

RELATED CORRESPONDENCE

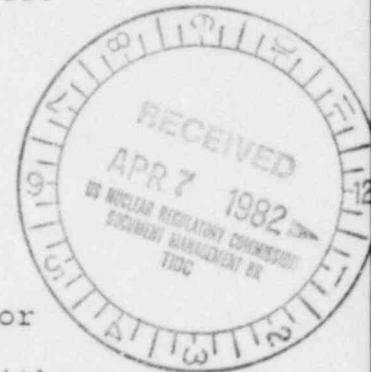
DOCKETED March 29, 1982
USNRC

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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 FOURTH SET OF INTERROGATORIES



In response to a document entitled "Intervenor Doherty's Fourth 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 Fourth Set because they are irrelevant to the limited issue to be heard in the

8204080540 820329
PDR ADOCK 05000466
G PDR

*DSB
90/1*

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 six 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

What are the personal qualifications of R. Koppe, Q. Hossain, J. Nardello, Gene Esswein, H. R. Booth, and R. Uffer of the Quadrex Corporation?

ANSWER

1. 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. 2

What examples did Quadrex provide to support its statement in Sec. 4.6.2.1(c) of the Report, that: "Nuclear Analysis has failed to scope, perform or have analysis performed that should have been completed (including correction of reports containing obsolete or erroneous analysis) given the present state of STP design and construction?"

- (a) Does Applicant agree with the finding in 4.6.2.1(c)?
- (b) Does the finding apply to NUS and B&R?
- (c) What part of its organization will Applicant rely upon to prevent a similar problem or situation at ACNGS?

ANSWER

2. The Quadrex Report contains the entirety of the information provided HL&P on this subject.

2(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).

2(b). Same objection as 2(a).

2(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. 3

What are the personal qualifications of Earl Willey of Quadrex Corp.?

ANSWER

3. 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. 4

What basis did Quadrex provide for the statement: "The technical assumptions used for design and analysis are not reasonable for STP?" (See Sec. 4.6.2., p. 4-57, Report)

(a) Prior to Quadrex, did Applicant protest that any technical assumptions were not reasonable for STNP?

(b) Make available any documents that question technical assumptions in the above, but identify same in your reply, please.

ANSWER

4. Quadrex provided no explanation beyond that which is contained in its report.

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

4(b). Same objection as Interrogatory 4(a).

INTERROGATORY NO. 5

In Sec. 4.6.2., p. 4-57, has Quadrex indicated what it means when it states, "...no evidence has been seen that the B&R Nuclear Analysis Group has produced a significant contribution to the STP design?"

(a) Prior to Quadrex has Applicant been dissatisfied with the production of this group?

(b) Make available any documents that show Applicant's dissatisfaction expressed, but identify same in your reply, please.

(c) What does Applicant intend to do supervising ACNGS construction with regard to the analogous Ebasco Services Nuclear Analysis Group that will prevent the problem cited here by Quadrex?

(d) With regard to Question N-15, what equipment had been purchased without backup analysis?

ANSWER

5. See discussion following the quoted statement on p. 4-57 of the Quadrex Report.

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

5(b). See response to Interrogatory 5(a).

5(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.

5(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. 6

Had Applicant prior to Quadrex detected the inappropriate use of RELAP3 code mentioned in Question N-13?

(a) If so, make available any document showing this, and identify the document by name and date in your response, please.

ANSWER

6. 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).

6(a). Same objection as Interrogatory 6.

INTERROGATORY NO. 7

Did Applicant obtain any reasons from B&R for not identifying any high energy lines in the Mechanical Auxiliary Building (MAB) to be analyzed for environment? (See Question N-3)

(a) Was Applicant aware that B&R had no breaks or scoping mass releases for breaks in the MAB of high energy lines, prior to Quadrex?

(b) How will Applicant be organized differently to become aware sooner of this type of problem if it should occur at ACNGS?

(c) Would it be one of Applicant's responsibilities to make B&R certain of any need to perform analyses for high energy line breaks in the MAB?

ANSWER

7. 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).

7(a). Same objection as Interrogatory 7.

7(b). 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.

7(c). 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

Did Applicant know that NUS Company was using an obsolete code in its annulus pressurization analysis?

(Question N-2, Report)

(a) What group in Applicant would consider codes used by NUS in this work?

(b) Did anyone from Applicant urge NUS to use the COMPARE code instead of RELAP3 code?

