

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION
HAROLD R. DENTON, DIRECTOR

In the Matter of

METROPOLITAN EDISON COMPANY
(Three Mile Island Nuclear
Station, Unit 2)

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Docket No. 50-320
(10 CFR 2.206)

DIRECTOR'S DECISION UNDER 10 CFR 2.206

In a petition dated August 9, 1979, the Anti-Nuclear Group Representing York (ANGRY) of York, Pennsylvania, requested that the Commission issue an environmental impact statement prior to issuing any authorization to vent radioactive gases from the containment building of the Three Mile Island Nuclear Station Unit 2. ANGRY was informed by letters from the Director of Nuclear Reactor Regulation dated September 6, 1979, and from the Secretary of the Commission dated October 12, 1979, that ANGRY's petition would be considered under 10 CFR 2.206 of the Commission's regulations. A notice was published in the Federal Register, 44 Fed. Reg. 53593 (1979), that ANGRY's petition was being treated pursuant to 10 CFR 2.206.

The Office of Nuclear Reactor Regulation issued a draft report in March 1980 entitled "Environmental Assessment for Decontamination of Three Mile Island Unit 2 Reactor Building Atmosphere" (NUREG-0662). ANGRY was provided a copy of the Staff's environmental assessment. The assessment discussed five alternative methods for decontaminating the reactor building atmosphere and recommended that the building atmosphere be decontaminated by purging the environment through the building's hydrogen control system. Based on the Staff's estimate of doses to the public from releases during the decontamination by purging and on the Staff's estimate of

occupational dose, the Staff concluded that this action did not constitute a significant environmental impact and that the environmental impacts for each of the alternative methods would be less than those considered in the TMI-2 Final Environmental Statement (1972) (reissued as NUREG-0552, April 1979). Accordingly, the Staff did not propose to prepare an environmental impact statement on the action to decontaminate the reactor building atmosphere.

Two addenda were issued to the Staff's assessment. Addendum 1 referenced studies that have been undertaken on the issue of psychological stress. Addendum 2 considered a variation in the recommended purging method for decontamination of the reactor building atmosphere. The variation would involve more rapid purging and would be permitted only under meteorological conditions favorable to atmospheric dispersion. Addendum 2 recommended that the reactor building atmosphere be decontaminated by more rapid purging using the reactor building purge system in conjunction with the building's hydrogen control system. The Staff again found that the more rapid purging would not result in a significant environmental impact and, accordingly, the Staff did not propose to prepare a separate environmental impact statement on this action.

Public comment was invited through May 16, 1980, on the assessment and the two addenda in notices published in the Federal Register. See 45 Fed. Reg. 20265, 21760, and 30760 (1980). At the close of the comment period, approximately 800 responses had been received from various federal, state and local agencies and officials, nongovernmental organizations and other individuals. The Staff has issued a final report entitled "Final Environmental Assessment for Decontamination of the Three Mile Island Unit 2 Reactor Building Atmosphere" (NUREG-0662, Vol. 1, May 1980), which discusses the Staff's assessment of alternative decontamination

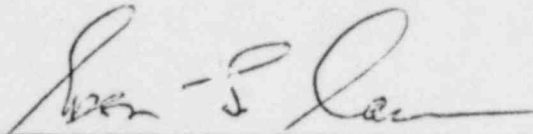
methods and of various public comments submitted on the draft assessment. Upon review of these various comments and further Staff analyses of alternatives, the Staff again recommended that controlled purging of the reactor building atmosphere be authorized. The Staff reaffirmed its earlier assessment that this action would not have any significant adverse impact on public health and safety and that neither containment purging nor the other alternatives discussed in the assessment would result in any significant environmental impact. The Staff does not intend, therefore, to prepare an environmental impact statement on the purging operation.

The Staff's conclusion and recommendation were discussed at Commission meetings on June 5 and 10, 1980. At the June 10th meeting, the Commission approved the purging operation and determined that preparation of an environmental impact statement was not necessary. An appropriate authorization to purge the reactor building atmosphere and negative declaration have been issued by action separate from this decision under 10 CFR 2.206. Copies are attached to this decision.

In view of the determination not to prepare an environmental impact statement on the purging operation, ANGRY's petition is denied. ANGRY also requested that the Commission give 12 hours notice of its intent to authorize release of radioactive materials in the event that it authorized purging of the containment atmosphere. Since purging may not take place until 10 days after the authorization to purge is issued, this aspect of ANGRY's petition is granted.

A copy of this decision will be filed with the Secretary for the Commission's review in accordance with 10 CFR 2.206(c). As provided in 10 CFR 2.206(c), this

decision will become the final action of the Commission twenty (20) days after issuance, unless the Commission elects to review this decision on its own motion within that time.


A Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Dated at Bethesda, Maryland
this 13th day of June, 1980.

