON TMI-UNIT 2i.
REV. O 12/07/79

ARTICLE 1

First paragraph:

1. Include a statement of radiation protection objectives e.g., the objective of the radiation protection program is to control radiation hazards to avoid accidental radiation exposures, to maintain exposures within the regulatory requirements, and also to maintain exposures to workers as low as is reasonably achievable.
2. Include a commitment to Reg. Guide 8.8 and other guides referenced in SRP 12.1 and 12.5.

Second paragraph:

3. Add to first sentence a commitment to R.G. 1.33, Rev. 2, App. A, paragraph 7.
4. Add to second sentence a commitment to other appropriate station procedures, e.g. Instrument surveillance, Hi-Rad Key Control Procedure.
5. Add to fourth paragraph the following commitments.

Procedures shall provide adequate guidance and specify appropriate methods or techniques to ensure that the performance of such activities are in accordance with sound radiation protection principles, and are in compliance with applicable regulatory provisions. Station Health Physics Procedures shall be prepared, reviewed, approved, and controlled as described in Station Administrative Procedures.

ARTICLE 2

1. Introductory paragraph add sentence:

Each individual is responsible for maintaining his or her exposure as low as is reasonably achievable.

2. Add sentence to item 3, "Report loss of unexpected exposure and off-scale dosimeter to Radiological Control Dept."
4. Add it item 10, "Notify Rad. Con. personnel if contamination is found."
5. Add a new item 18, "Notify Rad. Con. of faulty or alarming radiation protection equipment."
6. Add a new item 19, "Notify Rad. Con. personnel of medical administration of radiopharmaceuticals."

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ARTICLE 3

1. Item 5--should be RORC? Also add a sentence, "As a minimum those procedures should include those required by Reg. Guide 1.33, App. A, paragraph 7. Also add a sentence, "These reviews shall be in accordance with a formally promulgated procedure review protocol.
2. Add a item 10 which discusses your policy for corrective action for audit deficiencies, technical review deficiencies and other rad. con. deficiencies.

ARTICLE 4

1. Add to item 3, "Rad. con. training shall be given to personnel requiring access to a restricted area.
2. Item 5. Add a requirement for training for changes to procedures, equipment and programs.
3. Add a new item 6:

Task-specific Training shall be given to personnel who have been assigned to a task which involves significant radiological hazard. Indoctrination in the specific hazards in the work place, in appropriate special radiation protection procedures, ALARA considerations, and the use of special protective clothing, respirators, and equipment should be considerations for the Task-Specific Training.

ARTICLE 5

1. Add to paragraph 2, "Procedures will be developed to track personnel exposure and require a stricter radiological control and higher level of authorization as individual exposures increase.
2. Add to paragraph 2, "Exposures shall be maintained such that they can be attributed to specific work and/or job functions.
3. Add to paragraph 2:

A Radiation Work Permit will be required for any work or entry to controlled areas that would involve or create the following:

Radiation Area
High Radiation Area
Airborne Radioactivity Area
Contaminated Area

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5. Add to paragraph 4:

The Radiation Protection Program shall include radiation surveys for airborne activity, removable surface contamination and radiation levels. Those surveys shall be performed in accordance with applicable Health Physics procedures and regulatory requirements. Surveys are performed in order to:

Monitor the suitability of control measures,
Evaluate the need for additional controls,
Evaluate trends for ALARA purposes, and,
Evaluate radiological conditions in areas routinely entered without
radiation work permits coverage.

Surveys in Uncontrolled areas are provided to insure the effective controls of radioactive material.

6. Add to paragraph 4, "Portable radiation survey instruments will be calibrated semiannually, except for dose rate measuring instruments, which will be calibrated quarterly."
7. Add a commitment to require a quality assurance function for the personnel dosimetry and portable radiation monitoring equipment programs.

ARTICLE 6

1. Add to paragraph 2, sect. 2, last sentence--add words "breaking zone" after periodic.

ARTICLE 7

1. Add in paragraph 1 specific limits for control of surface contamination.
2. In paragraph 2, specify limits for contamination on person's skin and criteria for evaluation of resultant dose by a Health Physicist.
3. Add a new paragraph 3:

The Radiation Protection Personnel will be notified in the event that anyone in the plant is found to be contaminated with radioactive materials. Applicable procedures concerning personnel decontamination are provided for:

Decontamination process
Release limits
Alternative decontamination methods
Documentation

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ARTICLE 8

1. Paragraph 1. Add a definition of what is considered radioactive material. NRC position is that a commitment to ANSI-N547 (SRP Rev. 1) is acceptable with a maximum dose rate measured with a beta gamma survey meter at 1" not to exceed 0.2mr/hr.
2. Paragraph 1/5. Add to end of 1st sentence "or subject to unauthorized removal." In second sentence delete periodic and include frequency in procedure.
3. Add a new paragraph 1/7:

Radioactive waste discharges shall be controlled administratively by the use of Liquid Release Permits and Gaseous Release Permits. The completion, approval and use of these permits is described in applicable Health Physics Procedures.

4. Add a new paragraph 1/8:

Effluent streams shall be sampled prior to release, and appropriate sampling and/or monitoring by instrumentation shall be performed during the releases, in accordance with unit Technical Specifications and appropriate Health Physics Procedures.

5. Add a new paragraph 1/9:

Radioactive wastes are prepared for solidification and solidified in accordance with operating procedures under the cognizance of a Radwaste Foreman or individual designated by the operating procedure for the particular process.

ARTICLE 9

1. Paragraph 2. Add after first sentence, "It is the responsibility of the Radiological Control Department to evaluate radiological conditions in the restricted area and recommend precautionary measures."
2. Paragraph 3. Change last sentence to read,..., a deputy will be appointed who meets the requirements of R.G. 1.8. Such persons must have a line management function in the Radiological Control organization. All other supervision and Technicians (including contractor personnel) in the Radiological Control Department must meet the requirements of ANSI N18.1 or ANSI N3.1.
3. Figure 1 -- Expand functional description to include all major activities covered by each section in the Radiological Control Dept. Include relationship of audit program to Rad. Con. Dept. Deputy functions should be included in the line organization.

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UNIT 1 SPECIFIC COMMENTS

ARTICLE 3

1. Item 8. Change "approval" in second sentence to "information".

ARTICLE 5

Second paragraph--include commitment to incorporate appropriate radiological controls into new designs.

ARTICLE 9

With regard to the HP organization, the organization should be such that all technical matters are reviewed and approved by an individual Reg. Guide 1.8 qualified. This may be implemented by assigning a deputy 1.8 qualified in the line below the Manager, Radcon, or by assigning 1.8 qualified individuals as Radiological Engineers and Rad. Con. Technician Supervisors.

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