

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

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| In the Matter of |) | |
| |) | Docket Nos. 50-254-SP |
| COMMONWEALTH EDISON COMPANY |) | 50-265-SP |
| (Quad Cities Station, |) | (Spent Fuel Pool Modification) |
| Units 1 and 2) |) | |

COMMONWEALTH EDISON COMPANY'S
AND IOWA-ILLINOIS GAS AND ELECTRIC COMPANY'S
FIRST SET OF INTERROGATORIES
AND REQUEST FOR PRODUCTION OF DOCUMENTS
TO BE ANSWERED BY CITIZENS FOR SAFE ENERGY
AND THE QUAD-CITIES ALLIANCE FOR SAFE ENERGY AND SURVIVAL

Pursuant to 10 CFR §§2.740b and 2.741, Commonwealth Edison Company and Iowa-Illinois Gas and Electric Company ("Licensees") request Citizens For Safe Energy ("CSE") and Quad-Cities Alliance for Safe Energy and Survival ("QASES") to answer separately and fully in writing, under oath or affirmation, each of the following Interrogatories not later than November 23, 1981, and to produce the requested documents, or accurate reproductions thereof, at the offices of Isham, Lincoln & Beale, Suite 4200, One First National Plaza, Chicago, Illinois 60603 not later than December 9, 1981.

INSTRUCTIONS AND DEFINITIONS

1. As used in these Interrogatories, whenever appropriate, the singular form of a word shall be interpreted as plural and the masculine gender shall be deemed to include the feminine.

2. As used in these Interrogatories, the term "and," as well as "or," shall be construed either disjunctively or conjunctively as necessary to bring within the scope of these Interrogatories any information which might otherwise be construed to be outside their scope.

3. As used in these Interrogatories, the term "person" includes, without limiting the generality of its meaning, every natural person, corporate entity, partnership, association, governmental body or agency.

4. As used in these Interrogatories, the term "document" shall mean all written or recorded material of any kind or character known to CSE or QASES, their agents or consultants, or in the possession, custody or control of CSE or QASES, their agents or consultants, including, without limitation, letters, correspondence, telegrams, memoranda, notes, records, minutes, contracts, agreements, records or notations of telephone or personal conversations or conferences, interoffice communications, microfilm, bulletins, circulars, pamphlets, studies, notices, summaries, reports, books, articles, treatises, teletype messages, invoices, tape recordings and worksheets. The term "document" shall also include copies containing information in addition to that contained in or on the original and all the attachments, appendices, enclosures or documents referred to in any documents produced pursuant to this Request.

5. When used with respect to any act, occurrence, transaction, statement, request, conduct, communication, instance, aspect of any event, defect, or omission, "Identify" means, without limitation, to describe in complete detail the event or events constituting such act, the location, the date, the individuals involved, the individuals having knowledge thereof, and the documents referring or relating thereto.

6. When used with respect to a document, "Identify" means, without limitation, to state its date, the type of document (e.g., letter, memorandum, telegram, chart, photograph, sound reproduction, et cetera), the author and addressee, the present location and the custodian, and a description of its contents.

7. If any of the information contained in the answers to these Interrogatories is not within the personal knowledge of the person signing the Interrogatory, so state and identify each person, document and communication on which he relies for the information contained in answers not solely based on his personal knowledge.

8. If you cannot answer any portion of the following Interrogatories in full, after exercising diligence to secure the information to do so, so state and answer to the extent possible, specifying your inability to answer the remainder and stating whatever information or knowledge you have concerning the unanswered portions.

9. If you claim privilege with respect to any information which is requested by these Interrogatories, specify the privilege claimed, the communication and/or answer as to which that claim is made, the parties to the communication, the topic discussed in the communication and the basis for your claim.

INTERROGATORIES

1. With reference to Contention 1 (Attachment No. 1), (a) identify with particularity the factual basis for your assertion that the additional spent fuel assemblies which will be stored in the proposed high density spent fuel storage racks will increase the temperature of the spent fuel pool water; (b) define what is meant by "corrode"; (c) identify with particularity the factual basis for your assertion that increasing the temperature of the spent fuel pool water will cause the cladding of the fuel rods to corrode and thereby endanger the public health and safety; and (d) identify and produce all documents which support your answers to this Interrogatory.

2. With reference to Contention 2 (Attachment No. 1), (a) identify with particularity the factual basis for your assertion that the increased amounts of irradiated fuel to be stored in the proposed high density spent fuel storage racks will increase radiological releases from spent fuel pools and occupational exposure in the pools

area; (b) identify specifically all inadequacies, referred to in the second sentence of this contention, in the present monitoring system; (c) identify with particularity modifications to the present monitoring system which you believe are necessary to provide a reasonable assurance of the public health and safety; (d) identify with particularity the factual basis for your assertion that the present monitoring system should be required to be reanalyzed; and (e) identify and produce all documents which support your answers to this Interrogatory.