Attachment:
As Stated

NUCLEAR REGULATORY COMMISSION

(Docket No. 50-320)

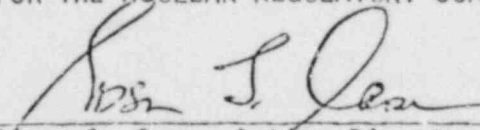
METROPOLITAN EDISON COMPANY(Three Mile Island Nuclear Station, Unit 2)ISSUANCE OF DIRECTOR'S DECISION UNDER 10 CFR 2.206

On September 14, 1979, a notice was published in the Federal Register that a petition by the Anti-Nuclear Group Representing York (ANGRY) was being considered under 10 CFR 2.206. ANGRY's petition requested that the Commission prepare an environmental impact statement concerning the venting of radioactive gases from the reactor building of the Three Mile Island Nuclear Station, Unit 2. Because this action will not cause any significant environmental impact, it has been determined not to prepare an environmental impact statement. Accordingly, ANGRY's petition is denied.

A copy of the formal decision denying the petition is available for inspection in the Commission's Public Document Room at 1717 H Street, N.W., Washington, D. C. 20555 and in the local public document rooms at the State Library of Pennsylvania (Government Publications Section), Education Building, Commonwealth and Walnut Streets, Harrisburg, Pennsylvania 17126 and the York College of Pennsylvania, Country Club Road, York, Pennsylvania 17405. A copy will also be filed with the Secretary for the Commission's review in accordance with 10 CFR 2.206(c). As provided in 10 CFR 2.206(c) this decision will become the final action of the Commission twenty days after issuance unless the Commission elects to review the decision on its own motion within that time.

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FOR THE NUCLEAR REGULATORY COMMISSION



Edson G. Case, Acting Director
Office of Nuclear Reactor Regulation

Dated at Bethesda, Maryland
this 13th day of June, 1980.

Before the
UNITED STATES NUCLEAR REGULATORY COMMISSION

In the Matter of the Petition of

ANTI-NUCLEAR GROUP REPRESENTING YORK (ANGRY)
JOHN BOWERS, GAIL BRADFORD, Etc.

PETITION FOR
RULEMAKING

For An Order Requiring the Preparation Of An
Environmental Impact Statement Prior To The
Release Into The Atmosphere Of Radioactive
Gases From The Three Mile Island Nuclear
Generating Station

PRM No.

1. On July 26 and 27, 1979, Newspapers serving the area in which petitioners reside published reports describing the presence within the containment structure of Unit Two of the Three Mile Island Nuclear Generating Station (TMI-2) of high concentrations of radioactive gases, and the eventual necessity of removal of such gases from the structure prior to entry of workers assigned to recovery operations.¹ The most plentiful radioactive isotope present in the gaseous mixture was reported to be Krypton-85, although other fission products, including xenon-133 and -135, strontium-90, and cesium-137 are also present. Mr. John Herbein, Vice-President of Metropolitan Edison Co. the owner of TMI-2 and licensee of this Commission, estimated the overall level of radioactivity represented by the gaseous mixture to be two million curies.² The aforementioned newspaper accounts stated that Met-Ed was considering two principal options for the removal of the gases: 1) ventilation into the atmosphere, and 2) pumping it into pressurized steel tanks of liquid hydrogen for disposal at an appropriate nuclear waste facility. Mr. Herbein stated that release into the atmosphere was considered by Metropolitan Edison to be the "less hazardous" of the two aforementioned methods of removal.³

1. "Krypton Gas May Be Vented At TMI Plant," York Daily Record, July 27, 1979, p.1.

2. Interview with John Herbein at TMI-2, August 3, 1979. On July 30, 1979, Petitioner Bradford was erroneously informed by Mr. Karl Abraham, of this Commission's Region I office that the level of radioactivity in TMI-2 gases was 61,000 curies.

3. Ibid.

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2. Petitioners all reside within an eight to fifteen mile radius of the TMI-2 facility and therefore are directly affected by whatever action this Commission may take with respect to the disposal of TMI-2 gaseous fission products.

3. Krypton-85 is a noble gas radionuclide with a half-life of 10 years. It emits both gamma rays, which are known to pose serious health risks to human reproductive organs, and beta particles gravitating toward concentration in the lungs. In addition to the lung exposure, direct exposure would provide an external skin dose.⁴

4. This petition is brought pursuant to section 2.802 of this Commission's regulations (10 CFR § 2.802). It seeks a determination by this Commission pursuant to 10 CFR § 51.5(a) (10) that any action by it authorizing the release into the atmosphere of the radioactive gases presently contained within the TMI-2 facility would "significantly affect the quality of the human environment," and therefore requires the preparation of an Environmental Impact Statement prior to the taking thereof.

