



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

September 8, 1983

The Honorable Edward J. Markey, Chairman
Subcommittee on Oversight and Investigations
Committee on Interior and Insular Affairs
United States House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

Your letter of July 27, 1983 requested a response to six questions relative to the NRC Inquiry Team meeting held in New Orleans on June 28, 1983 with individuals representing Gambit Publications, Inc. Responses to your questions are enclosed along with a copy of the Inquiry Team Report on Waterford QA allegations, dated July 14, 1983.

In regard to your request for a status report, the following information is provided. The enclosed letter of August 4, 1983 from the Director, Office of Inspection and Enforcement to the Chief Executive Officer, Louisiana Power and Light notes the status of the staff's actions to date to resolve identified quality assurance concerns prior to licensing of Waterford 3 for operations.

In regard to the status of the investigative review and inquiry into the reporter's allegations of collusion by the NRC, the Office of Inspector and Auditor does not now plan to conduct an investigation into those matters due to lack of specific information.

The Office of Inspector and Auditor plans no further inquiry into this matter.

We trust that this information is responsive to your request.

Sincerely,

Nunzio J. Palladino

Enclosures:

1. Response to Questions
2. Inquiry Team Report
dtd. 7/14/83
3. Letter dtd. 8/4/83
to Louisiana Power
and Light Company

cc: Rep. Ron Marlenee

QUESTION 1: Does NRC have a written or other established policy concerning interviewing members of the news media on investigatory matters?

ANSWER.

Both the Office of Investigations (OI) and the Office of Inspector and Auditor (OIA) have written policies for conducting investigative interviews with individuals associated with allegations made to the NRC. OI has a specific instruction relative to contacting and interviewing media representatives. Generally, these policies encourage discussion with anyone who may help the process of an investigation. The interviews and conference held with Gambit representatives were conducted with those policies.

QUESTION 2. What was the reason for interviewing the editor and reporter from Gambit?

ANSWER.

A Gambit Publications reporter called a Commissioner's office and spoke with an assistant on April 13, 1983 about his concerns that there are quality assurance problems at Waterford. On April 15, 1983 the Commissioner's assistant informed the Acting Director of the Office of Inspection and Enforcement (IE) of the conversation he had with the Gambit reporter and requested that IE investigate. After a number of further telephone calls between the reporter and the Commissioner's assistant, the reporter on May 31, 1983 provided him with some written materials detailing specific QA problems at Waterford. The assistant then forwarded the materials to IE.

IE reviewed the material provided by the reporter and determined that the allegations raised questions relating to matters of public health and safety, such that any additional information held by Gambit might be important. Also, a decision was made by IE to pursue the reporter's concerns through its inspection and enforcement programs. In accordance with normal interview practices, it was decided to meet directly with him to ascertain if additional and more specific information was available in the areas of concern. The view was that the reporter might have more information available than he used in the newspaper article. The intent was to meet with the reporter for the first time in order to better define subsequent IE action and to assure him of our sincere interest in the matters he had raised.

The Office of Inspector and Auditor (OIA) also desired to interview the reporter to obtain any specific information concerning the alleged collusion between NRC and Louisiana Power and Light Company and the alleged complicity of NRC in QA problems at Waterford. This information was to be used as a basis for determining whether an internal NRC investigation should be initiated.

The editor of Gambit was present during the interview and acted as the spokesman for Gambit.

QUESTION 3. Did NRC officials ask either the reporter or the editor for the identify of sources used in writing stories on the Waterford plant?

ANSWER.

The entire interview of June 28, 1983 was tape recorded by Mr. Esolen. NRC does not have a copy of this tape. NRC also tape recorded the June 28, 1983 interview but the tape is of extremely poor quality and sheds no further light on this issue. The OIA official who participated in the June 28, 1983 interview is positive that he did not ask for this information. Other participants do not believe that this question was raised by them. In any case, NRC would not object to such a question being asked.

