

LAW OFFICES
CONNER, MOORE & CORBER

1747 PENNSYLVANIA AVENUE, N. W.
WASHINGTON, D. C. 20006

TROY B. CONNER, JR.
ARCH A. MOORE, JR.
ROBERT J. CORBER
MARK J. WETTERHAHN
DONALD J. BALSLEY, JR.
ROBERT M. RADER
KEITH H. ELLIS
NOT ADMITTED IN D.C.

June 30, 1979

6/30/79

(202) 833-3500

CABLE ADDRESS: ATOMLAW

Gary L. Milhollin, Esq.
Chairman, Atomic Safety
and Licensing Board
1815 Jefferson Street
Madison, Wisconsin 53711

Mr. Lester Kornblith, Jr.
Member, Atomic Safety and
Licensing Board Panel
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Dr. James C. Lamb, III
Member, Atomic Safety and
Licensing Board Panel
313 Woodhaven Road
Chapel Hill, N.C. 27514

In the Matter of
Public Service Electric and Gas Company, et al.
(Salem Nuclear Generating Station, Unit 1)
Docket No. 50-272

Gentlemen:

Enclosed are:

- (1) "Licensee's Objections to Lower Alloways Creek Township's Proffered Testimony," and
- (2) "Licensee's Outline of Cross-Examination."

These filings are being made one day late because of my participation in Cincinnati Gas & Electric Company's Zimmer licensing hearings in Cincinnati, Ohio which unexpectedly continued through Friday, June 29, 1979, and my absence from the office for substantially all of the month of June. This slight delay in submitting these two documents will not affect the upcoming hearing scheduled for the week of July 10.

Sincerely,



Mark J. Wetterhahn
Counsel for Licensee

cc: Per Service List

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)	
)	
PUBLIC SERVICE ELECTRIC & GAS)	Docket No. 50-272
COMPANY, et al.)	(Proposed Issuance of
)	Amendment to Facility
(Salem Nuclear Generating)	Operating License
Station, Unit 1))	No. DPR-70)

LICENSEE'S OBJECTIONS TO LOWER ALLOWAYS CREEK
TOWNSHIP'S PROFFERED TESTIMONY

On April 25, 1979, counsel for Lower Alloways Creek Township ("LACT") filed a document entitled "Response to the Atomic Safety and Licensing Board Order dated April 18, 1979," transmitting the "Testimony of Richard E. Webb, Ph.D. in Respect to Board Question #3 of Order Dated April 18, 1979." On June 12, 1979, LACT submitted the written testimony of Earl A. Gulbransen, Ph.D. which purported to relate to all three of the Board's questions. As discussed below, Licensee, Public Service Electric & Gas Company, et al., objects to the proposed testimony of Drs. Webb and Gulbransen.

I. The Testimony of Dr. Gulbransen

Licensee objects to the proffered testimony of Dr. Gulbransen as beyond the scope of the Board's questions, as beyond the scope of the issues in the proceeding, and as constituting an attack on the Commission's ECCS regulations

as contained in 10 C.F.R. §50.46 and Appendix K to 10 C.F.R. Part 50 which is prohibited by 10 C.F.R. §2.758. Moreover, there has been no demonstration that Dr. Gulbransen is an expert or entitled to give opinion evidence as to the effect of an accident on the Salem Unit 1 spent fuel pool.

This Board has already indicated that it is interested in reviewing the effect of a Three Mile Island-type incident on the Salem Unit 1 spent fuel pool and is not interested in constituting itself as another panel to review the causes and chronology of the TMI incident. The entire thrust of the Gulbransen testimony appears to be an analysis of the Three Mile Island incident as an end in itself. Dr. Gulbransen speculates as to the causes and the courses of the TMI accident. As a result of his analysis, he includes in his proposed testimony "procedures" which apparently relate to observations of the events of TMI and his proposal for actions to be taken at the Three Mile Island facility. These points do not address even peripherally the Board's questions, i.e., the effect of the accident on the Salem Unit 1 fuel pool.

