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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

RELATED CORRESPONDENCE

BEFORE THE ATOMIC SAFETY & LICENSING BOARD

In the Matter of	§	
	§	
HOUSTON LIGHTING & POWER COMPANY	§	Docket No. 50-466
	§	
(Allens Creek Nuclear Generating	§	
Station, Unit 1)	§	

HOUSTON LIGHTING & POWER COMPANY'S
ANSWERS AND OBJECTIONS TO
DOHERTY'S SIXTH SET OF INTERROGATORIES

In response to a document entitled "Intervenor Doherty's Sixth Set of Interrogatories to Applicant With Regard to TexPirg Contention 31 and Quadrex Matters", Applicant answers and objects as set forth below. As stated in response to Mr. Doherty's First Set of Interrogatories, Mr. J. H. Goldberg, Vice President - Nuclear Engineering and Construction will testify regarding the pertinence of Quadrex Corporation's review of engineering work at the South Texas Nuclear Project to the Allens Creek Nuclear Generating Station. Mr. Louis J. Sas, Vice President - Engineering with Ebasco, will testify regarding Ebasco's engineering organization for the Allens Creek Nuclear Generating Station.

Initially Applicant notes that it has objected to a number of the interrogatories in this Sixth Set because they are irrelevant to the limited issue to be heard in the reopened proceeding pursuant to the Board's Order of January 28, 1982. For example, many of Mr. Doherty's interrogatories are directed at exploring either the details of design of the STP or the Quadrex evaluation of specific Brown & Root engineering practices -- matters which are beyond the scope of the Board's Order. Questions concerning whether the STP is being safely designed and constructed are before the STP Board, which has deferred consideration of all Quadrex related issues until ongoing reviews of the Quadrex Report by the Applicant and the NRC Staff are completed late this year. The Board's Order did not admit these STP-specific matters for litigation in this proceeding. Rather, the limited issue to be explored in this reopened proceeding is how the Quadrex Report, and specifically the matters labelled (A) through (O) in Doherty's December 7, 1981 motion, reflect upon the technical qualifications of HL&P to oversee the design and construction of the ACNGS. While Applicant has objected to a number of such interrogatories, it has also answered some interrogatories of questionable relevance. Applicant's decision to answer such interrogatories should not be taken as conceding their relevance to this reopened

proceeding. On the contrary, Applicant maintains that the vast majority of the hundreds of obscure and pointless interrogatories contained in the seven sets of interrogatories thus far received from Mr. Doherty are not relevant to the reopened Allens Creek proceeding. Moreover, in answering any questions hereinafter, Applicant does not admit the accuracy or relevance of any assumptions made by Mr. Doherty in posing such questions.

INTERROGATORY NO. 1

Is the Attachment A to this set of Interrogatories the first HL&P recognition that B&R's ISI (in-service inspection) manual contained the entire Winter of 1975 Addenda to ASME Section XI, in error?

- (a) If not, indicate an earlier discovery and give the identity of the memo, etc. and make it available.
- (b) For how long had this "error been going on"?
- (c) How will HL&P strengthen its organization at ACNGS to prevent recurrence of a similar event?

ANSWER

1. Applicant objects to this interrogatory on the ground that it is unduly vague and Applicant cannot determine what information is sought. Moreover, Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this

reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

1(a). Same objection as Interrogatory 1.

1(b). Same objection as Interrogatory 1.

1(c). As described in PSAR Section 17.1.3A, HL&P Project Engineering provides programmatic direction and overview of Ebasco engineering activities to ensure that such activities are conducted in accordance with approved engineering procedures. HL&P Engineering performs reviews of selected elements of the completed design, design documents and specifications to ensure that contractual requirements are met. As stated in PSAR Section 17.1.18A HL&P QA audits Ebasco activities to verify compliance with the QA Program. In addition, the HL&P Engineering Assurance Department will review selected elements of the design for technical adequacy.

INTERROGATORY NO. 2

(With regard to Applicant's reply to this Intervenor's Interrogatory #22, in his Set #1 of February 17, 1982,) how does Applicant believe the fact that Quadrex had, "...[n]ot observed other evidence sufficient to conclude that an effective systems integration function existed in the B&R design process,"^{1/} could be, a "Most Serious Finding"? (A

^{1/} Applicant's Answers, p. 11.