(c) Have any mass and energy releases been calculated for ACNGS?

(d) What has Applicant done to be sure obsolete codes are not used there, if the answer to (c) is affirmative?

ANSWER

8. 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).

8(a). Same objection as Interrogatory 8.

8(b). Same objection as Interrogatory 8.

8(c). Yes.

8(d). HL&P's contracts with Ebasco and General Electric require the use of appropriate design and engineering practices. Moreover the use of adequate codes is assured by the NRC review of SAR analyses. Finally, HL&P Engineering performs reviews of selected elements of the completed

design, design documents and specifications to ensure that contractual requirements are met.

INTERROGATORY NO. 9

With regard to Question N-8 of the Report, was Applicant aware that B&R did not know the proper methodology for handling potential flow paths during environmental analysis?

ANSWER

9. 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. 10

With regard to Question N-10 of the Report, was Applicant aware B&R did not know of the need to model makeup supplies of water for long term environmental analysis, prior to Quadrex? If so, make available any documents which show this, but provide here, please, the names and dates of them.

ANSWER

10. 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. 11

Was Applicant aware B&R was not giving consideration to valve performance qualification requirements near break locations, prior to Quadrex? (Question N-12)

(a) If so, make available any memoranda or documents showing this, but in reply, please give dates and names of these documents.

ANSWER

11. 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).

11(a). See objection to Interrogatory 11.

INTERROGATORY NO. 12

Was Applicant aware prior to Quadrex that B&R had not considered local hydrogen concentrations in the battery room? (Question N-25, Report)

(a) If yes, indicate what memos, documents, etc. indicate this and give names in your reply, and please make them available for inspection and copying.

(b) Is hydrogen generation in the battery room of the ACNGS a consideration in that plant's design?

ANSWER

12. 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).

12(a). See objection to Interrogatory 12.

12(b). Yes.

INTERROGATORY NO. 13

With reference to Question N-11 (and see also p. 4-61 of the Report), what part of the reactor protection system does the MSIV trip or valve ramp characteristics play?

(a) Prior to Quadrex, was Applicant aware of any "weakness" in B&R's understanding of the MSIV trip logic?

(b) How will Applicant be able to assess this weakness sooner should it occur at the ACNGS site?

ANSWER

13. 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).

13(a). Same objection as Interrogatory 13.

13(b). 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. 14

Referring to Question N-18, does Applicant agree with Quadrex that acceptance criteria for the containment Spray Analysis should have been performed by B&R?

(a) Was Applicant aware this was not done, prior to the Report?

(b) Was Applicant aware that B&R considered this analysis a Westinghouse responsibility?

(c) What steps has Applicant taken to be certain there is no recurrence of this at ACNGS?

ANSWER

14. 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.

14(a). Same objection as Interrogatory 14.

14(b). Same objection as Interrogatory 14.

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

INTERROGATORY NO. 15.

In Quadrex's discussion of the B&R response to Question C-4, they mention a reportable deficiency on the structural steel inside containment caused by the lack of consideration of thermal loadings and two other factors.

(a) Was this due to lack of knowledge of "much higher localized temperatures than expected?" (See: Question N-13, last sentence of "Quadrex Assessment")

(b) Was the structural steel constructed prior to the deficiency report?

ANSWER

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).

15(b). Same objection as Interrogatory 15(a).

INTERROGATORY NO.

In Sec. 4.6.2.4(u) of the Report, did Quadrex calculate how much higher the localized temperature for the outside containment concrete would be?

(a) Prior to Quadrex, was Applicant aware a higher temperature was required, and if so, when was Applicant first aware?

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.

INTERROGATORY NO. 17

Referring to item 4.6.2.4(v) of the Report, has Applicant the option of enlarging the ECP to accommodate concurrent trip of the STNP units?

ANSWER

17. 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 23, 1982 Memorandum and Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

INTERROGATORY NO. 18

Question N-23 of the Report, which consists of several questions on ECCS pump room flooding, states in the "Quadrex assessment": "Quadrex review of handout calculations showed a 44% non-conservative error. (Break area of

.432 in2 should be .622 in2. Pipe wall thickness was inadvertently used."

(a) Does this mean B&R substituted the pipe wall thickness for the break area?

(b) Was Applicant aware of these two errors prior to Quadrex review?

(c) If Applicant was aware, please give the date of first awareness, and make available any documents, etc. on the discovery of these errors.

ANSWER

18(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).

18(b). Same objection as Interrogatory 18(a).