QUESTION 4. What information was obtained as a result of the interview?

ANSWER.

The information obtained as a result of the conference with the editor of Gambit publications is documented in Attachment 1 of the enclosed Inquiry Team Report dated July 14, 1983.

QUESTION 5. What other parties have been interviewed to date in connection with this particular inquiry?

ANSWER.

Other parties interviewed to date in connection with this inquiry are documented on pages 4 and 5 of the Inquiry Team Report. These other parties include the NRC Resident Inspector for the Waterford site and the Louisiana Power and Light Company QA Manager.

QUESTION 6. Has the NRC requested additional meetings with either the reporter or editor, and if so, for what purpose?

ANSWER.

In addition to the requests initiated by the Inquiry Team to meet with the reporter the day before and the day after the July 28, 1983 meeting with Gambit, no other NRC requests have been made to meet with either the reporter or editor.

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July 14, 1983

MEMORANDUM FOR: Richard C. DeYoung, Director
Office of Inspection and Enforcement

FROM: Mark W. Peranich, Chief
Construction, Vendor, and Special Program Section
Reactor Construction Programs Branch
Division of Quality Assurance, Safeguards,
and Inspection Programs
Office of Inspection and Enforcement

SUBJECT: * INQUIRY TEAM REPORT ON WATERFORD QA ALLEGATIONS

The enclosed Inquiry Team Report completes the action assigned by J. Sniezek's memorandum of June 21, 1983 on the matter of Waterford QA Allegations. It is forwarded for your further consideration.

I and other members of the Inquiry Team are available, if needed, to discuss the contents of the enclosed report.

Mark W. Peranich

Mark W. Peranich, Chief
Construction, Vendor, and Special
Program Section
Reactor Construction Programs Branch
Division of Quality Assurance, Safeguards,
and Inspection Programs
Office of Inspection and Enforcement

Enclosure:
Inquiry Team Report

cc w/enclosure:
J. Sniezek
J. Taylor
J. Collins, Region IV
B. Hayes, OI
J. Cummings, OIA
R. Shewmaker
E. Johnson, Region IV
M. Peranich
G. Mulley, OIA
E. Jordan

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INQUIRY TEAM REPORT WATERFORD QA ALLEGATIONS

The memorandum of June 21, 1983 from James Snizek, Deputy Director, Office of Inspection and Enforcement to Mark Peranich, Chief, Construction, Vendor and Special Programs Section, Division of Quality Assurance, Safeguards and Inspection Programs, assigned an Inquiry Team to interview Mr. Ron Ridenhour about allegations forwarded with his letter of May 31, 1983 to James Joosten, Technical Assistant to Commissioner Gilinsky. The Inquiry Team consisted of Mark Peranich, IE, Team Leader; Robert Shewmaker, IE, Sr. Civil-Structural Engineer; and Eric Johnson, RIV, Technical Assistant. Present at the interview in addition to the Inquiry Team were George Mulley, Investigator, NRC Office of Inspector and Auditor; Mr. Gary Esolen, Editor, Gambit Publications; Mr. Ron Ridenhour, free-lance reporter; and Mr. Brad Bagert, Esquire, Attorney for Gambit Publications. The interview was tape recorded by Gambit Publications.

A summary of the interview is provided in the Attachment 1, Memorandum, George Mulley, Jr. (OIA) to James Cummings (OIA), dated July 6, 1983. As noted therein, the inquiry team held an interview with Mr. Esolen but was not given the opportunity to interview Mr. Ridenhour.

A second attempt was made to interview the alleged on June 29, 1983. A telephone call was made to his residence at approximately 7:00 a.m. Mr. Ridenhour was asked if he wished to meet separately with the Inquiry Team to discuss his allegations. He indicated that he did not. In response to the team leader's question, Mr. Ridenhour believed it was appropriate for Mr. Esolen to take

the lead during the June 28, 1983 interview. He further explained that, as the editor, Mr. Esolen played a significant role in the preparation of the published Gambit articles forwarded to the NRC. In addition, Mr. Ridenhour did not feel it was necessary for him to add or change any of the statements made by Mr. Esolen regarding the issues that were identified for NRC followup.