Most Serious Finding is one "...that pose(s) a serious threat to plant licensability because either (a) the finding would prevent the obtaining of a license, or (b) the finding could produce a significant delay in getting license, or (c) the finding addresses a matter of serious concern to the NRC at this time).^{2/}

ANSWER

2. Applicant objects to this interrogatory on the ground that it is unduly vague and Applicant cannot determine what information is sought. Moreover, Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

INTERROGATORY NO. 3

Did Applicant hold any post-Quadrex Report conferences with Quadrex Corp. in which this item was clarified? What result?

ANSWER

3. Applicant objects to this interrogatory on the ground that the information sought is not relevant to

^{2/} Report, p. 3-1, Sec. 3.0(1).

the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31). Moreover, Applicant objects to this interrogatory on the ground that it is unduly vague and Applicant cannot determine what information is sought.

INTERROGATORY NO. 4

Did Quadrex maintain it should have been able to observe such evidence?

ANSWER

4. Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31). Moreover, the question is unduly vague and applicant cannot determine what information is sought.

INTERROGATORY NO. 5

What prompted the creation of the "B&R System Design Assurance group...created in February 1980"^{3/}? If Applicant prompted the formation of this group, when did Applicant first request or demand it?

^{3/} Applicant's Answers, p. 11.

ANSWER

5. Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

INTERROGATORY NO. 6

Wasn't the Attachment 1 to "Applicant's Answers to Doherty's First Set of Interrogatories Re Quadrex", questioning of Mr. Goldberg by Mr. Reis of the NRC Staff?

ANSWER

6. Yes.

INTERROGATORY NO. 7

Won't the two lines mentioned in Interrogatory No. 7, of this Intervenor's Set No. 5, require Augmented Inservice Inspection? What is "augmented in-service inspection"?

ANSWER

7. Applicant objects to this interrogatory on the ground that it is unduly vague and Applicant cannot determine what information is sought. Moreover, Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's

January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

INTERROGATORY NO. 8

When did HL&P first begin its recruitment of the position or need eventually filled by Mr. J. H. Goldberg?

ANSWER

8. HL&P's recruitment of Mr. Goldberg to fill the position of Vice President-Nuclear Engineering and Construction began in the Spring of 1980. HL&P had recognized previously the need for additional senior level management with nuclear construction experience and had hired Mr. Jack Ferguson in mid-1979 to act as a consultant to Mr. Ed Turner, the Vice President of HL&P who then had responsibility for STP.

INTERROGATORY NO. 9

(Referring to Attachment B, an HL&P office memorandum, what is meant by the statement:

The problems we have, and are experiencing today are due to the identical problems Ebasco had with access engineering on the Allens Creek Project.
(?)

ANSWER

9. To the extent that this interrogatory seeks information concerning STP, Applicant objects to this interrogatory on the ground that the information sought is not relevant

to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

To the extent that this interrogatory seeks information concerning Allens Creek, see answer to Interrogatory 14.

INTERROGATORY NO. 10

Who lacked program management?

ANSWER

10. To the extent that this interrogatory seeks information concerning STP, Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

To the extent that this interrogatory seeks information concerning Allens Creek, see answer to Interrogatory 14.

INTERROGATORY NO. 11

Who lacked program plan and scheduling?

ANSWER

11. To the extent that this interrogatory seeks information concerning STP, Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified

in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

To the extent that this interrogatory seeks information concerning Allens Creek, see answer to Interrogatory 14.

INTERROGATORY NO. 12

Who lacked staffing?

ANSWER

12. To the extent that this interrogatory seeks information concerning STP, Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

To the extent that this interrogatory seeks information concerning Allens Creek, see answer to Interrogatory 14.

INTERROGATORY NO. 13

Who was unclear and inconsistent in interpretation of the scope of access design review?

ANSWER

13. To the extent that this interrogatory seeks information concerning STP, Applicant objects to this interrogatory on the ground that the information sought is not

relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

To the extent that this interrogatory seeks information concerning Allens Creek, see answer to Interrogatory 14.

INTERROGATORY NO. 14

What problems did Ebasco have with access engineering on Allens Creek Project?

(a) When did Applicant first become aware of these problems?

(b) What steps, if any, has Applicant taken to mitigate these "problems"?

