796.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION



Before the Atomic Safety and Licensing Board

In the Matter of	84 AGO -6 P2:33
METROPOLITAN EDISON COMPANY	Docket No. 50-289 SP (Restart - Management Phase)
(Three Mile Island Nuclear Station, Unit No. 1)) BRANCH

INTERVENOR THREE MILE ISLAND ALERT'S FIRST SET OF INTERROGATORIES TO NUCLEAR REGULATORY COMMISSION STAFF

TO: Atomic Safety and Licensing Board Chairman Ivan W. Smith.

Intervenor Three Mile Island Alert ("TMIA"), pursuant to 10 C.F.R. 2.720(h)(2)(ii) submits the following interrogatories to Atomic Safety and Licensing Board Chairman Ivan W. Smith and requests that these interrogatories, necessary to a proper determination before this Licensing Board and whose answers are not readily obtainable from any other source, be answered fully, separately, in writing and under oath by the Nuclear Regulatory staff ("NRC staff") by or before August 23, 1984.

These interrogatories are deemed to be continuing and any additional information relating in any way to these interrogatories which the NRC staff acquires subsequent to the date of answering them, and up to and including the time of hearing, should be furnished to intervenor promptly after such information is acquired.

-2-

INSTRUCTIONS TO NRC STAFF

- A. All information is to be divulged which is in your possession or under your control, or is in the possession or under the control of your present or former executives, commissioners, employees, staff, directors, officers, trustees, managers, attorneys, inspectors, investigators, consultants, accountants, offices, branches, sections, or their agents, representatives or attorneys.
- B. Where an individual interrogatory calls for an answer which involves more than one part, each part of the answer should be set out so that it is clear to which interrogatory it refers.
- C. Where identification of a meeting, conversation, discussion or communication is required, the following shall be separately stated as to each such meeting, conversation, discussion or communication: the date; place; persons present; the method of communication; whether oral or written; the identity of each speaker; the substance of each speaker's participation; the substance of the subject discussed; the purpose of the meeting; the identity of any person who possesses information concerning such meeting; conversation, discussion or communication; the substance of any decision made at such meeting; any minutes, correspondence, notes, memoranda or other writing which resulted from or memorialized such meeting; and the location of any correspondence, notes, memoranda, or other writing.
 - D. Where identification of a document is required,

the following shall be separately state its date; its exact title; the general

the following shall be separately stated as to each such document: its date; its exact title; the general subject matter of the document; the author and his/her affiliation, office or business, presently and at the time the document was prepared; the last known address of the addressee and his/her name, title, affiliation, presently and at the time the document was prepared; and last known address of every person to whom a copy of the document was to be sent, other than the addressee described above; the names and addresses of all persons who now have the original and/or copies; the identification and location of the files where the original and each copy is normally kept and the custodian thereof; whether the document will be made available for inspection and copying; and the site of such voluntary production.

- E. If the NRC staff contends that the answer to any interrogatory is privileged, in whole or in part, or otherwise objects to any part of any interrogatory, state the reasons for each objection or grounds for exclusion, and identify each person having knowledge of the factual basis, if any, on which the privilege or other ground is asserted.
- F. If an interrogatory could, at one time, have been answered by consulting documents which are no longer in existence, in answer to such interrogatory:
 - 1. identify what information was maintained;
- identify all documents which contained such information;
- state the time period during which such documents were maintained;