The Inquiry Team met on June 29, 1983 to review the limited information acquired during the interview on specific issues associated with the three main problem areas identified by Gambit. Based on this review and the team's review of the published Gambit articles, the following issues were identified for followup to address Gambit's allegations of three problem areas.

1. Adequacy of Louisiana Power and Light (LP&L's) QA program during construction.

Related Issues

- ° Contractor transferred four plant systems to LP&L with numerous deficiencies
- ° LP&L lack of knowledge whether its QA program was being implemented
- ° LP&L inaction in response to recommendations from its independent QA consultant
- ° Errors in design assumptions by LP&L's engineering contractor

2. QA program dispute between LP&L and Combustion Engineering (CE).

Related Issues

- ° LP&L audit in 1974, noting that CE's QA program had not incorporated the "new" QA requirements (Amendment 44, Gray Book)
- ° EBASCO December 6, 1976 audit of CE-identified problems with CE's system for records
- ° Communications between LP&L and CE
- ° Statements of LP&L, CE, and EBASCO individuals

3. Waterford Unit 3 common basemat.

Related Issues

- ° Cracking discovered in 1977 and 1983
- ° Leakage through cracking in basemat
- ° Errors in assumptions for design
 - Sizing of dewatering pump
 - SAR statement that common basemat would be a "watertight barrier"

Observations - Waterford Unit 3 Site

The main purpose of the Inquiry Team's effort at the site was to observe first hand the cracking and leakage of water through the basemat. The observations of the plant included (1) the equipment rooms where the new cracking was discovered in May 1983; (2) approximately 300° of the 360° around the shield building at the -35 ft level (i.e., top of basemat); and (3) all 360° of the floor of the annulus area between the shield building and containment at El. -1.5 ft. Specific details of these observations are noted by R. E. Shewmaker in Attachment 2. In summary, the Inquiry Team observed water, apparently seepage, on the surface of the common basemat at various locations around the shield building and in equipment rooms identified with the May 1983 discovery of other cracking in the basemat. Examinations using an 8X magnifying lens at one equipment room location did not result in the visual identification of a "crack" or, after one hour, any additional seepage and collection of water into the excavated area prepared for these examinations. With respect to the floor of the annulus area, water was observed in one location; however, visual observations alone were not sufficient to determine the origin of the water (i.e., leakage from concrete below or entry of water from above open areas). All observations were made by R. E. Shewmaker, M. W. Peranich and the NRC Resident Inspector, Les Constable.

The site visit also included general discussions with the Resident Inspector regarding the problem of the cracking of the basemat and the identification of a number of deficiencies in the four plant systems turned over to LP&L

by an EBASCO contractor. Certain existing record documents relative to the design of the common basemat were acquired for further examination after the visit. While at the site, the LP&L QA Manager was asked to clarify the statement attributed to him in Gambit's published article that other cracks and water seepage have been discovered in the floor of the nuclear island from time to time in the intervening years. The QA Manager believed he was referring to other cracks in the common basemat outside the containment that probably occurred in 1977, but had not been observed until later. The Inquiry Team's discussion with the QA Manager was preceded with the clarification that the NRC effort at this time was an inquiry and not an inspection or investigation.

Proposed Followup Actions

Based on the results of the Inquiry Team's interview with Gambit Publications representatives, observations made at the Waterford Unit 3 site and the current status of the team's review of existing documentation, the Inquiry Team recommends that the following actions be taken for each problem area to address fully the Gambit Publications allegations:

1. In addition to reviews completed by the Inquiry Team of existing inspection documentation, Region IV, or others as assigned, should perform a detailed review of all documentation of inspections of LP&L, CE and EBASCO unique to the Waterford 3 project during the 1974-1977 period. The review should assess the extent the issues and actions noted below may have been previously addressed. Where not adequately addressed by prior NRC inspection

activities, the actions listed below are recommended for implementation. Bases for not completing the following actions should be documented.