(c) Please list any documents, reports, or memos which show HL&P was taking steps to alleviate this problem at ACNGS, indicate if this covers the entire period until close-out of the problem, and make these available to this Intervenor.

ANSWER

14. HL&P's concerns with respect to Ebasco included a lack of emphasis on the ISI program management, the need for an explicit or separately identified ISI Access Engineering Program Plan and Schedule, the need for an evaluation of quality and quantity of staffing required for Ebasco

ISI work, a concern that Ebasco's interpretation of the scope of work was not consistent with HL&P's interpretation, and a concern that existing verification and documentation of ISI Access reviews were not being performed as anticipated. These problems were described in a letter from P. A. Horn (HL&P) to R. K. Matzelle (Ebasco) on May 16, 1980 (AC-HL-ES-2928).

14(a). HL&P first became aware of these problems approximately in early 1980.

14(b). In early June 1980, HL&P and an independent consultant conducted an engineering review of Ebasco's ISI Access Engineering activities to date. On June 12, 1980 (mtg. minutes AC-ES-HL-7404) a meeting was held between HL&P and Ebasco to discuss the ISI Access Engineering Program and to respond to HL&P's concerns. These concerns were documented in AC-HL-ES-2928 (See Answer to #14) and AC-HL-ES-3063 (an engineering audit of Ebasco's previous ISI Access work).

In order to resolve the problem with program management and staffing, Ebasco improved its ISI program management by providing a new organizational arrangement and a full-time ISI Engineer.

In order to resolve the problem with the program plan, scheduling, and scope, Ebasco presented a new scope and plan for ISI Access Review. In recognition of the differing interpretations of ISI scope of work, a document,

"Design Review and ISI Support Services for Allens Creek," was prepared to assure consistent interpretations. Ebasco also provided a format document for the schedule of ISI activities.

In order to resolve the problem with verification and documentation, Ebasco provided an ISI Review Document List which tabulates the drawings and documents to be reviewed concerning ISI activities.

14(c). The following documents cover the approximate period from problem identification to the determination of a mechanism for problem resolution concerning Ebasco's Access Engineering Program:

- AC-ES-HL-3456
- AC-HL-ES-1423
- AC-ES-HL-6939
- AC-ES-HL-7174
- AC-HL-ES-2928
- AC-ES-HL-7303
- AC-HL-ES-3063
- AC-ES-HL-7404
- AC-HL-HL-8890
- AC-HL-ES-3113
- AC-HL-ES-3110

These documents will be available at HL&P's Baybrook offices, 19435 Glenwest, Friendswood, Texas 77546. Arrangements for reviewing these documents may be made by contacting Mr. Thomas A. Petersen at 486-3859.

INTERROGATORY NO. 15

Referring to Question E-8 of the Report, what did Quadrex mean by a "logic choice"?

(a) Did they indicate it is industry practice, or good practice to have documentation or analysis of logic choices?

ANSWER

15. Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

15(a). Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

INTERROGATORY NO. 16

Referring to Question E-16 of the Report, what is the process radiation monitoring system in a PWR?

(a) Was it the job of B&R nuclear analysis to determine the amount of radiation to be metered at various points in this system?

(b) Was it the job of B&R I&C to provide instruments that met those ranges of radiation?

(c) If the answers to (a) and (b) above are "Yes" and "Yes", wouldn't Applicant say their communication would be essential?

(d) What organizational steps will Applicant take to be certain analagous groups at ACNGS have adequate communications?

ANSWER

16. Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

16(a). Same objection as Interrogatory 16.

16(b). Same objection as Interrogatory 16.

16(c). Same objection as Interrogatory 16.

16(d). Applicant objects to this interrogatory on the ground that it is unduly vague and Applicant cannot determine what information is sought.

INTERROGATORY NO. 17

B&R replied to Question E-1, in part, "For the independence criteria especially, STP is implementing a multi-discipline review group to address the hazard protection criteria of 3E570EQ0006 and assure compliance."

(a) Is the independence criteria different from separation criteria?

(b) Did Applicant request "STP" to implement the review group?

(c) If so, when did Applicant do this?

(d) Did Quadrex indicate to HL&P they thought lack of this group had caused inadequate electrical work in the STNP which would have to be redone?

