

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
BEFORE THE ATOMIC SAFETY & LICENSING BOARD

June 15, 1982

In the Matter of:

HOUSTON LIGHTING & POWER CO.  
(Allens Creek Nuclear Generating  
Station, Unit 1)

267  
Docket No. 50-466

INTERVENOR DOHERTY'S CONTENTION 59

This Contention is filed together with "Intervenor Doherty's Motion to Reopen the Record", and is the reason for that Motion. The Contention is in two parts. Doherty Contention 59-A is below, and Doherty 59B begins at page 4. The conclusion and timeliness section of this motion apply to both parts of the contention.

CONTENTION 59(a)

Intervenor contends Applicant has not demonstrated it is able to comply with NRC regulations, specifically 10 CFR 50.55(e) and hence should not be granted a construction permit for the proposed ACNGS. This contention is based on Applicant's failure to report under this regulation several deficiencies found by the Quadrex Corporation in its report on design work by the Brown & Root Company at the South Texas Nuclear Project (STNP), of May, 1981. Intervenor asserts that the following deficiencies should have been reported under 10 CFR 50.55(e) (1)(i-iv):

10 CFR 50.55(e)(1)(i):

<u>Quadrex Rept.</u> <u>Item #</u>	<u>Description</u>
3.1 (a)	Lack of systems integration
3.1 (b)(3)	Inconsistent review of vendor submitted reports
3.1 (c)	Lack of thorough and consistent treatment of plant operating modes and environmental conditions
4.3.2.1 (e)	No documentation for defining separation barriers
4.3.2.1 (g)	Lack of method to assure FSAR commitments go into the design
4.7.2.1 (a)	Since no modal analysis was done FSAR was incorrect

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Quadrex Report

<u>Item #</u>	<u>Description</u>
4.3.2.1 (b)	No top-level document that specifies plant-wide separation requirement.
4.3.2.1 (n)	No document provides guidance on circuit application of isolation devices
4.5.2.1 (b)	Loads used as basis for plant design unverified or not reviewed
4.6.2.1 (a)	Temperature value not controlled by designers for equipment design
4.6.2.1 (b)	Insufficient environmental analysis
4.8.2.2 (m)	Different values of essential cooling pond initial temperature assumptions were used by Nuclear Analysis and Heavy Civil disciplines

10CFR50.55 (e) (1) (iii):

3.1 (d)(1)	Lack of awareness of high energy piping in the MAB and safety-related classification versus non-safety related
3.1 (d)(5)	Identified support systems and safety related vs non-safety related classification
4.1.2.1 (b)	No evidence of evaluation of reasonableness of postulated internal missiles
4.1.2.1 (c)	Turbine building not analyzed for SSE
4.3.2.1 (m)	No methodology to assure all required manual operations may be performed at remote shutdown panels
4.4.2.1(c)	Pocket hydrogen accumulations in containment after LOCA (But not the battery room)
4.6.2.1(b)	Lack of environmental analysis throughout
4.6.2.1(b)	Problems with reactor-shield wall pressurization analysis
4.8.2.2(k)	No documented basis for locating breathing connections

10 CFR 50.55(e)(1)(iv)

Quadrex Report

Description

Item #

- |                     |  |
|---------------------|--|
| 3.1(b)(1)           | Input data to technical groups not reviewed for reasonableness prior to use                  |
| 3.1(e)              | No written guidelines for failure mode and effects analysis                                  |
| 3.1(j)(2) page 3-12 | AFW pumps not qualified for postulated accident environments                                 |
| 4.1.2.1(f)          | Pipe rupture loading may not be adequate   |
| 4.3.2.1(h)          | No basis or procedure to identify support systems needed to assure safety system performance |
| 4.3.2.1(j)          | Vendors allowed to apply NRC requirements instead of architect engineer                      |
| 4.4.2.1(d)          | Separation requirements against common mode failures not identified                          |
| 4.4.2.2(h)          | No consideration of normal open doors and hatches in EVAC calculations                       |
| 4.5.2.1(c)          | Secondary effects of pipe rupture events have been uninvestigated                            |
| 4.6.2.1(a)          | Temperature values for equipment design have not been properly controlled.                   |
| 4.6.2.1(e)          | Use of RELAP3 for annulus pressurization analysis was inappropriate                          |
| 4.6.2.1(j)          | Use of double ended pipe break rather than crack break disagrees with PSAR commitment        |
| 4.7.2.1(a)          | No modal analysis of pipe whip was done  |
| 4.7.2.1(d)          | Use of high stiffness for pipe supports gives unconservative results                         |
| 4.8.2.1(d)          | Shielding calculations were not safety related   |
| 4.8.2.1(e)          | No correlation of radiation zones to shielding design;                                       |

