

The Light company

Houston Lighting & Power P.O. Box 1700 Houston, Texas 77001 (713) 228-9211

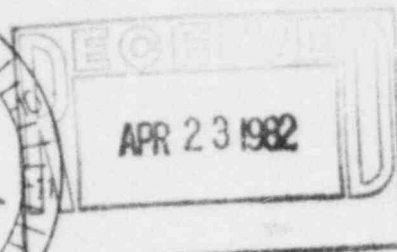
April 22, 1982

ST-HL-AE-821

SFN: B-0250

Mr. John T. Collins
Regional Administrator, Region IV
Nuclear Regulatory Commission
611 Ryan Plaza Dr., Suite 1000
Arlington, Texas 76012

Dear Mr. Collins:



South Texas Project

Units 1 & 2

Docket Nos. STN 50-498, STN 50-499

Program to Disposition Quadrex Findings

This letter is in response to Paragraph (3) in your letter of February 12, 1982 that requested a description of the corrective actions for substantive issues raised in the Quadrex report and to provide the rationale for eliminating any issues for which no corrective action is to be taken.

In late October, 1981 HL&P requested Bechtel Power Corporation (BPC) to review the Quadrex Report and prepare an assessment of the findings. An experienced group of nine individuals was formed as a Task Force to accomplish a preliminary review. They issued a report entitled "An Assessment of the Findings in the Quadrex Corporation Report" which was transmitted to your office on March 15, 1982. The purpose of the report was to provide a preliminary assessment of the findings and to place them in perspective with regard to the management and design actions that should be taken to permit timely disposition of all the findings.

Upon receipt of the Task Force Report, HL&P reviewed and commented upon the report and a copy of those comments was distributed to your office on April 7, 1982. Following these comments, the attached program description was finalized. The program, as described, will be the mechanism for a systematic review of the findings; for the determination of corrective actions, if any; and for setting forth the rationale for eliminating those findings for which no corrective action is required. If HL&P comments on the Report result in changes to the Report or a supplementary letter from the Task Force, the Task Force final assessment will be used by BPC Engineering as guidance in completing the disposition of Quadrex issues.

The basic tenet of our approach is the systematic review of the engineering status of the Project by the BPC engineering team for the transition program. In the development of the work packages the cognizant system engineers review the applicable Quadrex findings (using the Task Force Report as guidance), identify "action items" and document their reviews in the work package reports. As a complimentary action, an interdisciplinary work package is being developed that will address the generic findings of the Quadrex

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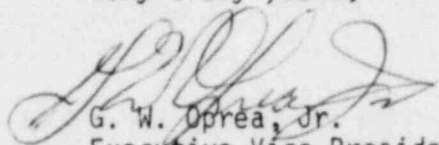
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Report and specific discipline findings not assigned to work packages, and will produce a single report containing the disposition of all Quadrex findings, including those addressed in the discipline work packages.

The BPC Action Item List, work plans and schedules will be the means for monitoring the implementation of those actions required to complete the disposition of Quadrex findings as identified in the work package final reports.

The attached description gives the details of our program. If there are revisions to this program we will promptly notify your office.

Very truly yours,



G. W. Oprea, Jr.

Executive Vice President

GWO/kmr
Attachment

Houston Lighting & Power Company

cc: G. W. Oprea, Jr.

J. H. Goldberg

J. G. Dewease

J. D. Parsons

D. G. Barker

C. G. Robertson

R. A. Frazar

J. W. Williams

J. W. Briskin

J. E. Geiger

R. L. Ulrey

S. M. Dew

J. T. Collins

(NRC)

D. E. Sells

(NRC)

W. M. Hill, Jr.

(NRC)

M. D. Schwarz

(Baker & Botts)

R. Gordon Gooch

(Baker & Botts)

J. R. Newman

(Lowenstein, Newman, Reis, & Axelrad)