Without attempting to address the merits or substance of the testimony as it relates to the TMI incident, the Licensee suggests that the testimony be referred by the Licensing Board to the Nuclear Regulatory Commission for its consideration in the various investigations of the matter.

To a large extent, the matters raised by the proposed Gulbransen testimony relate to the Commission's ECCS regulations. It is not clear whether the testimony seeks to attack ECCS Criterion 1, relating to a peak cladding temperature limit of 2200°F (§50.46(b)(1)), and ECCS Criterion 2 relating to a maximum cladding oxidation (§50.46(b)(2))^{1/} or is an attack on the ability of the Salem Generating Station or other nuclear generating facilities to meet these criteria. If it is an attack on the ECCS criteria which were developed after an exhaustive rulemaking proceeding, it is clearly prohibited by 10 C.F.R. §2.758. If it is an attack on the ability of Salem Unit 1 to meet the NRC's ECCS Acceptance criteria, this is not the proper proceeding to challenge such compliance.

Finally, assuming arguendo that Dr. Gulbransen was qualified to give opinion evidence on the metallurgical properties of zircalloy, there is no showing that he has any expertise on the issues before this Board or related to the Board's questions such as to give opinion evidence on the health and safety of the public regarding the storage of spent fuel either in the Salem Unit 1 spent fuel pool or elsewhere.^{2/}

II. The Testimony of Dr. Webb

Licensee objects to the proffered testimony of Dr. Richard Webb as beyond the scope of the issues in this pro-

^{1/} For that matter, the proposed testimony also appears to attack Criterion 3 relating to maximum hydrogen generation, Criterion 4 relating to coolable geometry and Criterion 5 relating to long term cooling.

^{2/} See the last paragraph of the Gulbransen testimony.

ceeding and as beyond the scope of the Board's questions. Furthermore, even if relevant, Dr. Webb's testimony is of no probative value and should be stricken. Moreover, the testimony should not be permitted to be utilized to introduce new issues in the proceeding which are entirely unrelated to the Board's questions, and, if otherwise proper, should have been submitted earlier. Dr. Webb's testimony should be stricken.

Sections 1, 2, 3 and 4 of Dr. Webb's testimony set the stage for the remainder of the testimony. In these sections, Dr. Webb hypothesizes the "loss-of-water accident" in a spent fuel pool and discusses asserted consequences. He fails to demonstrate any relationship between this hypothesized event and the TMI questions promulgated by the Board. The fundamental fact is that the requested change in fuel racks has not changed the design basis for the fuel storage pool or its associated components from that approved by the Commission in issuing the operating license for the Salem facility. Therefore, consideration of such a hypothesized event and its consequences is beyond the scope of the issues in this proceeding as determined by the Commission and, in any event, beyond the scope of the Board's questions.

The remainder of Dr. Webb's discussion then concerns a hypothesized loss-of-water accident. As a Class 9 accident, i.e., greater than the design basis accidents analyzed by the Commission, the Board is prohibited from considering

such an issue.^{3/} Moreover, no connection between the Board's questions and this hypothesized event has been shown. New matters and contentions should not be permitted to be raised in this proceeding under the guise of a response to the Board's question. Dr. Webb admits^{4/} that he is attacking the manner in which the Commission evaluates the risk of accidents. The entire testimony should be stricken as a prohibited attack on the regulations.

The testimony has no probative value. The testimony repeatedly states that certain events are conceivable or possible.^{5/} Playing out every conceivable scenario of a hypothesized event is of no value in assisting this Licensing Board in reaching its decision on the limited issues in this proceeding. Such a test would unduly delay the proceeding without any compensating benefit.

In Section 5 of his proposed testimony, Dr. Webb wants the Board to consider four events which could cause a loss-of-water accident. Initially, none of these events are tied to the TMI questions asked by the Board. The question of a spent fuel shipping cask drop has already been addressed by the NRC in the issuance of an operating license; the change

^{3/} For a complete discussion of this matter, see Licensee's Response to NRC Staff's Objection to Board Question and Motion for Extension of Time to File Response to Board Question Relating to Class 9 Accidents dated June 18, 1979.

^{4/} See Webb Testimony, §1(f) at 3.