Intervenor asserts that failure to report these findings demonstrates inability to comply with NRC regulations, and that this inability would endanger the public and this Intervenor were Applicant granted the sought license.

Contention 59B

By reporting but three findings from the Quadrex Report under 10 CFR 50.55(e), by May 12, 1981, and failing to report the items listed in Contention 59A (supra.) and failing to use other means of communication, the ACNGS Applicant deliberately prevented the NRC, the South Texas Nuclear Project Board (Docket STN 50-498, 499), and the Board and Parties in the Allens Creek proceedings from learning the potential significance of the Quadrex-South Texas Nuclear Project Report's findings. This action or inaction by Applicant prevented the NRC, the two Boards and other parties, particularly parties in these proceedings, from learning the implications of the Quadrex-South Texas Nuclear Project Report for judging Applicant's technical competence, and whether the Applicant can be held to an "...[e]xtraordinary responsibility for safety," as required by the Commission. (In the Matter of Atlantic Research Corp.), CLI 80-7, March 14, 1980; CCH 30,459, at 29,302.

This contention is supported by a memorandum (Attached) from William J. Dircks, Executive Director for Operations of the NRC to then Commissioner Bradford, dated December 15, 1981, made available to this Intervenor on March 24, 1982 in reply to Intervenor Doggett's First Set of Interrogatories to Staff, Item #7.

When the Memorandum attached to this filing is compared to the "Chronology attached to this Intervenor's March 29, 1982, "Intervenor Doherty's Motion for the Board to Call as a Witness, Donald E. Sells (NRC) for TexPIRG Additional Contention 31 and Quadrex Related Matters", differences are insignificant in terms of the question of when the NRC first received a copy of the Quadrex Report-STNP for full review. In fact, this Intervenor is aware that William Dircks, of the NRC, also sent a memorandum to the Commission on January 11, 1982, in which he concurs with this Intervenor's assertion the two chronologies are insignificantly different. This Intervenor does not have a copy of this memorandum to attach, since it is not yet in the public document room in Washington D. C. However, this Intervenor fully expects the Staff will provide it on discovery if this Contention is admitted.



### Conclusion

Intervenor therefore urges his Contention 59, consisting of Parts A and B be admitted into this proceeding in a re-opened record. There is evidence from the Quadrex-South Texas Nuclear Project Report that Applicant either does not have the technical competence to or is simply unwilling to comply with a licensee policing regulation such as 10 CFR 50.55(e)(1)(i-iv). In addition, the NRC has provided a basis for the assertion that the Applicant did not notify it of the significance of the Quadrex-South Texas Nuclear Project Report regardless of whether also should have been reported to the NRC under 10 CFR 50.55(e).

It is clear that there were many advantages to the Applicant if the Quadrex-STNP findings could have avoided Commission scrutiny. One of these was that additional issues would not be raised as part of TexPIRG 31 in these proceedings by Intervenor or perhaps by the licensing Board, through Board Questions.

### Timeliness Requirement for this Contention

A. There is good cause for the lateness in filing this additional contention for Board consideration.

By granting this Intervenor's Renewed Motion for Additional Evidence on TexPIRG Additional Contention 31, (Applicant's Technical Qualifications), the Board recognized that

issues related to the Quadrex/STNP Report were considered legitimately excluded from timeliness bars because the report did not become available until very late in this proceeding.