18(c). Same objection as Interrogatory 18(a).

INTERROGATORY NO. 19

Does Applicant agree with the Quadrex finding in Sec. 4.8.2, "Sufficient evidence to verify that appropriate design inputs (based on the criteria documents) were utilized, was not provided? If not, for what reasons?"

ANSWER

19. 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

Relevant to Question R-9 of the Report, was Applicant aware that access to a steam generator manway was interfered with by structures, prior to Quadrex?

(a) If "yes" to the above, when did Applicant first become aware? (Please make available any documents, etc. showing Applicant was aware as stated)

(b) How did Applicant first find out?

(c) If Report was Applicant's first notice, what changes has Applicant made at ACNGS to prevent structures from impeding access to frequently maintained equipment in containment?

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).

20(a). See response to Interrogatory 20.

20(b). See response to Interrogatory 20.

20(c). Without conceding that any such situation existed at STP, Applicant states as follows with respect to ACNGS:

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. 21

Relevant to Question R-9 of the Report, was Applicant aware that access to Valves RHO60B and XRH-019B were located such that maintainability would be very difficult or almost impossible, prior to the Report? If so, at what date was Applicant aware, and indicate in your reply which documents, etc. show this, plus make the documents, etc. available.

(a) What is the function of these valves, and what systems utilize their function?

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). See objection to Interrogatory 21.

INTERROGATORY NO. 22

Referring to Question R-9 of the Report, was Applicant aware prior to Quadrex that Valve XRC-074C had been installed upside down? If so, please identify and make available any document, report, etc. which shows this.

(a) What is the function of Valve XRC-074C, and of which plant system is it a part?

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.

INTERROGATORY NO. 23

What is the radiation streaming referred to in Question R-13 of the Report?

(a) Does Applicant agree with the Quadrex assessment that for the most part, the criteria of TRD A509NQ005-B dealing with (radiation) streaming through shield penetrations had not been implemented?

(b) Prior to Quadrex Report, had Applicant noticed that the document mentioned in part 23(a) criteria had not been implemented with regard to shield penetrations? If so, please identify and make available any document, report, etc. which shows this.

ANSWER

23. Radiation streaming normally refers to an increase in dose rate of radiation (usually neutron or gamma) with respect to the shielded dose rate. This relative increase in dose rate is due to the lower amount of attenuation caused by random irregularities of the shield and by necessary discontinuities in the shield.

23(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).

23(b). Same objection as Interrogatory 23(a).

INTERROGATORY NO. 24

Referring to Question R-10 of the Report, what is a "gap release" accident?

ANSWER

24. HL&P believes that a "gap release accident" as stated in Question R-10 refers to an event in which the gaseous activity initially residing within the fuel pin is released from the fuel pin to the reactor environment.

INTERROGATORY NO. 25

In what ways does Quadrex Corp. maintain shielding design did not adequately consider ISI requirements or potential locations for temporary shielding? (Report, Question R-10)

ANSWER

25. 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. 26

Does Applicant agree that, "The radiation zones ...have not taken into account accident situations or other abnormal conditions?" (Report, Question R-10)

(a) Prior to Quadrex Report, had Applicant noticed this alleged deficiency? If so, please identify and make available any document, report, etc. which shows this.

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.

INTERROGATORY NO. 27

Report, Question R-6, states, "A failure mode and effects analysis has not been performed from a radiological safety standpoint on the systems referred to in the B&R response". Are each of the systems below included in that statement to the best of your knowledge? (a) Spent Fuel Pool Ventilation, (b) Fuel Handling Building Ventilation, (c) Control Room Ventilation, (d) Reactor Containment Building Stack Monitor.

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).

INTERROGATORY NO. 28

Were any reviews of plant design from an ALARA standpoint, ever given to Applicant in result form?

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).

INTERROGATORY NO. 29

Did Applicant ever ask for the results of such reviews as mentioned in item 28, above?

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). Moreover,

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

INTERROGATORY NO. 30

Referring to the Report, Question R-1, does Applicant accept the statement that B&R reviews of plant design from an ALARA standpoint were inadequate? If so, indicate the date and names of any report, document or memo indicating this, and make it available to this Intervenor, please.

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

At any time prior to the Report, had any of Applicant's personnel reviewed models and codes used for shielding analysis by B&R? Has Applicant any reports, memos, etc. showing their opinion of B&R's understanding of these analyses? If so, please indicate the date of, and identify these reports or memos, etc. as well as make them available to Intervenor. (See: Report, Question R-11)

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).