3. With reference to Contention 3 (Attachment No. 1), identify with particularity the factual basis for your assertion that the durability and performance of the Boraflex in the spent fuel pool water environment is unknown and unsubstantiated; (b) identify with particularity the factual basis for your assertion that the corrosion rate of stainless steel in the spent fuel pool water environment is unknown; (c) identify with particularity the factual basis for your assertion that the proposed high density spent fuel storage racks may structurally fail due to the corrosion rate of the stainless steel in the racks and thereby endanger the public health and safety; and (d) identify and produce all documents which support your answers to this Interrogatory.

4. With reference to Contention 4 (Attachment No. 1), (a) define what is meant by "decay heat"; (b) identify with particularity the factual basis for your assertion that the decay heat will increase as a result of the proposed increase in the spent fuel pool's storage capacity; (c) identify specifically all inadequacies, referred to in line five of this contention, in the current capacity of the radioactive waste treatment and cooling systems for the spent fuel pools; (d) identify with particularity modifications to the current radioactive waste treatment and cooling systems for the spent fuel pools which you believe are necessary to provide a reasonable assurance of the public health and safety; and (e) identify and produce all documents which support your answers to this Interrogatory.

5. With reference to Contention 5 (Attachment No. 1), (a) identify specifically the sections of 10 CFR Part 20 which you believe will be violated as a result of the removal, dismantling and disposition of the present racks, and installation and routine maintenance of the proposed high density spent fuel storage racks; (b) define what is meant by "excessive occupational exposure"; (c) identify with particularity the factual basis for your assertion that the occupational exposure which will result from the removal, dismantling and disposition of the present

racks and installation and routine maintenance of the proposed high density racks will violate 10 CFR Part 20 and thereby endanger the public health and safety; and (d) identify and produce all documents which support your answers to parts (b) and (c) of this Interrogatory.

6. With respect to Contention 6 (Attachment No. 1), (a) identify with particularity the factual basis for your assertion that bowed fuel assembly channels and bowed fuel rods are present at the Quad Cities Nuclear Station; (b) define what is meant by "reracking operation"; (c) identify with particularity the factual basis for your assertion that bowed fuel channels and bowed fuel rods will present an unacceptable risk of radiation exposure to workers and the environment during the reracking operation; and (d) identify and produce all documents which support your answers to subparts (a) and (c) of this Interrogatory.

7. With respect to Contention 7 (Attachment No. 1), (a) define what is meant by "unacceptable risk"; (b) define what is meant by "consequences"; (c) identify with particularity the factual basis for your assertion that the consequences of the chimney falling on the spent fuel pool will increase as a result of the requested modification; (d) identify with particularity the factual basis for your assertion that the consequences of a fuel drop accident

will increase as a result of the requested modification; (e) identify with particularity the factual basis for your assertion that the consequences of a dropped fuel assembly on the five special plutonium bearing experimental fuel assemblies will increase as a result of the requested modification; and (f) identify and produce all documents which support your answers to subparts (c), (d), and (e) of this Interrogatory.

8. With respect to Contention 8 (Attachment No. 1), (a) identify specifically what you believe are deficiencies in Licensees' quality assurance programs and inspection procedures which will be utilized during installation of the proposed racks and removal of existing racks; (b) identify with particularity the factual basis for your assertion that the quality assurance programs and inspection procedures are not set forth by Licensees with sufficient specificity to provide reasonable assurance of public health and safety during the reracking operation; and (c) identify and produce all documents which support your answers to this Interrogatory.

9. With respect to Contention 9 (Attachment No. 1), (a) identify with particularity the factual basis for your assertion that the proposed racks are not adequately designed to withstand the Safe Shutdown Earthquake (SSE) and Operating Basis Earthquake (OBE) established for the Quad Cities Nuclear Station and thereby endanger the public health and safety; (b) identify specifically all inadequacies in the seismic design of the proposed high density spent fuel storage racks; (c) identify with particularity modifications to the present seismic design of the proposed racks which you believe are necessary to provide reasonable assurance of the public health and safety; and (d) identify and produce all documents which support your answers to this Interrogatory.

10. With reference to each of the above Interrogatories, identify all persons who participated in the preparation of the answers, or any portion thereof, or who directly provided information to CSE and QASES, its counsel or agents, for use in preparation of the answers or any portion thereof, to these Interrogatories.

11. With reference to each of the contested contentions admitted for adjudication in this proceeding, identify all persons who participated in the preparation of the contentions, or any portion thereof, or who directly provided information to CSE and QASES, its counsel or agents, for use in preparation of the contentions.

