R. C. Arnold

uctober 19, 1979

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October 19, 1979

Docket No. 50-289

Ar. N. C. Arnola, Senior Vice President Netropolitan Euison Company 200 Cherry Hill Road Parsippany, New Jersey 07054

Dear Mr. Arnold:

As we have previously noted, our review of your "Restart Report" is underway. In order that you may proceed with preparation of any necessary additional information without waiting for our review in the areas of management and technical capability and QA program (as required by Item 6 of the Commission's Order of August 9, 1979), we are enclosing a description of information we will require in these areas. We have previously discussed these items with your staff and will require timely and complete information, in order that we may complete our review. Please inform us within seven days of receipt of this letter when we may expect your replies.

Sincerely, Original signed Pro Elchard E. Vales

Richard H. Vollmer, Director Three hile Island Support

Enclosures:

1. Quality Assurance Program and Procedural Control Information Required for the TMI-1 Restart Review

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### R. C. Arnold

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Nr. J. C. Herbein, Vice President Nuclear Operations Metropolitan Edison Company P.O. Fox 480 Middletown, Pennsylvania 17057

Fr. E. G. Vallace, Licensing Manager Metropolitan Edison Company 260 Cherry Hill koad Parsippany, New Jersey 07054

Mr. C. P. Miller, Manager Support Services and Logistics Metropolitan Edison Company 260 Cherry Hill Road Parsippany, New Jersey 07054

Mr. J. L. Seelinger, Superintendent, Unit 1 Metropolitan Edison Company 260 Cherry Hill Road Parsippany, New Jersey 07054

Mr. J. J. Colitz Manager Plant Engineering Metropolitan Edison Company 260 Cherry Hill Road Parsippany, New Jersey 07054

Mr. I. R. Finfrock Jersey Central Power and Light Company Madison Avenue at Punch Bowl Road Morristown, New Jersey 07960

Mr. P. W. Conrad Pennsylvania Electric Company 1007 Broad Street Johnstown, Pennsylvania 15907

George F. Trowbridge, Esq. Shaw, Pittman, Potts & Trowbridge 1800 M Street, N.W. Washington, D.C. 20026

0. To Lieterrin, Coo. Noticerrin Toissin Corns 200 Gladny Hill Koos Parsidoany, New Jorsey

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Ms. Mary V. Southard, Chairperson Citizens for a Safe Environment c/o Metropolitan Edison Company 260 Cherry Hill Road Parsippany, New Jersey 07054

Chauncey R. Kepford, Esq., Chairman York Committee for a Safe Environment 433 Orlando Drive State College Pennsylvania 16801

U.S. Environmental Protection Agency Pegion III office Attn: EIS Coordinator Curtis Building Sixth and Walnut Streets Philadelphia, Pennsylvania 19106

Director, Office of Radiological Health Department of Environmental Resources P.O. Box 2063 Harrisburg, Pennsylvania 17105

Mr. Weldon B. Arehart, Chairman Board of Supervisors Londonderry Township RFD #1, Geyers Church Road Middletown, Pennsylvania 17057

Mr. Harry B. Reese, Jr., Chairman Eoard of County Commissioners P.O. Box 1295 Harrisburg, Pennsylvania 17120

Mr. Gustave A. Linenberger Atomic Safety and Licensing Foard U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Dr. Ernest O. Salo Professor, Fisheries Research Institute, 10410 College of Rightman University of Mashington Seattle, Washington 98195

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R. C. Arnold

Alan S. Rosenthal, Esq., Chairman Atomic Safety and Licensing Appeal Doard U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Dr. W. Reed Johnson, Member Atomic Safety and Licensing Appeal Board U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Jerome S. Sharfman, Esq., Member Atomic Safety and Licensing Appeal Doard U.S. Nuclear Regulatory Commission Mashington, D.C. 20005

Dauphin County Office Emergency Preparedness Court House, Room 7 Front & Market Streets Harrisburg, Pennsylvania 17101