INTERROGATORY NO. 32

What is the identity and date of any memo, report, etc. where Applicant requested that B&R make a listing of radioactive piping outside containment? Please make this request available to Intervenor. (See Report, Question R-12)

ANSWER

32. 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

Did Applicant concur in B&R's conduct in not reviewing the documents NUS-TM-261, "Pressure Vessel Activation Product Radiation Analysis and Shield Design," 1976;

and NUS-TM-232, "Radiation Streaming Through Reactor Vessel Primary Shield Gap and Inspection Tours," 1976? (See: Report, Question R-14)

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

Did Applicant, prior to Feb. 1981, request that B&R create radiation zone drawings based on accident conditions? (See: Report, Question R-30) If so, please give the date of the request, identify any memo, report, letter, etc. showing this, and make such item available to this Intervenor, please.

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

Had Applicant, prior to Quadrex Report, ever notified B&R or other contractor at STNP of the need for a design basis governing removable concrete block walls?

(See: Report, Sec. 4.8.2.1(g))

(a) If so, identify and please make available a copy of any means used by Applicant to notify them, but give the date and identify the document or means used, in your reply to this Interrogatory.

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.

INTERROGATORY NO. 36

Has Applicant concluded B&R performed a thorough review of system design features relative to crud buildup? (Report, R-15) If so, identify and make available memos, documents, etc. from which Applicant concluded this. Identify them in your reply, please.

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).

INTERROGATORY NO. 37

Referring to a letter from G. W. Oprea signed by J. H. (?) Goldberg ("for") of 6/5/81 identified as ST-HL-AE-678; SFN: V-0530, did the assessment of computer codes mentioned there refer to work by Quadrex? (See Attachment "A")

ANSWER

37. No.

INTERROGATORY NO. 38

Referring to Question C/M-3 of the Report. what are the names of the following computer programs and what do they compute or provide for the user? a) ES-425; b) CP-231; c) EP-200; d) EL-303; e) CW-522.

ANSWER

38. 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. 39

Relevant to Question C/M-8 of the Report, had Applicant ever examined or approved of the document STP-DC-017-C?

(a) Did Quadrex ever give Applicant an idea of how many times the "loop hole" had been used? How many?

(b) Was Applicant aware B&R was not verifying nationally recognized programs? If so, please give the date and identifying name or number of any document or report showing this and make said item available. If not, how will Applicant at the ACNGS site prevent this with Ebasco Services?

(c) Was Applicant aware, prior to Quadrex, that B&R was permitted to verify codes in five ways according to document STP-DC-017-C, without guidance for preference? If so, please give the date it determined this, and identify any document or other item showing this and make it available.

ANSWER

39. 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).

39(a). Same objection as Interrogatory 39.

39(b). Applicant objects to the first two parts of 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).

As to the third part of this interrogatory, with respect to ACNGS, 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.

39(c). 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. 40

Prior to Quadrex Report, was Applicant aware that document STP-DC-017 permitted that, "If any part or portion of the computer code is verified, the whole is considered verified."? If so, indicate date Applicant became aware of it, anything it did as a result of this awareness, and identify and make available any memo, etc. that shows this. (Refer to C/M-13, Report)

ANSWER

40. 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. 41

Is Applicant aware at this time if there is a control document identifying all computer codes used on STP?

(a) Prior to Quadrex, was Applicant aware that a control document of the type described in the first paragraph of the Quadrex Assessment of Question C/M-1 did or did not exist?

(b) Prior to Quadrex, was Applicant aware of the differences in the listings between the FSAR and the PSS mentioned by Quadrex in Question C/M-1 of the Report? If so, when was Applicant first aware, and what memo or document, etc. shows this awareness?

(c) What will Applicant do in the case of its ACNGS organization to keep these two documents correctly updated, that it did not do in the case of STNP?

ANSWER

41. 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).

41(a). Same objection as Interrogatory 41.

41(b). Same objection as Interrogatory 41.
Order (Granting The Doherty Renewed Motion For Additional
Evidence on TexPirg Additional Contention 31).

41(c). Ebasco and General Electric provides HL&P
with the pertinent SAR provisions and the updates thereto.
HL&P Engineering performs reviews of selected elements of
the completed design, design documents and specifications as
well as SAR changes. As stated in PSAR Section 17.1.13A
HL&P QA audits Ebasco and General Electric activities to
verify compliance with the QA Program.