12. With reference to each of the contested contentions admitted for adjudication in this proceeding, identify the names and addresses of all persons who are expected to testify as witnesses on your behalf in this proceeding.

Dated: November 9, 1981

Respectfully submitted,


Robert G. Fitzgibbons Jr.

One of the Attorneys
for Licensees

David M. Stahl
Philip F. Steptoe
Robert G. Fitzgibbons Jr.
ISHAM, LINCOLN & BEALE
Suite 4200
One First National Plaza
Chicago, Illinois 60603
(312) 558-7500

CONTESTED CONTENTIONS

1. Intervenors contend that the additional spent fuel assemblies which will be stored in the proposed high density spent fuel storage racks will increase the temperature of the spent fuel pool water and cause the cladding of the fuel rods to corrode, thereby endangering the public health and safety.

2. Intervenors contend that the increased amounts of irradiated fuel in the proposed spent fuel pools will increase radiological releases from the pools and occupational exposures in the pools area. In light of this, the present radiation monitoring system is inadequate to provide a reasonable assurance of public health and safety. Specifically, reanalysis of the present system should be required and should consider:

- a. increasing the capacity of the ventilation system, and
- b. increasing the range, sensitivity and number of area radiation monitors, including Geiger-Mueller monitors, and monitors of the pool water itself.

3. Intervenors contend that Licensees' application to install its proposed spent fuel storage racks should be denied, as

- a. the durability and performance of the Boraflex in the spent fuel pool water environment is unknown and unsubstantiated, and

b. the corrosion rate of the stainless steel in the racks is unknown, and may result in their structural failure, thereby failing to provide a reasonable assurance of public health and safety.

4. Intervenors contend that in light of the increase in decay heat which will result from the proposed increase in the spent fuel pools' storage capacity, the current capacity of the radioactive waste treatment and cooling system for the spent fuel pools will be inadequate for the proposed modification, thereby failing to provide the requisite assurance of public health and safety.

5. Intervenors contend that potentially excessive occupational exposure will occur due to removal, dismantling and disposition of the present racks, and installation and routine maintenance of the proposed high density racks, in violation of 10 C.F.R. Part 20.

6. Intervenors contend that the presence of bowed fuel assembly channels and bowed fuel rods at Quad Cities Nuclear Station will present an unacceptable risk of radiation exposure to workers and the environment during the reracking operation.

7. Intervenors contend that the high density fuel storage, as proposed by Licensee will present an unacceptable risk to the public health and safety, because

of increased consequences of the following accidents:

a. The consequences of the chimney falling on the spent fuel pool containing additional spent fuel as a result of the requested modification;

b. The consequences of a fuel drop accident in the modified spent fuel storage pools;

c. The consequences of a dropped fuel assembly on the five special plutonium bearing experimental fuel assemblies in a spent fuel pool containing more densely compacted additional spent fuel as a result of the requested modification.

8. Quad Cities Nuclear Station's quality assurance programs and inspection procedures which will be utilized during the installation of the proposed racks and removal of existing racks are not set forth by Licensees with sufficient specificity to provide reasonable assurance of public health and safety during the reracki g operations.

9. Intervenors contend that the proposed racks are not adequately designed to withstand the Safe Shutdown Earthquake (SSE) and Operating Basis Earthquake (OBE) established at the operating license proceeding for the Quad Cities Nuclear Station, which could lead to the release of radioactive materials which would have a detrimental effect not only on the State of Illinois but on other states as well.

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| (Quad Cities Station, Units |) | (Spent Fuel Pool Modification) |
| 1 and 2) |) | |

CERTIFICATE OF SERVICE

I hereby certify that Commonwealth Edison Company's and Iowa-Illinois Gas and Electric Company's First Set of Interrogatories and Request for Production of Documents to be Answered by Citizens for Safe Energy and the Quad-Cities Alliance for Safe Energy and Survival, with Attachment, has been served on the following by deposit in the United States mail, first class, postage prepaid, this ninth day of November, 1981:

James L. Kelley
Atomic Safety and Licensing
Board Panel
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Dr. Peter A. Morris
Atomic Safety and Licensing
Board Panel
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Dr. Richard F. Foster
Atomic Safety and Licensing
Board Panel
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555
(also)
P.O. Box 4263
Sunriver, Oregon, 97710

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

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

Docketing and Service
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Richard Goddard
Office of Executive Legal
Director
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Robert Romic
628 Grant Street
Bettendorf, Iowa 62722

Marilyn Bos
Citizens for Safe Energy
P.O. Box 23
Hillsdale, Illinois 61257


Robert G. Fitzgibbons Jr.