The Board's Order of January 28, 1982, re-opening this proceeding indicated the Board itself was concerned with whether HI&P informed the Board in a timely fashion of the report, (p. 3,6). The Board Order of April 8, 1982, indicated the issue of disclosure was at least marginally relevant and denied without prejudice this Intervenor's motion to subpoena an NRC witness on this matter.

From the Board's two Orders cited above, this Intervenor expected to be able to explore both issues set forth in this motion during the hearing convened on April 12, 1982. This expectation is demonstrated by interrogatories to Applicant of both the 10 CFR 50.55(e) issue and disclosure in general. These Interrogatories included: in Set #1, items 8, 9, 10, 11, 14, and 17; in Set #2, items 33, 34, and 35; in Set #6, item 2; and in Set #7, item 6, 20, and 32.

The discovery process for the April 12 hearing resulted in the Attachment coming into the possession of this Intervenor for the first time on approximately March 27, 1982, as part of the Staff's response to item 7 of Doggett's Interrogatory Set 1.

At the April 12-14, 1982 hearings, the Board restricted questions on these issues to narrow areas of fact, Tr. 21,688 line 7 et seq.; 21,696, line 23, et seq.; and 21, 834 line 19 et seq. The Board specifically denied this Intervenor the opportunity to cross examine regarding the attachment. (Tr. 21,727) Similarly, the Board denied this Intervenor the opportunity to cross examine regarding an apparent NRC investigation on whether Applicant deliberately withheld the Quadrex/STNP Report from the NRC.

Only by actually attempting to cross examine on these issues relevant to Doherty Contention 59 as set forth above, could this Intervenor know whether the Board's Orders of January 28, 1982 and April 8, 1982 would permit such issues to be raised and fully litigated. Eight days after the hearing this Intervenor filed to hear issues similar to Contention 58. On being denied, he has through this Contention and a Motion to Reopen, after a seven day pause sought to have the Board consider

this Contention 59, setting forth in the Motion to Reopen why the Contention is sufficiently important to reopen.

For the above reasons, there is good cause for the lateness in filing this additional Contention for Board consideration.

B. Assuming good cause for lateness is established, the balancing of the five factors in 10 CFR 2.714(a) (i-v) determines whether the issues should be admitted for hearing.

According to previous rulings of the Commission, late filed issues are first examined to see if there is good reason for lateness and then a balancing test is conducted of the five factors in 10 CFR 2.714(a)(i-v) to determine if the issues should be admitted, Pacific Gas and Electric Company (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI 81-5, 13 NRC 361, 364 (1981).

The five factors are:

- (1) Good cause, if any, for failure to file on time.
- (2) The availability of other means whereby petitioner's interests will be protected.
- (3) The extent to which the petitioner's participation may reasonably be expected to assist in developing a sound record.
- (4) The extent to which the petitioner's interest will be represented by existing parties.
- (5) The extent to which the petitioner's participation will broaden the issues or delay the proceedings.

1. The issues in Contention 59 were raised as rapidly after the April 12, 1982 hearings as possible. Rulings on the scope of the issues for those hearings were, of course made at that time, which meant filings came after those rulings. This Intervenor has endeavored firmly to bring these issues before the Board since that time.

2. Only admission of the additional contention can protect this Intervenor's interests.

The only available forum for determining whether Applicant should receive a construction permit for the ACNGS is this proceeding. This Intervenor filed for and received permission to intervene in this proceeding in order to contest the granting

of this construction permit. Only by granting the instant motion can the Board assure this Intervenor an opportunity to litigate the contention raised in the context of the ACNGS.

3. Absent the admission of this new contention, the record of this proceeding will be seriously flawed.

Both the failure to report pursuant to 10 CFR 50.55(e) and the possible deliberate failure to disclose raise very serious questions relevant to whether the Applicant should be granted a permit to build the ACNGS. Much of the faith of the NRC in Applicant's improved performance rests on the credentials and expertise of Jerome Goldberg, Tr. 22010, line 12. The central figure in the failure to report pursuant to 10 CFR 50.55(e) and the possible deliberate non-disclosure is the same Mr. Goldberg. As Vice President for Nuclear Engineering and Construction, Mr. Goldberg is obviously a central figure in the Applicant's effort at ACNGS. The fact that the events forming a basis for the new contention took place at another nuclear plant is irrelevant since the same personnel are involved as in this proceeding and the events took place while this proceeding was under way.