- 4. state the circumstances under which documents ceased to exist;
- 5. state the date when such documents ceased to exist;
- 6. identify all persons having knowledge of the circumstances under which such documents ceased to exist; and
- 7. identify all persons who have knowledge or had knowledge of the documents and their contents.
- G. As used herein and unless the context otherwise required, the terms:
- (i) "NRC" shall mean the Nuclear Regulatory Commission, its branches, departments, sections, offices, subdivisions, and its present and former commissioners, administrators, management, employees, agents, staff, investigators, inspectors, accountants, auditors, representatives, consultants or officials, or their agents, attorneys and representatives.
- (ii) "General Public Utilities" or "GPU" shall mean General Public Utilities, any of its subsidiaries, including but not limited to GPU Nuclear Corporation and Metropolitian Edison Company, or its and its subsidiaries branches, divisions, departments, sections, affiliates, offices, and present and former officers, directors, management, board of directors, employees, staff, officials, agents, consultants, attorneys, representatives or their attorneys, representatives and agents.
 - (iii) "Babcox and Wilcox" or "B&W" shall mean

the Babcock & Wilcox Company, its subsidiaries, branches, divisions, departments, sections, affiliates, offices, and its or its subsidiaries, present and former officers, directors, management, board of directors, employees, officials, staff, agents, consultants, attorneys, representatives or their attorneys, representatives and agents.

- (iv) The I&E investigation and/or I&E report shall mean NUREG-0760 and/or the investigation leading to NUREG-0760, entitled "Investigation into Information Flow During the Accident at Three Mile Island," dated January, 1981.
- (v) The Senate Report shall refer to the report on the Three Mile Island accident completed by the Subcommittee on Nuclear Regulation of the Senate Committee on Environment and Public Works, and the investigation leading up to that report.
- (vi) The SIG Report shall refer to the report and/or investigation of the NRC Special Inquiry Group headed by Mitchell Rogovin, which is entitled "NRC Special Inquiry Report," dated January, 1980.
- (vii) The Kemeny Report shall refer to report of the special commission appointed by President Carter to investigate the Three Mile Accident, entitled "The Report of the President's Commission on Three Mile Island."
- (viii) "Document" shall mean every writing of every type and description, and every other instrument or device by which, through which or on which information has been recorded and/or preserved, including but not limited to memoranda,

including those reflecting meetings, discussions or conversations, notes, letters, drawings, files, graphs, charts, maps, photographs, deeds, agreements, contracts, handwritten notes, diaries, logs, ledgers, studies, data sheets, notebooks, books, appointment calendars, telephone bills, telephone messages, receipts, vouchers, minutes of meetings, pamphlets, computations, calculations, accounting(s), financial statements, voice recordings, computer printouts, computer discs and programs, and other data compilations, device or medium on which or through which information of any type is transmitted, recorded or preserved. The term "document" also means every copy of a document when such copy is not an identical duplicate of the original.

- (ix) "Person" shall refer to any natural person, firm, partnership, joint venture, trust, corporation, holding company, or any other entity natural or legal, domestic or foreign.
- (x) "Communication" shall mean communication, discussion, conversation, contact, letter, memorandum, telephone call, telegram, message or direction, whether written or oral, and whether in person, by telephone or by mail.

INTERROGATORIES

1. Regarding any document responsive to Intervenor TMIA's First Request for Production of Documents of whose existence the NRC staff is aware, or which the NRC staff knew existed in the past, and which is not now within the NRC staff's custody or control, state the following:

- (a) the current location of the document;
- (b) the custodian of the document;
- (c) the title and substance of the document;
- (d) the document request to which the document is responsive; and
- (e) if the document no longer exists, the last known location of the document and the circumstances under which the document ceased to exist.
- 2. Explain the reason(s) the NRC requested data on core exit thermocouple temperatures on March 28, 1979 as referenced on page 39 of the I&E report, and the reason(s) GPU failed to provide the NRC the requested information. State the exact time and date on which these temperature readings were provided to the NRC and identify the person(s) who so provided them.
- 3. Identify all lines and methods of communication between the NRC on one hand and GPU or B&W on the other hand, which were maintained at any time from March 28 to March 30, 1979 and identify for each such line and/or method of communication the following:
- (a) The person who recommended or suggested the initiation of the line/method of communication;
- (b) The exact times and dates during which each such line/method of communication was maintained;
- (c) The information which was transmitted by means of that line/method of communication;

