RELATED COMMENCE

September 12, 1984

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UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of)
METROPOLITAN EDISON COMPANY)) Docket No. 50-289 SP) (Restart - Management Phase)
(Three Mile Island Nuclear Station, Unit No. 1))

LICENSEE'S ANSWERS TO UNION OF CONCERNED SCIENTISTS' FIRST SET OF INTERROGATORIES TO GENERAL PUBLIC UTILITIES (TRAINING)

Licensee General Public Utilities Nuclear Corporation (GPU Nuclear), pursuant to 10 C.F.R. § 2.740b, hereby submits the following answers to "Union of Concerned Scientists' First Set of Interrogatories to Genera' Public Utilities." The provision of answers to these interrogatories is not to be deemed a representation that Licensee considers the information sought to be relevant to the issues to be heard in this remanded proceeding.

INTERROGATORIES

1. Regarding any document responsive to UCS' First Request for Production of Documents of whose existence GPU is aware, or that GPU knew existed in the past, and that is not now within GPU'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;

8409170123 840912 PDR ADOCK 05000289 6 PDR (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.

ANSWER & OBJECTION. Licensee is currently gathering the documents responsive to UCS' First Request for Production of Documents. They will be located in the document discovery room. Once Licensee has completed this effort, if there are any documents that are responsive to this interrogatory, Licensee will note that fact in its document request response. Licensee objects to the request as impermissible discovery outside the scope of 10 C.F.R. § 2.740 insofar as it requests information about documents that are not within Licensee's custody or control.

2. Identify all individuals whom GPU intends to call as witnesses on the remanded issues related to the GPU training program. For each such witness, state or identify the following:

ANSWER & OBJECTION. Licensee has not finally determined who its witnesses will be on the remanded training issue. However, Licensee anticipates that it probably will have the following witnesses: the five members of the Reconstituted OARP Committee (Dr. Uhrig, Dr. Kimel, Dr. Christensen, Dr. Gardner and Mr. Kelly); Dr. Long, Dr. Coe, Mr. Newton, Mr. Leonard and Mr. Ross.

a. The individual's qualifications, including educational and employment history and publications.

ANSWER. The curriculum vitae (cv) of these individuals will be available in the document discovery room.

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b. All of the individual's contracts, consulting arrangements, advisory positions, and other relationships with GPU.

<u>ANSWER</u>. Documents reflecting the consulting arrangements with GPUNC of the OARP Committee members will be available in the document discovery room. This question is inapplicable to Licensee's own employees.

c. All regulatory proceedings of any type in which the individual has testified. For each proceeding, state the purpose of the hearing, the subject of the testimony, and the date, time, and place of the testimony.

ANSWER. Licensee objects to this interrogatory as unreasonably burdensome.

- d. All documents reviewed by the individual in the course of preparing testimony for this proceeding.
- e. All other persons whom the individual interviewed or consulted in the course of preparing testimony for this proceeding. In each case, state the subject of the interview or conversation and the advice or information obtained from the person in question.

ANSWER & OBJECTION. Licensee has not yet prepared its testimony. However, Licensee objects to Interrogatory 2(d) and (e) insofar as it seeks information about consultations with or advice of Licensee's counsel, or trial preparation materials. Such information is privileged. See 10 C.F.R. § 2.740(b)(2).

- f. All documents that the individual intends to use in connection with forming the opinions contained in his/her testimony in this proceeding.
- g. The topics to be covered in the individual's testimony.
- h. The conclusions reached in the individual's testimony and the bases for those conclusions.

(Note: Overlaps with, but is broader than Interrogatory 75 in TMIA's Second Set of Interrogatories.)

ANSWER. None of the individuals has yet formulated testimony for this proceeding. See also Licensee's answer to TMIA Interrogatory (second set) #57.

3. Identify all individuals who currently hold licenses as Reactor Operators or Senior Reactor Operators for Three Mile Island-1. For each such individual, state or identify the following:

a. The dates of the individual's employment by GPU.

<u>ANSWER</u>. A list of all TMI-1 licensed ROs or SROs, with date of employment, will be available in the document discovery room.

b. Each position held by the individual at GPU, the dates he/she held that position, and the responsibilities of the position.