Aside from the people involved, Contention 59 raises a question regarding the technical competence of Applicant which is already in issue in this proceeding, TexPIRG Additional Contention 31.

Getting to the facts on this issue would strengthen the record.

4. The issue of this Intervenor's interests being represented by existing parties is moot.

This Intervenor is already recognized as representing an independent viewpoint. Factor four, is uniquely applicable to a petition for leave to intervene. In addition no other party has assumed as much of the burden in the Technical Qualification Issue as this one.



5. The issue of technical qualifications, part of Contention 59 is among issues currently before the Board as within TexPIRG Additional Contention 31. The issue in Contention 59B is of much importance to the ultimate decision which must be reached by this Board on the qualifications of the Applicant. While admission of this contention will lengthen the construction permit proceeding, the primary responsibility for delay rests with the Applicant.

As argued above, a failure to recognize and report a deficiency reportable pursuant to 10 CFR 50.55(e) demonstrates a serious lack of technical competence.

Contention 59B raises a very serious question about Applicant's willingness to conform with both the spirit and the letter of the NRC's self-policing regulatory process. The issue goes even further in suggesting Applicant might deliberately obstruct the NRC in the conduct of a full regulatory review. Issues of such importance are clearly relevant to this Board's determination on whether Applicant has the qualifications to receive a construction permit for the ACNGS.

Obviously to admit these issues would lengthen the construction permit proceedings, but this Intervenor maintains that these issues exist because the Applicant delayed in communicating the significance of the findings in the Quadrex/STNP report to the NRC. The Applicant's delay should not form a basis for denying an Intervenor's motion for a new Contention.

#### Conclusion on timeliness

While the fourth relevant factor weighs against admission, there are mitigating circumstances. The other three factors support admission of this Contention. A balancing of the four relevant factors in 10 CFR 2.714(a)(i-v) favors the admission of Contention 59 and a reopening of this proceeding to litigate it.

Respectfully,

*John F. Doherty*  
John F. Doherty  
Intervenor pro se

CERTIFICATE OF SERVICE

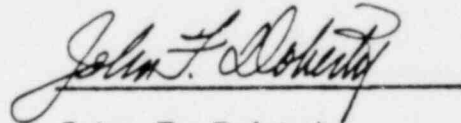
I certify that copies of, "INTERVENOR DOHERTY'S MOTION TO REOPEN THE RECORD" and "INTERVENOR DOHERTY'S CONTENTION 59" were served on the Parties below via first class U. S. Postal Service from Houston, Texas, this 15<sup>th</sup> of June, 1982.

\* \* \* \* \*

Sheldon J. Wolfe, Esq.  
Gustave A. Linenberger  
Dr. E. Leonard Cheatum  
Richard A. Black, Esq.  
Jack R. Newman, Esq.  
J. Gregory Copeland, Esq.  
Atomic Safety Licensing & Appeal Board  
The Several Intervening Parties  
Docketing & Service Branch (NRC)

Administrative Judge  
Administrative Judge  
Administrative Judge  
Staff Counsel  
Applicant Counsel  
Applicant Counsel

Respectfully,



John F. Doherty  
Intervenor

DEC 15 1981

ATTACHMENT

HY

MEMORANDUM FOR: Commissioner Peter A. Bradford  
FROM: William J. Dircks, Executive Director for Operations  
SUBJECT: CHRONOLOGY RELATED TO THE QUADREX REPORT ON SOUTH TEXAS

The enclosure provides the chronology relating to the Quadrex report. The chronology is based on interviews with cognizant individuals and correspondence. As shown in the chronology, the NRR Project Manager was aware of the study almost from the beginning, and was aware of its completion in early May. The major findings of the report were not made known to the NRC until August 19, 1981, when a regional investigator and inspector, during investigation of an unrelated matter, requested access to various audits performed by Houston Light & Power (HL&P) and their contractors. The Quadrex report was provided as part of the material requested. The regional office notified Mr. DeYoung and Mr. Case of their review of the report on August 27, 1981. On September 28, 1981, HL&P notified the ASLB of the report, and the Board received the report on October 6, 1981.