- (d) The person(s) who transmitted information by means of that line/method of communication;
- (e) The person(s) who received information by means of that line/method of communication; and
- (f) The documents which recorded, mentioned, referred to or otherwise related to information transmitted by any such line/method of communication.
- 4. Identify the date and precise time at which GPU informed the NRC of the following:
- (a) The pressure spike which occurred at approximately 1:50 p.m.;
- (b) The PORV had been open from approximately 4:00 a.m. to approximately 6:00 a.m.;
- (c) The HPI (high pressure injection) had been throttled during the time the PORV had been leaking during the early morning of March 28, 1979;
- (d) Hot leg temperatures in excess of 700 degrees
 F. had existed during the morning of March 28, 1979;
- (e) Temperatures in excess of the saturation temperature indicated the core was or had been in a condition to be cooled by steam rather than water;
- (f) On March 28, 1979 the TMI-2 reactor was in a condition not covered by emergency procedures;
- (g) Certain GPU and/or B&W personnel on site on March 28, 1979 were uncertain prior to noon on March 28, 1979 as to whether the TMI-2 core was being adequately cooled;

- (h) The in-core thermocouple temperature readings for any part of the date of March 28, 1979;
- (i) The neutron detectors mounted inside and outside the reactor pressure vessel indicated increased neutron levels on March 28, 1979;
- (j) The high radiation levels detected by the radiation monitor mounted at the top of the containment building during the morning of March 28, 1979;
- (k) The hydrogen explosion and/or combustion which occurred during the early afternoon on March 28, 1979;
- (1) The actuation of the containment sprays associated with the pressure spike;
- (m) Any instructions by Mr. Miller or other GPU personnel not to activate any equipment in the reactor building because it might cause a spark and/or a hydrogen explosion;
- 5. For each communication identified in response to Interrogatory No. 4 above, identify the following:
 - (a) The person(s) who made each report;
- (b) The person(s) at the NRC who received each report;
- (c) The means by which the report was made, either in person, in writing or by telephone or telex;
- (d) Any document recording, mentioning, referring, to or otherwise concerning that report;
- (e) The current location of any document identified in response to subpart (d) above.

6. State the NRC staff's current position as to whether any misstatements, inaccurate statements or false statements were made in the Dieckamp mailgram to Congressman Udall, and identify any statements which the NRC staff believes are misstatements, inaccurate statements or false statements.

Identify the factual support for your position, including identification of all interviews, statements, documents or other evidence.

- 7. Identify any communications between the NRC and GPU concerning the Dieckamp mailgram, including but not limited to any meetings, discussions or conversations between GPU and the NRC concerning the mailgram or any of the statements or issues raised in the mailgram, including the pressure spike which occurred at approximately 1:50 p.m. on March 28, 1979; the actuation of the containent sprays caused by that pressure spike; Mr. Miller's order not to turn on equipment in the reactor building after the occurrence of the pressure spike in order not to cause a spark or possible hydrogen explosion; a hydrogen explosion, hydrogen combustion or hydrogen burn which occurred on March 28,1979; any concern on March 28, 1979 about the presence of hydrogen in the reactor building.
- 8. Identify all investigations, inquiries, studies, research or reports the NRC has conducted on the Dieckamp mail-gram, including any investigation, inquiry, research, study or report on whether Mr. Dieckamp made a material false statement(s) in that mailgram.

- 9. Identify the date on which GPU was informed of the substance of the I&E interviews of Joseph Chwastyk and Brian Mehler, including identification of any GPU attorney or other personnel who attended any I&E interviews of Mr. Mehler and Mr. Chwastyk and the dates of those interviews.
- 10. What is the factual basis for the statement on page 44 of the I&E report that Mr. Miller and Mr. Herbein felt at the time of briefing of the Pennsylvania Lt. Governor on March 28, 1979 that "conditions were improving?"
- 11. What is the factual basis, including any interviews, notes, documents or other evidence, for the statement on page 44 of the I&E report that Mr. Miller and Mr. Herbein had information at the time of briefing of the Pennsylvania Lt.