^{5/} For example, on page 5 the word conceivable or conceivably is used four times.

in racks does not affect the analysis done by the NRC. This Board has already rejected such a contention for these reasons. Similarly this Board has rejected consideration of sabotage and terrorism as unaffected by the requested rack change. Under the guise of criticality considerations, Dr. Webb attempts to raise new issues.^{6/} No showing has even been attempted under the criteria of §2.714(a) that these new matters should be considered. The fourth category of events, earthquakes beyond the design basis of the facility and large airplane crashes, are clearly beyond the scope of the issues in this proceeding.

Section 7 of the Webb Testimony merely asserts that a severe reactor accident could cause "the entire operating crew . . . to flee" There is no basis or analysis given for such a hypothesis and thus it is of no value in responding to the Board's question. The remainder of the section deals with issues not possibly related to the spent fuel pool questions, the asserted effect of the meltdown accident itself, argument concerning releases from a loss-of-water accident, a criticism of the Rasmussen Report, and a request to the NRC to do further studies of the type considered in WASH-1400.

^{6/} Section 6 sets forth alleged deficiencies which could cause a criticality accident such as missing boral plates and asserted deficiencies in the Licensee's criticality evaluation.

Section 8 seeks to deal with the Salem spent fuel pool as a permanent spent fuel repository and should, in conformance with the Board's past rulings in this proceeding, be stricken. Sections 9 and 10 are without foundation, conclusory and argumentative and should be stricken.

CONCLUSION

Thus, as discussed above, the testimony of Drs. Gulbransen and Webb is objectionable and should not be heard by the Licensing Board.

Respectfully submitted,

CONNER, MOORE & CORBER

A handwritten signature in cursive script, appearing to read "Mark J. Wetterhahn".

Mark J. Wetterhahn
Counsel for the Licensee

June 30, 1979

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)
)
PUBLIC SERVICE ELECTRIC & GAS) Docket No. 50-272
COMPANY, et al.) (Proposed Issuance
) of Amendment to
(Salem Nuclear Generating) Facility Operating
Station, Unit 1) License No. DPR-70)

LICENSEE'S OUTLINE OF CROSS-EXAMINATION

If and to the extent that "Licensee's Objections to Lower Alloways Creek Township's Proffered Testimony," dated June 30, 1979, are not sustained, the following represents Licensee's outline of intended cross-examination:

I. Testimony of Dr. Earl A. Gulbransen

1. Qualifications of the Witness to testify with regard to:
 - a. The design and operation of the Salem Generating Station
 - b. The design, construction and operation of the fuel pool and racks for Salem Unit 1
 - c. The cause and effects of hypothesized reactor accidents on the spent fuel pool
 - d. The TMI Event
 - e. NRC ECCS Acceptance Criteria
2. Bias and Prejudice
3. Basis for Testimony Regarding the Three Mile Island event
 - a. Course of the event
 - b. Basis for conclusions regarding cladding effects
 - c. Basis for recommended "procedures," including hydrogen embrittlement, hydrogen in the cooling water and necessity for hydrogen gauges.

4. Knowledge of the NRC's ECCS Acceptance Criteria and Comparison with Testimony.^{1/}
5. Basis for testimony regarding cladding behavior in reactors, particularly Salem Generating Station, Unit 1.
6. Basis for conclusions regarding the safety of the spent fuel pool and the consequences of nuclear accidents.

II. Testimony of Dr. Richard Webb

1. Qualifications of the Witness to Testify Regarding:
 - a. Plans to store fuel in the spent fuel pool in the Salem Generating Station
 - b. Accident evaluation and probability
 - c. The design, construction and operation of Salem Generating Station, including the spent fuel pool
 - d. The "loss of water accident"
 - e. A permanent fuel repository at Salem
2. Bias and prejudice of the Witness
3. Basis for evaluation of a "Loss of Water Accident," including its hypothesized consequences.
4. Basis for evaluation of conceivable possibilities for causing a "Loss of Water Accident"
5. Basis for evaluation regarding criticality accidents
6. Basis for evaluation regarding reactor accidents that could cause "Loss of Water Accidents," including effect on and actions by the operating crew.