<u>ANSWER</u>. The job positions held by the individuals identified in response to Interrogatory 3(a), and a job description of these positions will be available in the document discovery room.

c. Al! training activities in which the individual has been enrolled or involved that are related to qualifying to hold a license as a Reactor Operator or Senior Reactor Operator. For each such training activity, state the date or dates of the activity, the dates the individual actually attended the activity, the purpose and scope of the activity, the number of hours required for the activity, and the actions required of the individual during the activity.

ANSWER.

- For date or dates of training activities, refer to training schedules provided in the document discovery room
- For dates individual actually attended the activity refer to lesson attendance sheets provided in the document discovery room.

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- 3. For purpose and scope of the activity for the last two annual cycles, refer to schedules and lesson plans. As discussed with UCS, Licensee is not providing documentation for any individuals who may have been initially qualified during the 1979-81 time period. With respect to requalification for the 1979-81 time period, refer to the OARP description provided in Section 6, Vol. I and Appendix A of the TMI-1 Restart Report. For training conducted between the April and October 1981 NRC examinations refer to the NOTE below.
- For number of hours required, refer to attendance sheets.
- 5. For actions required, refer to lesson plans for objectives and simulator training record for evaluations conducted and individual position

responsibilities during the evolution.

NOTE - For the last two annual cycles, there also are individual summary sheets for requal training activities showing lesson attended, date, number of hours, and associated quiz and examination grades, copies of which will be available in the document discovery room.

d. The dates of all examinations or tests of any type (including quizzes and oral examinations or tests) that the individual has taken during the training referred to in the previous paragraph (c) or that the individual has taken for the purpose of obtaining or maintaining a license as a Reactor Operator or a Senior Reactor Operator for GPU. For each such examination or test, state the purpose, the subject matter or matters, the individual's grade, and the consequence (e.g., promotion, licensing, retraining) of the individual's grade.

<u>ANSWER</u>. Copies of all examinations for the last two complete requalification cycles, including quizzes and oral examinations, will be provided in the document discovery room. Individual examination cover sheets will show date, grade, and purpose. Subject matter will be evident from the examination itself. Where the consequence of the individual's grade is not self-evident, the examination cover sheet will be annotated. Also see note in 3(c), above.

e. The dates of all examinations or tests of any type that the individual has taken for the purpose of obtaining or maintaining a license as a Reactor Opera-. tor or a Senior Reactor Operator before the individual was employed by GPU. For each such examination or test, state the purpose, the subject matter or matters, the individual's grade, and the consequence (e.g., promotion, licensing, retraining) of the individual's grade.

<u>ANSWER</u>. For those operators who have failed NRC exams, mock exams, or requal exams at GPU, refer to exam cover sheets provided with request #2 in UCS document production request (first set).

Regarding exams taken at other sites, the only individual currently licensed at TMI-1 who was licensed elsewhere is Mr. M. J. Ross, who was licensed as a Reactor Operator for the Saxton Nuclear Experimental Corporation. He did not fail any of the exams (NRC, mock, or regual) while at Saxton.

4. Answer all parts of Interrogatory #3 for all individuals who have held licenses to act as Reactor Operators or Senior Reactor Operators for TMI-1 since March 28, 1979, but who either no longer hold such a license or are no longer employed at TMI-1. In addition, if the individual is no longer employed at TMI-1, state the date the individual's employment was terminated and the reason for the termination.

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5. For each examination or test identified in response to Interrogatories ## 3 or 4, state the name of the person or persons who prepared the examination or test, the name of the person or persons who administered the examination or test, and the name of the person or persons who graded the examination or test.

<u>ANSWER</u>. Refer to examination cover sheets provided under UCS Interrogatory 3. Prior to 1984, there were separate examination approval sheets which in many cases have not been retained. The standard procedure for the preparation of examinations is discussed in response to Interrogatory 14. Personnel who administered the examination can generally be determined from the signature on the attendance sheets provided in response to Interrogatory 3. Grades are indicated on the examination cover sheets. Assignments made for the annual requalification examinations for the past two cycles are referenced in the following memoranda:

- Licensed Operator Regual Exam, 6211-82-677, dated
 Dec. 3, 1982.
- b. Licensed Operator Annual Regualification Exam Administration, 6211-84-0235, dated March 22, 1984.