 Governor that hot leg temperatures were decreasing and cold leg temperatures were increasing?
- views, notes, documents or other evidence, supporting the conclusion on page 23 that Mr. Chwastyk and Mr. Mehler did not discuss their belief that the pressure spike was real with their supervisors on March 28, 1979 and that they diverted their attention "away from the spike to other plant activities after a brief time period?"
- 13. What is the factual basis, including any interviews, notes, documents or other evidence, supporting the conclusion on page 24 that GPU personnel other than Mr. Chwastyk

and Mr. Mehler did not conclude that hydrogen was the cause of the pressure spike?

- 14. What is the factual basis, including any interviews, notes, documents or other evidence supporting the conclusion on page 25 that no NRC inspector or NRC personnel were informed about the pressure spike on March 28, 1979?
- 15. What is the factual basis, including any interviews, notes, documents or other evidence, supporting the conclusion on page 29 that an order not to restart electrical equipment was given on some day subsequent to March 28, 1979?

Describe the conditions existing at the time the instruction was given which would lead to a concern that electrical equipment might cause a spark or ignite hydrogen. Further, identify all documents which record those conditions.

Identify the precise time and date when such conditions existed and when the order was given not to restart the electrical equipment.

- 16. State the factual basis, including any interviews, documents, notes or other evidence, supporting the conclusion on page 28 that Mr. Miller did not give Mr. Chwastyk permission to establish a bubble in the pressure or "draw the bubble" after the pressure spike occurred around 1:50 p.m. on March 28, 1979.
- 17. State the factual basis, including any interviews, documents, notes or other evidence supporting the conclusion on

page 27 that Mr. Chwastyk did not direct operators to make checks of the integrity of the containment and other checks of the conditions of the plant because of the hydrogen explosion.

Describe all investigations, inquiries or studies the NRC staff conducted to determine whether any containment checks or other checks were made immediately after the pressure spike occurred at approximately 1:50 p.m. on March 28, 1979.

18. Describe the licensing training and required knowledge of engineered safety feature systems and associated instrumentation which should have led personnel at TMI-2 to conclude that the pressure spike observed at 1:50 p.m. on March 28, 1979 was real and not a malfunction.

Include in your answer consideration of the fact that two out of three pressure sensors needed to detect high pressure prior to triggering and/or actuation of the containment sprays.

19. Identify all investigations, inquiries, studies, research or reports conducted by the NRC to determine why the operators' logs describe the pressure pulse which occurred at approximately 1:50 p.m. on March 28, 1979 as 4 psi and 5 psi when the magnitude of the pulse was, in fact, 28 psi.

Explain the reason(s) the operators' logs erroneously recorded the magnitude of the pressure spike.

- 20. At what time(s) on March 28 through March 30, 1979 did the hydrogen recombiner become actuated? For each time identified above, identify the following:
- (a) The manner in which the actuation was recorded;
- (b) The documents which record, memorialize, mention or otherwise concern the actuation, and their current location;
- (c) All persons who had knowledge or were informed of the actuation of the hydrogen recombiner at or near the time of actuation;
- (d) The persons to whom each person identified in subpart (c) above communicated the fact of the actuation of the hydrogen recombiner;
- (e) The mode of actuating the hydrogen recombiner, including whether it was actuated automatically or manually.
- 21. At what time on March 28, 1979 did the Command Team or Emergency Team personnel decide to employ and begin to implement a repressurization strategy? Identify all persons who gave directions or instructions to change to a repressurization strategy and all persons to whom such instructions and/or directions were given.

What were the reason(s) GPU changed to a repressurization strategy at this time. Inlcude in your answer any indicators of the reactor's conditions which you understand led GPU to change to a repressurization strategy.