Director, Technical Assessment Division Office of Radiation Program (AW-459) U.S. Environmental Protection Agency Crystal Mall #2 Arlington, Virginia 20460

Mr. Robert B. Borsum Babcock & Wilcox Nuclear Power Generation Division Suite 420, 7735 Old Georgetown Road Bethesda, Maryland 20014

Governor's Office of State Planning and Development Attn: Coordinator, Pennsylvania State Clearinghouse



October 19, 1979

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# Quality Assurance Program and Procedural Control

Information Required for the TMI-1 Restart Review

In accordance with item 6 of the August 9, 1979 Commission Order, provide a complete description of the operational quality assurance program, including the QA provisions associated with procedural controls. Specifically, the licensee should provide:

- A complete description of the operational QA program, including those additional QA controls determined to be necessary through the analyses resulting from the TMI-2 accident.
- An identification of the structures, systems, and components under the control of the QA program discussed in item 1 above.
- 3. A description of the extent to which the following procedural controls are applied for safety-related activities, including a specific discussion on how each of these controls is applied to activities associated with startup, shutdown, normal operation, emergency actions, surveillance (to satisfy technical specifications), maintenance, repairs, and modifications.
  - a. Independent inspections.
  - b. Documenting the results of inspections. .
  - c. Independent evaluation and verification of completed, documented activities to assure that they are acceptable prior to releasing a structure, system, or component for operation or prior to going to the next operation phase.
  - d. Documenting the results of the independent verification.
  - e. Procedures must be at the area where the activity is being carried out and followed step-by-step rather than performing the activity by memory without the procedure at hand.
  - f. Checklists are used delineating each important action that is to take place, with space provided to document that the action has been completed.
  - g. Documented results of inspections, verifications, and completed actions are filed and maintained for future reference and audit purposes.
  - h. Implementing procedures are reviewed and approved by technically qualified personnel and the QA organization.

Repertions and verification activities are performed by the QA Planicetics

Describe how the status of inspections and tests performed on each structure, system, and component, including the status of their operability, is maintained throughout the plant to assure safe operation and to preclude the use of structures, system, and components which are nonconforming or removed from service for mediterance, mobification, inspection, or test.



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Enclosure 1

# Information Required for the TMI-1 Restart Review

The following information should be provided regarding the managerial and technical capability of Metropolitan Edison Company to operate TMI Unit 1 under all modes of operation, including normal, abnormal, and accident conditions, independent of other activities underway or contemplated in support of TMI Unit 2.

A. Normal and Abnormal Conditions

Normal and abnormal operating conditions include startup, power operation, transient events, shutdown, and refueling.

1. Offsite

Organizational charts of Met Ed showing the management and technical support headquarters structure and a description of the specific provisions which have been made for technical support for the operations of TMI-1. The description should identify qualification requirements for headquarters staff personnel in terms of numbers, educational background and experience requirements for each identified position or class of positions providing headquarters technical support for operations; and include specific educational and experience background for individuals holding the management and supervisory positions identified for the technical support of operations (see items below). Indicate whether these personnel are assigned full-time to support the operation of TMI-1. If not, describe the proportion of time you expect they will be assigned to support the operation of Unit No. 1.

Technical services and backup support for the operating organization should continue throughout the life of the plant. The special capabilities that should be included are:

- a. Nuclear, mechanical, structural, electrical, thermal-hydraulic and fluid systems, metallurgical and materials, and instrumentation and controls engineering.
- b. Plant chemistry and radiochemistry.
- c. Health physics.
- d. Evening and refueling operations support.
- e. Maintenance support.

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f. Fire protection.



Enclosure 2

## 2. Plant Staff

An organization chart showing the 'tle of each position, the minimum number of persons to be assigned to common or duplicated positions, the number of operating shift crews, and the positions for which reactor operator and senior reactor operator licenses are required.