^{1/} Counsel for LACT should assure that a copy of the NRC's ECCS Acceptance Criteria are supplied to the Witness in advance of the hearing to facilitate cross-examination.

7. Basis for evaluation of consequences of reactor accidents and "Loss of Water Accidents"
8. Basis for statements regarding probabilistic risk assessment and need for future studies
9. Basis for statements regarding a permanent spent fuel repository at Salem
10. Basis for statements regarding impracticality of theoretical analysis and experiment verification

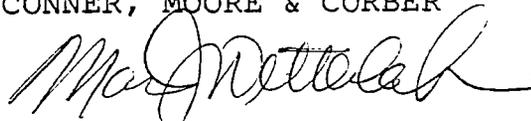
III. Testimony of the NRC Staff

1. Qualifications of the Witnesses to Testify
2. Basis for statements related to the effect of the TMI accident on the TMI spent fuel pool
3. Basis for statements regarding causes of the TMI incident and the chronology of events
4. Basis for statements regarding design and operational differences between TMI and Salem Unit 1
5. Basis for statements regarding hypothesized series of events at Salem Unit 1 in partial response to Board Question 3
6. Basis for statements regarding effect of hypothesized releases to the Auxiliary Building at Salem Unit 1 on the operation of the spent fuel pool
7. Basis for statements regarding effect of hypothesized releases into the Auxiliary Building on systems in the Fuel Handling Building at Salem Unit 1
8. Basis for conclusions regarding the Staff's evaluation resulting from the Board's questions on the proposed amendment to increase the spent fuel capacity

9. Basis for statements, evaluations and analysis contained
in NUREG-0560 as they apply to the Board's questions

Respectfully submitted,

CONNER, MOORE & CORBER



Mark J. Wetterhahn
Counsel for the Licensee

June 30, 1979

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of)
)
PUBLIC SERVICE ELECTRIC AND GAS) Docket No. 50-272
COMPANY, et al.) (Proposed Issuance of
) Amendment to Facility
(Salem Nuclear Generating) Operating License
Station, Unit 1) No. DPR-70)

CERTIFICATE OF SERVICE

I hereby certify that copies of "Licensee's Objections to Lower Alloways Creek Township's Proffered Testimony" and "Licensee's Outline of Cross-Examination," dated June 30, 1979, in the captioned matter, have been served upon the following by deposit in the United States mail this 30th day of June, 1979:

Gary L. Milhollin, Esq.
Chairman, Atomic Safety
and Licensing Board
1815 Jefferson Street
Madison, Wisconsin 53711

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

Mr. Lester Kornblith, Jr.
Member, Atomic Safety and
Licensing Board Panel
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Barry Smith, Esq.
Office of the Executive
Legal Director
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Dr. James C. Lamb, III
Member, Atomic Safety and
Licensing Board Panel
313 Woodhaven Road
Chapel Hill, N.C. 27514

Richard Hluchan, Esq.
Deputy Attorney General
Department of Law and
Public Safety
Environmental Protection
Section

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

36 West State Street
Trenton, N.J. 08625

Richard Fryling, Jr., Esq.
Assistant General Solicitor
Public Service Electric
& Gas Company
80 Park Place
Newark, N. J. 07101

Keith Onsdorff, Esq.
Assistant Deputy Public Advocate
Department of the Public Advocate
Division of Public Interest
Advocacy
Post Office Box 141
Trenton, N. J. 08601

Sandra T. Ayres, Esq.
Department of the Public Advocate
520 East State Street
Trenton, N. J. 08625

Mr. Alfred C. Coleman, Jr.
Mrs. Eleanor G. Coleman
35 "K" Drive
Pennsville, New Jersey 08070

Carl Valore, Jr., Esq.
Valore, McAllister, Aron
& Westmoreland
Mainland Professional Plaza
P. O. Box 175
Northfield, N. J. 08225

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

June D. MacArtor, Esq.
Deputy Attorney General
Tatnall Building, P. O. Box 1401
Dover, Delaware 19901


Mark J. Wetterhahn