22. Describe all assistance and/or information which GPU failed to report to the NRC or to the Commonwealth of Pennsylvania pursuant to the requirements of Section 6.8 of Three Mile Island Unit 2 Technical Specifications, cited in the NRC's Notice of Violation EA-81-17, dated January 27, 1981, signed by Victor Stello.

Include all issues which form the basis for this Notice of Violation.

23. Describe any investigation, inquiry, probe, research, study, or report on the reactor coolant sample(s) taken at about 8:50 a.m. on March 28, 1979.

Identify the person(s) who took the data at the time; person(s) who analyzed the data; the results of any such analysis; the person(s) to whom and at what time the results of that data analysis were communicated.

State whether GPU communicated the results of the analysis of the reactor coolant samples to the NRC at any time.

24. Identify the person(s) who directed and/or ordered that the pressurization block valve be closed at approximately 3:08 p.m. on March 28, 1979. If that person was anyone other than Mr. Miller, explain the authority by which

any other person issued such an order in light of the instruction given by Mr. Miller when he left the TMI-2 site at approximately 2:00 p.m. on March 28, 1979.

Respectfully submitted,

Joanne Doroshow

The Christic Institute 1324 North Capitol Street Washington, D.C. 20002 Telephone: 202/797-8106

Lynne Bernabei

Government Accountability Project 1555 Connecticut Avenue, Northwest

Suite 202

Washington, D.C. 20036 Telephone: 202/232-8550

DATED: August 3, 1984 Attorneys for Three Mile Island Alert

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of		2000
METROPOLITAN EDISON COMPANY	Docket No. 50-289 SP	DOCKLIAN
(Three Mile Island Nuclear Station, Unit No. 1)	(Restart - Management	Phase 160 -6 P2:33

I hereby certify that I have served this 3rd day of August RANCH 1984 a copy of the foregoing Intervenor Three Mile Island Alert's First Set of Interrogatories to Nuclear Regulatory Commission Staff

on the following by mail, first-class, postage prepaid:

Administrative Judge
Ivan W. Smith, Chairman
Atomic Safety & Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Administrative Judge Sheldon J. Wolfe Atomic Safety & Licensing Board U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Administrative Judge Gustave A. Linenberger, Jr. Atomic Safety & Licensing Board U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Docketing and Service Section (3) Office of the Secretary U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Atomic Safety & Licensing Board Panel U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Atomic Safety & Licensing Appeal Board Panel U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Jack R. Goldberg, Esq.
Office of the Executive Legal
Director
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Thomas Au, Esq.
Office of Chief Counsel
Department of Environmental
Resources
505 Executive House
P.O. Box 2357
Harrisburg, PA 17120

John A. Levin, Esq.
Assistant Counsel
Pennsylvania Public Utility
Commission
P.O. Box 3265
Harrisburg, PA 17120

Ernest L. Blake, Jr.
Shaw, Pittman, Potts & Trowbridge
1800 M Street, N.W.
Washington, D.C. 20036

Mr. Henry D. Hukill Vice President GPU Nuclear Corporation P.O. Box 480 Middletown, PA 17057

Mr. and Mrs. Norman Aamodt R.D. 5 Coatesville, PA 19320

Ms. Lousie Bradford TMI ALERT 1011 Green Street Harrisburg, PA 17102

Joanne Doroshow, Esq.
The Christic Institute
1324 North Capitol Street
Washington, D.C. 20002

Michael F. McBride, Esq. LeBoeuf, Lamb, Leiby & MacRae 1333 New Hampshire Avenue, N.W. Suite 1100 Washington, D.C. 20036

Michael W. Maupin, Esq. Hunton & Williams 707 East Main Street Post Office Box 1535 Richmond, VA 23212 Ellyn R. Weiss, Esq.
William S. Jordan, III, Wsq.
Harmon, Weiss & Jordan
2001 S Street, Northwest
Suite 430
Washington, D.C. 20009

Lyme Bernabei