5. Release of said gases into the atmosphere poses a substantial risk that one or both of the following limitations on radiation exposure of persons in the immediately surrounding unrestricted areas will be exceeded:

- 1) Two millirems within any single hour (10 CFR 20.105(b)(1))
- 2) 100 millirems in any seven consecutive days (10 CFR 20.105 (b)(2)).

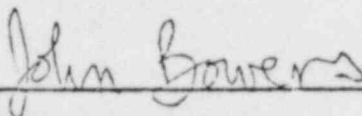
6. A full Environmental Impact Statement is felt by petitioners to be necessary in order to assure adequate consideration of all environmentally relevant aspects of the gaseous releases Metropolitan Edison Co. appears to have decided to cause in the near future. Such a Statement could be expected at minimum to satisfy the standards of comprehensiveness and specificity set forth by this Commission at 10 CFR 20.106 (c), which inter alia calls for an assessment of the possibility of "reconcentrations of radionuclides" within the relevant period of radioactive decay (10 CFR 20.106 (c)(6)). Most importantly, a full EIS will insure full and complete consideration of all feasible alternative methods of disposal of the gases. (42 USC § 4332 (C)(iii).

4. Anna Gyorgy, NO NUKES, p. 84.

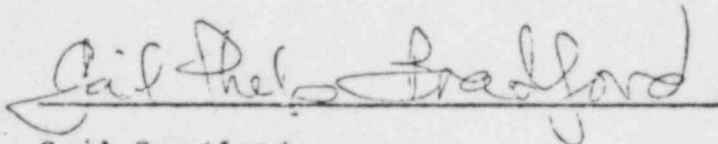
7. Notwithstanding this Commission's eventual action pursuant to this petition, Metropolitan Edison Co. should in no event be given authorization to make any further releases of radioactive materials into the atmosphere unless at least twelve hours before taking any such action it has issued a public announcement of its intent to do so.

DATED: York, Pennsylvania
August 9, 1979.

ANTI-NUCLEAR GROUP REPRESENTING YORK
(ANGRY)
245 West Philadelphia Street
York, Pa. 17404.



John Bowers,
Member, ANGRY Core Committee
RD7, Box 388A
York, Pa. 17402.



Gail Bradford
Member, ANGRY Core Committee
245 West Philadelphia Street
York, Pa. 17404.



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

September 6, 1979

Docket No.: 50-320

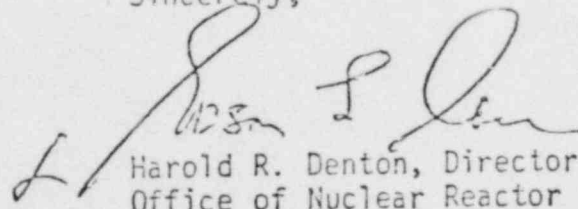
Anti-Nuclear Group Representing York
245 West Philadelphia Street
York, Pennsylvania 17404

Dear Mr. Bower and Ms. Bradford:

This letter is sent to acknowledge receipt of your petition on behalf of Anti-Nuclear Group Representing York requesting that the Commission issue an environmental impact statement prior to authorizing venting of radioactive gases from the Three Mile Island Nuclear Station, Unit No. 2. Your petition has been referred to the Director of Nuclear Reactor Regulation because the subject matter of the petition is within the jurisdiction of this office.

Your petition is being treated under 10 CFR 2.206 of the Commission's regulations, and accordingly, appropriate action will be taken on your petition within a reasonable time. I enclose for your information a copy of the notice that is being filed for publication with the Office of the Federal Register.

Sincerely,


Harold R. Denton, Director
Office of Nuclear Reactor
Regulation

Enclosure:
Notice

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OCT 12 1979

Ms. Gail Bradford
Mr. John Bowers
Anti-Nuclear Group Representing York
245 West Philadelphia Street
York, PA 17404

Dear Ms. Bradford and Mr. Bowers:

The NRC staff in its letter of September 6, 1979 has noted receipt of your petition requesting a determination that release of radioactive gases from Three Mile Island, Unit 2, would significantly affect the environment. With regard to the subject of the petition, the Commission wishes to inform you that GPU is expected to submit a proposal regarding methods for disposing of radioactive gases in the containment building. The NRC staff will then do an independent analysis of the proposal. An environmental valuation will be completed by the staff and published for public comment prior to any Commission approval of releases to the atmosphere.

After reviewing this material from its staff the Commission will be in a better position to determine whether the actions your petition requests are necessary and appropriate. The Commission notes that your petition is more in the nature of a request for enforcement action pursuant to 10 CFR 2.206, and will be dealt with as such, rather than as a petition for rulemaking. I shall keep you informed of significant developments relevant to your concerns.

Sincerely,

Samuel J. Chilk
Secretary of the Commission

bcc: GC:SUBJ
GC:READING (2)
GC:BICKWIT
GC:EILPERIN
GC:SLAGGIE
SECY (3)

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