The functions, responsibilities, and authorities of plant positions corresponding to the following should be described:

- a. Overall plant management.
- b. Operations supervision.
- c. Operating shift crew supervision.
- d. Licensed operators.
- e. Nonlicensed operators.
- f. Technical supervision.
- g. Radiation protection supervision.
- h. Instrumentation and controls maintenance supervision.
- i. Equipment maintenance supervision.
- j. Fire protection supervision.

For each position, where applicable, required interfaces with offsite personnel or positions identified in A above should be described. Such interfaces include defined lines of reporting responsibilities, e.g., from the plant manager to his immediate superior, as well as functional or communication channels. The following should also be described: (1) the line of succession of authority and responsibility for overall station operation in the event of unexpected contingencies of a temporary nature; (2) the delegation of authority that may be granted to operating supervisors and to shift supervisors, including the authority to issue standing or special orders; and (3) other designated personnel that possess special expertise useful for providing operational advice and guidance to plant staff personnel in the event of unusual occurrences. This section should also describe interfaces with TMI-2. The description supervisors and to should also describe interfaces with TMI-2. The description

The qualifications established for plant staff personnel describing the education, training, and experience requirements established for each management, operating, technical, and maintenance position category described above. In addition, provide the education, training, and experience background of the incumbent for each of the management or supervisory positions down through the shift supervisory level.

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## B. Accident Conditions

Management and Technical Response Staff - Provide a description of the organizational arrangement you plan to use and the resources you have available to respond to a TMI-2 type accident in both the short-term (less than one hour) and long-term (more than one hour). The following should be provided:

- 1. Management
  - a) Provide an organization chart showing each position for which the capabilities of the person filling the position are such that you could depend upon the individual to provide experienced management functions in the event of an accident. The persons filling these positions should have the capability, authority. and responsibility to allocate, on a company wide basis, the company's resources in their respective areas of responsibility, as needed. The areas of responsibility should include, as a minimum, the areas of engineering management; logistics support, coordination of activities with local, state, and Federal agencies, communication networks; and overall accident response coordination.
  - b) Describe the functions, responsibilities, and authority associated with each of the positions described in 1 above.
  - c) Describe the educational and experience background for the incumbent for each of the designated positions described in 1 above.
  - d) The organizational structure that will be used for both the shortterm and long-term accident responses.

# 2. Technical Staff

- a) Provide an organization chart showing each offsite functional unit and subunit that you would depend on to provide engineering-professional-technical support for your plant staff in the areas of:
  - 1) Nuclear power plant operations.
  - Nuclear, mechanical, structural, electrical, thermal-hydraulic, metallurgical and materials, instrumentation and controls, and systems engineering.
  - at Optake chartsery and radiocharistry.
  - 4) Health physics.
  - 5) -Nuclear fuels.

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6) Maintenance engineering.



- b) Describe the functions and responsibilities of each unit and subunit identified in a) above and indicate the number of professionaltechnical persons within each unit and subunit, including managers and supervisors. Indicate the proportion of time each unit or subunit is assigned nuclea. work (full-time, part-time, or not at all).
- c) Provide the following summary information for the professionaltechnical personnel within each unit and subunit identified in a) above:
  - 1) Educational background.
  - 2) Applicable work experience in the particular field.
  - Any other information you believe may be pertinent, including any NRC licenses held or formerly held.
  - Provide specific educational and experience background for individuals holding supervisory and management positions in those units or subunits.
- d) The organizational structure (see B.1.d above) that will be used to coordinate the activities of the staff described in B.2. For long-term support, indicate the time that would be required to activate all or a portion of this organization.

### 3. Advanced Planning

Describe the advanced planning that is established to implement the necessary actions using the personnel resources identified above including, but not limited to, the subjects of organizational arrangements, lines of communication, establishment of emergency control centers, interactions with the Emergency Preparedness Plan, engineering management, and logistics support.



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