6. For each week from March 28, 1979, to the present, describe all training activities carried out at TMI-1 during the week, including the purpose and subject matter of each activity, the number of hours involved in the activity, the number of people for whom the training was intended, the actual attendance at the training activities, the names and positions of the people who administered the training, and any examinations or tests that were part of the training or for which the training was intended to prepare the participants.

ANSWER. For the last two full training cycles, the licensed operator training activities can be determined from the

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weekly schedules and reports, provided in response to Interrogatory 3(c). These items will show purpose and subject matter, number of hours involved in the training, attendance, instructors and when an examination was scheduled. The reports will also indicate the number of people for whom requalification training was intended. This is typically one crew per week, but onften invludes one or two of the licensed or certified non-shift personnel. For initial training programs the number for whom the training was intended is self-evident from the attendance sheets, except for simulator training, where CRO classes may be split.

If the instructor who administered the training was other than an instructor assigned to the training department, the attendance sheet or weekly schedule will be annotated with his position. Matching weekly schedules with the titles on the examination cover sheets, provided in response to UCS Interrogatory 3(d) should provide a correlation between examinations and the training provided.

7. When did GPU have enough qualified personnel at TMI-1 to begin the six-shift rotation described in the special report of the reconstructed OARP Review Committee at page 8?. When did it actually begin the rotation?

ANSWER. As of January 1979, TMI was on a six (6) shift rotation. The 6 shift rotation continued until February of 1982, at which time a five (5) shift rotation was instituted. The 5 shift rotation was short-lived and a 6 shift rotation was re-instituted in April of 1982. TMI-1 has maintained 6 shift rotation to date.

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8. Identify all individuals currently serving as instructors for training provided at TMI-1. For each such individual, state the following:

ANSWER. Individuals currently serving as instructors associated with licensed operator training are provided in response to the second set of TMIA interrogatories, Interrogatory 9. Resumes are provided in response to TMIA Interrogatory 34 (second set).

a. If individual holds a college degree, his/her educational and employment history and qualifications to serve as an instructor.

ANSWER. Refer to resumes noted above.

b. The subject matter for which the individual serves as an instructor.

ANSWER. Refer to instructor qualification card provided along with document production.

c. If the instructor holds an RO or SRO license, when was it received?

ANSWER. Refer to resumes.

d. Has the instructor ever failed a utility or NRC-administered examination, including those for RO, SRO, OARP or annual requalification? If so, identify and provide each failed examination.

ANSWER. The instructors who have failed a GPUN comprehensive or NRC administered examination, including those for RO, SRO, OARP or annual regualification are listed below:

Instructor	Type Exam Failed
William Stanley	SRO Written (NRC)
Frank Kacinko	RO Written (NRC)
Daryl Wilt	SRO Written (NRC)

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Mike Fuller

RO Operational (NRC)

Details on categories and dates exams were administered are provided in the response to Interrogatory 3. An exam is not available for Mr. Fuller due to employment elsewhere at the time of the exam.

e. How long has each individual served as an instructor?ANSWER. Refer to resumes.

9. Identify all individuals who prepare exa ination questions for GPU training programs and provide their educational and employment history and qualifications to design examinations.

ANSWER. Basically all qualified instructors for licensed operator training prepare exam questions. "Guest" lecturers, as mentioned in response to Interrogatory 6 also sometimes submit questions to be used as part of quizzes or examination. Refer to resumes referenced in response to Interrogatory 8 for instructor qualifications. Resumes for "guest" instructors, usually chosen because of their expertise in the subject matter, will be available in the document discovery room.

10. Identify all individuals who prepared examination questions for the OARP program and provide their educational and employment history and qualifications to design examinations.

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II. Identify all individuals who grade examinations and provide their educational and employment history and qualifications to grade examinations.

<u>ANSWER</u>. The same instructors who prepare examinations and administer the training are those who also grade examinations, with the exception that "guest" lecturers seldom, if ever,

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grade examinations. Therefore, refer to resumes provided in response to Interrogatories 6 and 9.

12. Identify all individuals who grade the OARP examinations and provide their educational and employment history and qualifications to grade examinations.

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13. Describe the process, if any, by which examinations are evaluated by GPU for difficulty or for validity.