ANSWER

17(a). Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

17(b). Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31). Moreover, Applicant objects to this interrogatory on the ground that it is unduly vague and Applicant cannot determine what information is sought.

17(c). Same objection as Interrogatory 17(b).

17(d). Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

INTERROGATORY NO. 18

Referring to Question E-15 of the Report, what are the hazards to plant safety if there is inadequate separation of electrical system design or instruments and controls design for "turbine trip causing reactor trip"?

(a) Had HL&P Q/A ever audited B&R's work in this area?

(b) Was the Quadrex Report the first time HL&P had heard there was a deficiency of B&R design with regard to describing how separation was to be achieved?

(c) What organizational differences between that of STNP prior to Quadrex and ACNGS is Applicant expecting to prevent recurrence of the problem?

ANSWER

18. Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

18(a). Applicant objects to this interrogatory on the ground that it is unduly vague and Applicant cannot determine what information is sought. Moreover, Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

18(b). Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

18(c). Applicant has employed Ebasco Inc., a firm with extensive experience in nuclear engineering, to act as architect engineer at ACNGS. Moreover, HL&P has added additional experienced personnel to its staff and has established an Engineering Assurance Department to provide an enhanced engineering review capability.

INTERROGATORY NO. 19

Referring to Question E-15 of the Report, what are the hazards to plant safety if there is inadequate separation of electrical system design or instruments and controls design separation for main feedwater pump trip causing auxilliary feedwater pump initiation?

(a) Had HL&P Q/A ever audited B&R's work in this area?

(b) Was the Quadrex Report the first time HL&P had heard there was a deficiency of B&R with regard to describing how separation was to be achieved?

ANSWER

19. Applicant objects to this interrogatory on the ground that it is unduly vague and Applicant cannot determine what information is sought. Moreover, Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

19(a). Same objection as Interrogatory 19.

19(b). Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

INTERROGATORY NO. 20

Referring to Question E-15 of the Report, in the "Quadrex Assessment, on its line 10, "others" is mentioned"? Would this specifically not include HL&P?

ANSWER

20. Applicant objects to this interrogatory on the ground that the information sought is not relevant to

the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

INTERROGATORY NO. 21

Referring to Question E-1 of the Report, did Applicant ever suggest to B&R that it identify all Technical Reference Documents (TRDs) as suggested there by Quadrex?

(a) If so, give the date, and indicate if appropriate what was impeding progress toward achieving that gathering?

ANSWER

21. Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

21(a). Same objection as Interrogatory 21.

INTERROGATORY NO. 22

Referring to Questions E-2, was Applicant aware B&R was using Flamemastic material and that it was not acceptable for use as a fire barrier?

(a) Has any such material actually been installed in STNP?

(b) What will Applicant do in organizing its monitoring staff at ACNGS to avert the use of unacceptable flame-retardant materials?

ANSWER

22. Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

22(a). Same objection as Interrogatory 22.

22(b). HL&P has added additional experienced personnel to its Staff and has established an Engineering Assurance Department to provide an enhanced engineering review capability.

INTERROGATORY NO. 23

Referring to Question E-2, did Applicant give permission for the use of PVC by STNP at STNP?

ANSWER

23. Applicant objects to this interrogatory on the ground that it is unduly vague and Applicant cannot determine what information is sought. Moreover, Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this

reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

INTERROGATORY NO. 24

Prior to Quadrex, did Applicant notice that Specification ZQ-003, and its Appendix A allow the use of PVC?

ANSWER

24. Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

INTERROGATORY NO. 25

Was STNP the first nuclear plant B&R ever designed?

ANSWER

25. Yes.

INTERROGATORY NO. 26

Prior to Quadrex, did Applicant notice that B&R had no documentation for defining separation barrier requirements? (See: Sec.4.3.2.1(e))

- (a) If so, what steps did Applicant take if any?
- (b) Give the date of any memo where Applicant noticed this, identify it, and make it available, please.

ANSWER

26. Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

26(a). Same objection as Interrogatory 26.

26(b). Same objection as Interrogatory 26.

INTERROGATORY NO. 27

Referring to Question E-6, did Applicant give permission to B&R for the use of Glastic in electrical or control systems?

(a) For what purpose was Glastic used, or planned to be used at STNP?

(b) Has any Glastic actually been used in the construction of STNP thus far?