2. Adequacy of LP&L's QA program during construction.

a. Issue - Deficiencies in four systems turned over to LP&L

Action - Complete review of all documentation associated with this matter before and after issuance of the \$20,000 fine.

Review the reasons for a breakdown in the EBASCO contractor's QA program; LP&L's part in the identification of the deficiencies; and the adequacy of LP&L proposed corrective action.

Determine whether all systems to be turned over to the licensee will be subject to the established corrective action as well as the likelihood for possible deficiencies to be identified by the EBASCO contractor before future turnover of plant systems by EBASCO to LP&L. The ability of the LP&L QA audit of the turnover packages to identify such deficiencies should they not previously be identified by the EBASCO contractor's QA program should be determined. Also, conduct a review of the adequacy of the licensee's corrective action implemented to this date.

Assess whether the corrective action taken by LP&L and EBASCO is sufficient to prevent the recurrence of a breakdown in the EBASCO contractor's QA program. Also, assess whether the cause of the breakdown was determined to be limited to the "turnover phase" or applicable to a longer phase of construction.

- b. Issue - LP&L did not know whether its QA program was being implemented

Action - Conduct a review of LP&L's QA program and implementation relative to the measures established for LP&L to be cognizant regarding the adequacy and status of program implementation. Implementation review should cover the 1974-1977 time period and should include:

- (1) Audits conducted by LP&L of CE and EBASCO.
- (2) Audit conducted by EBASCO of CE and other EBASCO/ licensee contractors, the results of which were formally reported to LP&L.
- (3) LP&L review of audit reports and, if necessary, corrective action taken.

Determine, based on the results of the above reviews, whether LP&L was knowledgeable of the adequacy and status of the implementation of its QA program and, when necessary, initiated appropriate corrective action.

- c. Issue - LP&L did not take appropriate action on independent QA consultant's recommendations.

Action - Conduct a review of consultant reports and of LP&L action on the consultant's recommendations. Review QA program description and conformance of LP&L's implementation of the QA program in areas relating to consultant's recommendations.

Determine if licensee was in compliance with the QA program described in the SAR. If necessary, request the assistance of the DQASIP Quality Assurance Branch in arriving at a final determination of compliance.

- d. Issue - Errors in design assumptions by FBASCO.

Action - As a part of the actions completed under item 4 below, conduct an independent review of the adequacy of design control applied for original design assumptions relative to the sizing of the dewatering pumps and the water

tightness of the common basemat. Determine the adequacy of the design process for that aspect of the design and the implications of the apparent need to change those design assumptions on the adequacy of the overall design control for the design of the common basemat and the watertightness of underground structures. This independent review should include examination of other design assumptions relating to the area of design noted above.

3. QA program dispute between LP&L and CE

- a. Issue - LP&L 1974 audit of CE found that CE was not in compliance with LP&L's "new" QA program commitments (Amendment 44)

EBASCO 1976 audit of CE-identified problems with CE compliance with LP&L's "new" QA requirements for records.

Action (1) As input to the investigative aspects of this issue (Action (2) below), perform the following inspection activities. Examine the results of the LP&L 1974 audit of CE and of the EBASCO 1976 audit of CE. Determine the extent of the implication that audit findings show that CE was not implementing licensee SAR QA Program commitments during the 1974 -1976 time period. Examine documents listed under question 18 of Gambit Publications

correspondence dated April 4, 1983. Specific reviews of documents identified by question 18. d, e, i, k, q, s and t is recommended. To the extent necessary, interviews with LP&L and CE representatives involved in the QA program dispute between LP&L and CE should also be conducted to clarify any statements or data recorded in the above-referenced documentation.