It appears that HL&P did indeed keep the NRC informed concerning the study, but the potential significance of the findings was not made known in a timely fashion. Once the potential significance was known, the staff met its obligations to keep the Board and Commission informed. It should be noted that the real significance of the Quadrex review and findings are still not known. The licensee and their new architect/engineer, the Bechtel Corporation, are reviewing the matters raised in the report with the Quadrex personnel who performed the review, and will then apply their understanding of these findings to their overall review of the South Texas Project.

The regional office intends to ensure that the findings in the Quadrex report have been appropriately considered by Bechtel and HL&P prior to resumption of construction activities at the plant site.

(Signed) William J. Dircks

William J. Dircks  
Executive Director for Operations

cc w/enclosure:  
Chairman Palladino  
Commissioner Gilinsky  
Commissioner Ahearne  
Commissioner Roberts  
SECY  
OGC  
OPE

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12/8/81

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12/ /81

## Chronological List of Events

Jan/Feb 1981 Goldberg (VP, HL&P) told Sells (NRR Project Manager) HL&P hired Quadrex to conduct "Independent Review of Design Status"

April 21, 1981 Goldberg told Sells, as a result of Quadrex, there will be some 50.55(e) reports and Quadrex report will be completed in May 81 and Sells could see it.

Late April 1981 Sells told Mr. Hall (IE Section Chief) that HL&P had "Independent Design Status Review", that report would be completed in May and to expect some 50.55(e) reports.

Week of May 12, 1981 Goldberg told Sells Quadrex was completed and HL&P was reviewing it and NRC Region IV was notified of three possible 50.55(e) items.

May 13-14, 1981 Sells told Shannon Phillips (Resident Inspector, S. Texas) that HL&P was going to make Quadrex available to him (Sells).

May 1981 On May 8, 1981, Mike Powell (Project Engineer, HL&P) notified Region IV (Mr. Crossman) of three possible 50.55(e) items. (No mention of Quadrex.)

August 19, 1981 Phillips and Herr (Investigator, Region IV) saw "Quadrex" report during investigation 81-28.

August 27 1981 Hale (Staff, Region IV) became aware of Quadrex audit.

August 27, 1981 Collins (Deputy Regional Director, Region IV) contacted Mr. Oprea (Sr. VP, HL&P) and requested unrestricted review of Quadrex. Oprea concurred and Collins told Oprea that he is sending a RIV inspector to review report. Also, Mr. Oprea offered to come to RIV to conduct an overview of the finding of Quadrex on September 8, 1981. Collins also encouraged Oprea to advise ASLB Board of the existence of the Quadrex report. Also, Collins notified Mr. DeYoung, NRC HQ, and Mr. Case, NRC NRR. Collins told them he was not taking any additional action until September 8, 1981.

August 31 - September 3, 1981 Hale reviewed Quadrex at RRI office at STP.

September 4, 1981 Hale briefed Region IV personnel (Seyfrit, Collins & staff)

- a. Quadrex was general in nature in that many potential items existed.
- b. Quadrex did not appear to identify any significant items not already known to NRC.
- c. Apparent that construction was leading engineering.



September 8, 1981 HL&P presented overview of Quadrex to NRC RIV.

September 14, 1981 (approx) E. Reis (ELD) advised applicants' attorneys that they should provide the Quadrex report to the Hearing Board.

September 28, 1981 Letter sent to ASLB Board telling them that Quadrex report existed and would be forthcoming. (Received October 6, 1981.)

October 15, 1981 Region IV received Quadrex report from D. E. Sells, Project Manager.