(c) If Applicant ever disapproved of the use of Glastic in the STNP, please provide a memo or similar

item showing this, and mention any other steps taken by Applicant to prevent or eliminate the use of this material, please.

ANSWER

27. Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

27(a). Same objection as Interrogatory 26.

27(b). Same objection as Interrogatory 26.

27(c). Same objection as Interrogatory 26.

INTERROGATORY NO. 28

Was Applicant aware the specifications used for physical separation for each redundant ESF logic contained no such specifications for separation barriers, and no definitions for hazards and materials?

(a) If so, when did Applicant become aware, and when did it take any steps to alter the B&R use of this specification?

ANSWER

28. Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31). Moreover, Applicant objects to this interrogatory on the ground that it is unduly vague and Applicant cannot determine what information is sought.

28(a). See Response to Interrogatory 28.

INTERROGATORY NO. 29

Question E-3 states:

B&R presents an understanding of the difference in the qualification requirements for equipment operability versus structural integrity, but provided no basis for the classification of equipment into these categories.

If B&R had no basis for determining what operation class equipment fell in nor a basis for determining what structural integrity class to put items in, was Applicant aware of this prior to Quadrex?

(a) If Applicant was, what steps did it take to alter the situation?

(b) Please give the date and identity, and make available any memo, report, etc., that shows an effort to change this lack of basis in B&R's work in this aspect.

(c) What in Applicant's organizational plans at ACNGS will prevent recurrence of this?

ANSWER

29. Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

29(a). Same objection as Interrogatory 29.

29(b). Same objection as Interrogatory 29.

29(c). The Allens Creek Equipment Qualification Program will assure that environmental conditions that may affect equipment are properly considered. As described in PSAR Section 17.1.3A, HL&P Project Engineering provides programmatic direction and overview of Ebasco engineering activities to ensure that such activities are conducted in accordance with approved engineering procedures. HL&P Engineering performs reviews of selected elements of the completed design, design documents and specifications to

ensure that contractual requirements are met. As stated in PSAR Section 17.1.18A HL&P QA audits Ebasco activities to verify compliance with the QA Program. In addition, the HL&P Engineering Assurance Department will review selected elements of the design for technical adequacy.

INTERROGATORY NO. 30

Did Applicant know prior to Quadrex that B&R was using a part of the FSAR as a design input document? (See: Sec. E-3, "Quadrex Assessment, paragraph 1).

ANSWER

30. Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

INTERROGATORY NO. 31

Had Applicant been advised by B&R or noticed on its own prior to the Quadrex Corp.'s work, that B&R had not documentation for isolation devises to be used and the appropriate circuit applications? (Refer to Question E-14)

(a) Did B&R have a procedure for documenting what isolation devises were eventually used in construction?

(b) Are there currently installed isolation devices in the STNP today, with no documentation of their selection as to acceptability?

(c) If Applicant was aware of this prior to the Quadrex Report, please give the date and identity of any memo, report, etc., that shows this and provide it to this Intervenor.

ANSWER

31. Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

31(a). Same objection as Interrogatory 31.

31(b). Same objection as Interrogatory 31.

31(c). Same objection as Interrogatory 31.

INTERROGATORY NO. 32

On page 1-1 of the Quadrex Report on EBASCO, is the date of May 1981, the date Quadrex was "asked to assist HL&P in its review of EBASCO"?

(a) Did Mr. Goldberg suggest this study by Ebasco?

(b) Did either Mr. Goldberg or Mr. Oprea mention the Quadrex Report on Ebasco in their testimony on Allens Creek?

(c) Did each of these witnesses know that Quadrex had been retained by HL&P to review the Ebasco design work for ACNGS at the time they testified in the ACNGS proceeding?

(d) What was the cost of this report?

ANSWER

32. Yes.

32(a). Yes.

32(b). No.

32(c). Yes.

32(d). Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

INTERROGATORY NO. 33

What is the effect on plant safety if there is boron precipitation in the ECCS loops as mentioned in the "Quadrex Assessment" of Question E-22 of the Report (Vol. II)? What does "heat tracing do to alleviate this problem, or assist in improving plant safety in this instance"?