Provide the Office of Investigations (OI) the results of these examinations along with a recommendation of which issues may require investigation.

Action (2) The Office of Investigation should review the results of inspections conducted under Action (1) above and determine whether an investigation is necessary to determine whether LP&L or CE misrepresented the extent of CE compliance with the licensee's new QA Program commitments (Amendment 44). Bases for not conducting an investigation should be documented.

Action (3) In case either of the results of Actions (1) and (2) above identifies that there was a period during 1974-1977 where CE's QA program substantially deviated from licensee SAR QA program commitments (Amendment 44) (i.e., after appropriate time is allowed for LP&L promulgation and CE

implementation), the following additional items should be considered for followup.

- (a) Whether the eventual action and followup initiated by the licensee in resolving or addressing this matter was sufficient to ensure that affected CE design, procurement, manufacturing, and record activities were re-evaluated and verified to have been conducted and controlled, or otherwise corrected, to be in compliance with licensee SAR QA program commitments.
- (b) Action taken by the licensee in evaluating whether the shortcomings in CE's QA program were reportable under 10 CFR 50.55(e).

4. Waterford Unit 3 common basemat

- a. Issue - Errors in assumptions of design pertaining to size of dewatering pumps and the SAR statement that the 12-ft-thick common basemat would be a "watertight barrier"
- b. Issue - Cracking of common basemat discovered in 1977
- c. Issue - Cracking of common basemat discovered in May 1983
- d. Issue - Leakage through cracking in basemat

Action (1) The licensee should initiate an independent engineering evaluation of the common basemat cracking and seepage matters noted below. The use of a third-party consultant with expertise in soils, groundwater, foundations, water-related concrete structures (such as sanitary facilities), corrosion, concrete behavior (including cracking and concrete destructive and non-destructive test methods) should be considered in completing the evaluation.

Action (2) The licensee should evaluate the current adequacy of all facets of prior engineering and construction evaluations and corrective actions with regard to the cracking and water

seepage in the common basemat. The evaluation should address the cracking and seepage reported to the NRC in 1977 and 1983 and of other cracking noted and recorded by the licensee during the intervening and present time period, and include consideration of

- (a) Initial assumptions on the sizing of the relief well pumps.
- (b) The assumption that the common basemat would be a "watertight barrier".
- (c) The potential that the water seepage through the common basemat has for reducing the cross-sectional areas by corrosion of the ASTM A-615 reinforcement steel of the mat and the ASTM A-516 plate used in the containment vessel.
- (d) The immediate and long-term effect that all existing conditions of cracking and leakage in the basemat has on the original design concept and assumptions of the plant.

Action (3) Pertinent factors such as the following should be considered during the evaluation of matters to be addressed

in Action (2) above.

- (a) The survey of all cracks and seepage zones on the top of the common basemat at El. -35 ft and other potential zones of discontinuity.
- (b) Source of the seepage water on the top of the common basemat.
- (c) The physical and chemical properties of the basic groundwater and variations that could be expected; water seeping from the surface of the basemat; and the solid deposits left on the surface of the basemat from the seepage water.
- (d) Prior evaluations on how to stop or control the in-seepage.
- (e) Prior evaluations of all available data (e.g., piezo-meter, settlement, loading, etc.) since September 1977, which relates to the response of the common basemat and provides a basis for describing the behavior of the common basemat and establishing the cause(s) of cracking.

- Action (4) The licensee should complete action d. under item 2 (QA program) above for reviewing the overall adequacy of design control for the common basemat and watertightness of the underground structure.
- Action (5) The licensee should provide the NRC with comprehensive reports related to the proposed and completed evaluation of the cracking, seepage, corrosion potential, design control, and necessary actions to ensure the proper behavior of the common basemat and the steel containment over the life of the facility.