ANSWER. Refer to B. P. Leonard memo dated January 27, 1984. This memo pertains to the process for the annual requalification examination and comprehensive final examinations for initial training programs. For weekly requalification quizzes and periodic quizzes in initial training programs, the review and approval process includes informally checking that questions are relevant to the learning objectives utilized as part of the training sessions which the quiz is intended to cover. Mr. Leonard's memo was provided in response to TMIA production request (second set) 15.

14. Describe the process by which written and oral examinations are designed and questions prepared by GPU.

ANSWER. The administrative requirements for preparation of written examinations falls into three general classifications. These classifications reflect the program for which the exam is being written. They are classified as follows: (1) Annual Requalification and Comprehensive Program Completion (Mock) Exams; (2) Weekly Requalification exams: and (3) Periodic Replacement Program exams.

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The preparation of Annual Requalification and Comprehensive Completion (Mock) Exams is outlined in guidance provided by "Operator Training Comprehensive Exam Construction, Guidelines for" dated January 27, 1984. This document was provided in response to the TMIA production request (second set) 15.

The construction of weekly requalification exams is outlined below:

- 1. Instructors for each lecture are assigned to develop exam questions for the requalification cycle (6 weeks). The questions encompass the objectives which were developed for the topics of the requalification cycle. Enough questions are developed to be able to administer exams for all six weeks of training, and to meet the requirements for Category I exams established in "Control of Examinations" 6200-ADM-2600.01, provided in response to TMIA production request (second set) 8. Points are assigned to each question based on the difficulty and area of question.
- The exam preparers submit completed exam questions to the exam coordinator for compilation into an exam glossary for the requalification cycle.
- 3. The exam glossary is then reviewed by the exam coordinator, and Supervisor, Licensed Operator Training for question validity, point assignment, level of difficulty and scope of material covered. Corrections are made, as required, and entered.

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- 4. The exam coordinator constructs exams for each week of training based on guidance established in "Control of Examinations," 6200-ADM-2600.01.
- The weekly exams are then forwarded to the Supervisor, Licensed Operator Training for review and the Operator Training Manager for approval.

The construction of periodic replacement program exams is outlined below:

- Instructors for each lecture are assigned to develop exam questions for the training period. Exam questions are based on the objectives used for that period of training.
- Questions are submitted to the exam coordinator or Supervisor, Licensed Operator Training for review. This review encompasses but is not limited to:
 - -- Technical correctness of exam key
 - -- Comparison of question versus objectives
 - -- Point value
 - -- Scope of areas questioned
- 3. The exams are then submitted to the Operator Training Manager for approval. Prior to approval the areas addressed in (2) are reviewed for adequacy.

Oral examinations are administered as part of both replacement and requalification programs. The guidelines for administration for these exams are outlined in the respective program descriptions provided in response to TMIA production

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request (second set) 9. Oral examinations given as part of the replacement programs are given as system checkouts, final verifications checkouts, or final comprehensive (mock) exams.

For system checkouts the oral examiner examines the candidate for adequate knowledge level using the objectives published in the Operations Plant Manual and the qualification card, and includes questions which the examiner feels relate to safe operation of the system.

Final Verification Checkouts encompass several related topics in an OJT Qualification Card. The examiner, normally a Shift Supervisor or Foreman, uses the objectives published in the Operations Plant Manual and qualification card. In addition, the examiner can probe the examinees understanding of fundamental principles, his ability to apply these principles to practical situations, and his knowledge of factual information within the scope of the exam.

Oral examinations for the Annual Requalification Exam are based on a topic list established by the Training Department and concurred with by the Operations Department. The topics included address requalification training topics, plant operations, plant modifications, plant procedures and plant fundamentals. Each examiner is provided the exam sheet prior to the exam and is given guidance on topic coverage. Areas are graded as pass, marginal, or unsatisfactory. Results are documented on the topic listing and summarized on an oral exam summary sheet, which is included in the parent program description.

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Oral examinations used for program completion are addressed in the parent program descriptions. Examiners are designated by the training and operations department. The exam is comprehensive and addresses areas of plant fundamentals, systems, operations, modifications, and procedures. No specific topic listing is issued. Grades of pass, marginal and unsatisfactory are issued for each exam area and an overall grade is given.

For procedures pertaining to examination security during the construction process, refer to procedures identified in response to TMIA productions requests (second set) 5 and 8. These procedures also deal with the use of multiple examinations and with successive examinations, e.g., those given weekly for a six week cycle of requalification training.

Respectfully submitted,

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