ANSWER

33. Applicant objects to this interrogatory on the ground that the information sought is not relevant to

the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

INTERROGATORY NO. 34

Referring to Question E-3 of the Report, Vol. II, what is a "support" system as mentioned in the last sentence of the "Quadrex Assessment"? What is the concern if no basis or procedures existed for these systems?

ANSWER

34. Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

INTERROGATORY NO. 35

Was Applicant aware B&R did not consider Plant Operating Procedures within the scope of its design work prior to the Quadrex Report (Report, E-21)

(a) If so, please indicate the date and identity of any paper, memo, etc., which shows this.

(b) If not, how will the ACNGS procedures and organization be different such that this won't recur at that site?

ANSWER

35. Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

35(a). See Response to Interrogatory 35.

35(b). With respect to ACNGS, plant operating procedures are outside the scope of the engineering design services provided by the architect-engineer. However, as necessary, HL&P will determine from its operating experience feedback program if the architect-engineer should incorporate certain design changes in order to enhance certain operating activities. As discussed in ACNGS PSAR, Appendix O, Section I.C.5, operating experience feedback to the architect-engineer is a part of the design process.

INTERROGATORY NO. 36

Was Applicant aware that a large break in the Emergency Cooling Water (ECW) system might not be promptly detected and isolated because sump pumps are non-safety related (and hence might fail)?

(a) Where is the electrical system for detecting a large ECS break located?

(b) Are the sump pumps at STNP classified as non-safety related?

(c) Prior to the Quadrex Report, was Applicant aware of the lack of certainty of mitigation of an ECW large break because of lack of detection and isolation due to sump pump failure?

(d) If "yes" give the date of any correspondence, report, etc. between Applicant and B&R which shows this, please. Also identify the report, etc., and make it available.

ANSWER

36. Applicant objects to this interrogatory on the ground that the information sought is not relevant to the limited issues in this reopened proceeding as identified in the Licensing Board's January 28, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

36(a). Same objection as Interrogatory 36.

36(b). Same objection as Interrogatory 36.

36(c). Same objection as Interrogatory 36.

36(d). Same objection as Interrogatory 36.

INTERROGATORY NO. 37

At the time it was performing work at the STNP,
was the NUS Corporation owned by Brown & Root?

(a) If not who owned this company?

ANSWER

37. Applicant objects to this interrogatory on
the ground that the information sought is not relevant to
the limited issues in this reopened proceeding as identified
in the Licensing Board's January 28, 1982 Memorandum and
Order (Granting The Doherty Renewed Motion For Additional
Evidence on TexPirg Additional Contention 31).

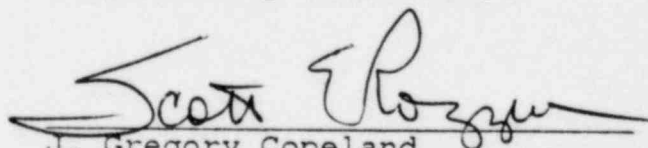
37(a). Same objection as Interrogatory 37.

Respectfully submitted,

OF COUNSEL:

BAKER & BOTTS
3000 One Shell Plaza
Houston, Texas 77002

LOWENSTEIN, NEWMAN,
REIS & AXELRAD
1025 Connecticut Ave., N.W.
Washington, D.C. 20036


J. Gregory Copeland
Scott E. Rozzell
3000 One Shell Plaza
Houston, Texas 77002

Jack R. Newman
Alvin H. Gutterman
David B. Raskin
1025 Connecticut Ave., N.W.
Washington, D.C. 20036

ATTORNEYS FOR APPLICANT
HOUSTON LIGHTING & POWER COMPANY

STATE OF TEXAS

§

COUNTY OF HARRIS

§

BEFORE ME, the undersigned authority, on this day personally appeared J.H. Goldberg, Vice President - Nuclear Engineering & Construction for Houston Lighting & Power Company, who upon his oath stated that the foregoing answers to "Intervenor Doherty's Sixth Set of Interrogatories Re Quadrex" were prepared under his supervision and direction, and that all statements contained therein are true and correct to the best of his knowledge and belief.

J. H. Goldberg
J. H. Goldberg

SUBSCRIBED AND SWORN TO BEFORE ME by the said
J.H. Goldberg, on this 5th day of April, 1982.



Angelina K. Self
Notary Public, State of Texas
My Commission Expires 2/17/85