INTERROGATORY NO. 42

Was Applicant aware program name and version
number, date of execution and sequential page numbering did
not appear on every page of all output prior to Quadrex
Assessment C/M-2? If so, please indicate the date of first
awareness and identify any letters, memos, etc. that show
this. Did Applicant attempt to have E&R revise this practice?

ANSWER

42. 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).

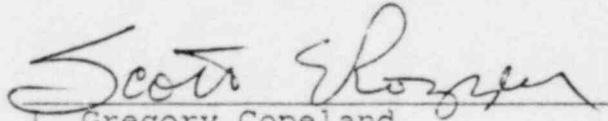
Order (Granting The Doherty Renewed Motion For Additional Evidence on TexPirg Additional Contention 31).

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



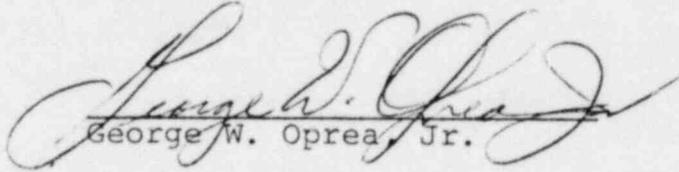
J. Gregory Copeland
Scott E. Rozzell
3000 One Shell Plaza
Houston, Texas 77002

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

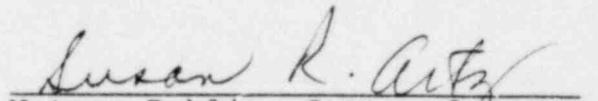
ATTORNEYS FOR APPLICANT
HOUSTON LIGHTING & POWER COMPANY

STATE OF TEXAS §
 §
COUNTY OF HARRIS §

BEFORE ME, the undersigned authority, on this day personally appeared George W. Oprea, Jr., Executive Vice President of Houston Lighting & Power Company, who upon his oath stated that the foregoing answers to "Intervenor Doherty's Fourth 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.


George W. Oprea, Jr.

SUBSCRIBED AND SWORN TO BEFORE ME by the said George W. Oprea, Jr., on this 29th day of March, 1982.


Notary Public, State of Texas
My Commission Expires 6-30-82

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

CERTIFICATE OF SERVICE

I hereby certify that copies of Houston Lighting & Power Company's Answers and Objections to Doherty's Fourth Set of Interrogatories in the above-captioned proceeding were served on the following by deposit in the United States mail, postage prepaid, or by hand-delivery this 2nd day of March, 1982.

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

Dr. E. Leonard Cheatum
County Route 3, Box 350A
Watkinsville, Georgia 30677

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

Susan Plettman
David Preister
Texas Attorney General's Office
P. O. Box 12548, Capitol Station
Austin, Texas 78711

Hon. Charles J. Dusek
Mayor, City of Wallis
P. O. Box 312
Wallis, Texas 77485

Hon. Leroy H. Grebe
County Judge, Austin
P. O. Box 99
Bellville, Texas 77418

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

Richard Black
Staff Counsel
U.S. Nuclear Regulatory
Commission
Washington, D. C. 20555

Bryan L. Baker
1118 Montrose
Houston, Texas 77019

J. Morgan Bishop
11418 Oak Spring
Houston, Texas 77043

Stephen A. Doggett
P. O. Box 592
Rosenberg, Texas 77471

John F. Doherty
4327 Alconbury
Houston, Texas 77021

Carro Hinderstein
723 Main, Suite 500
Houston, Texas 77002

D. Marrack
420 Mulberry Lane
Bellaire, Texas 77401

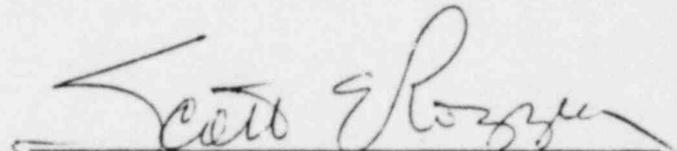
Brenda McCorkle
6140 Darnell
Houston, Texas 77074

W. Matthew Perrenod
4070 Merrick
Houston, Texas 77025

Wayne E. Rentfro
P. O. Box 1335
Rosenberg, Texas 77471

William Schuessler
5810 Darnell
Houston, Texas 77074

James M. Scott
13935 Ivy Mount
Sugar Land, Texas 77478


Scott E. Rozzell