STP RMS

Director, Office of Inspection & Enforcement

Nuclear Regulatory Commission

Washington, D. C. 20555

R. L. Range/G. W. Muench

Central Power & Light Company

P. O. Box 2121

Corpus Christi, Texas 78403

H. L. Peterson/G. Pokorny

City of Austin

P. O. Box 1088

Austin, Texas 78767

J. B. Poston/A. vonRosenberg

City Public Service Board

P. O. Box 1771

San Antonio, Texas 78296

Brian E. Berwick, Esquire

Assistant Attorney General

for the State of Texas

P. O. Box 12548

Capitol Station

Austin, Texas 78711

Lanny Sinkin

Citizens Concerned About Nuclear Power

5106 Casa Oro

San Antonio, Texas 78233

Jay Gutierrez, Esquire

Hearing Attorney

Office of the Executive Legal Director

U. S. Nuclear Regulatory Commission

Washington, D. C. 20555

April 22, 1982

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Charles Bechhoefer, Esquire

Chairman, Atomic Safety & Licensing Board

U. S. Nuclear Regulatory Commission

Washington, D. C. 20555

Dr. James C. Lamb, III

313 Woodhaven Road

Chapel Hill, North Carolina 27514

Mr. Ernest E. Hill

Lawrence Livermore Laboratory

University of California

P. O. Box 808, L-46

Livermore, California 94550

William S. Jordan, III

Harmon & Weiss

1725 I Street, N. W.

Suite 506

Washington, D. C. 20006

Citizens for Equitable Utilities, Inc.

c/o Ms. Peggy Buchorn

Route 1, Box 1684

Brazoria, Texas 77422

Revision Date 03-30-82

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter

Houston Lighting & Power
Company, et al.,

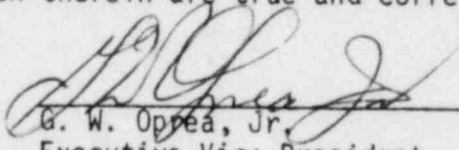
South Texas Project
Units 1 and 2

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Docket Nos. 50-498
50-499

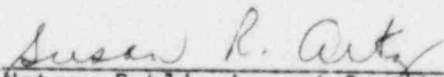
AFFIDAVIT

G. W. Oprea, Jr. being duly sworn, hereby deposes and says that he is an Executive Vice President of Houston Lighting & Power Company; that he is duly authorized to sign and file with the Nuclear Regulatory Commission the attached Program to Disposition Quadrex Findings; that he is familiar with the content thereof; and that the matters set forth therein are true and correct to the best of his knowledge and belief.


G. W. Oprea, Jr.
Executive Vice President

STATE OF TEXAS S
COUNTY OF HARRIS S

Subscribed and sworn to before me, a Notary Public in and for Harris County, Texas this 21st day of April, 1982.


Susan R. Arty
Notary Public in and for the
State of Texas

My commission expires:

6-30-82

PROGRAM TO DISPOSITION QUADREX FINDINGS

A preliminary assessment of the Quadrex Report findings has been completed by the Bechtel Task Force. The BPC project engineering staff will now use the categorizations and assessments of the Task Force as an input to its evaluation and disposition of each of the findings. The findings have been assigned to an appropriate work package for a system or structure depending upon the scope of that package and the nature of the finding. Those findings for which a work package is not appropriate (primarily some of the generic findings in the Quadrex Report) are to be addressed and dispositioned in an interdisciplinary work package (the "Quadrex Package"). In addition, the "Quadrex Package" will extract from the individual work packages the disposition of any Quadrex findings, so that the "Quadrex Package" will be an encompassing document. Both the individual work packages and the "Quadrex Package" will be presented to HL&P for Review/Comment. Next, BPC will address any HL&P comments thereto and incorporate their resolution into the final reports that it issues. The dispositions of findings will range from "No Further Action Required" to redesign or new calculations. The final reports will identify the actions needed or rationale for "no action". Once the actions are identified they will be tracked until completion by normal BPC project methods. The remaining discussion provides additional information regarding this program.

I. Work Packages

- A. The transition program that is currently underway was described in detail in the December 11, 1981 submittal to Mr. Tedesco of NRR and subsequent presentations to Region IV personnel. BPC Engineering is reviewing the existing design and assessing its adequacy with respect to application of appropriate design criteria, codes and regulatory requirements, suitability to perform required functions, and compliance with licensing and quality requirements. Status of present work is being analyzed to identify the need for corrective action for any identified deficiencies, to identify matters that require further resolution, and to determine the work remaining to be completed.

As a first step in performing the review the total plant design has been divided into discrete groupings called "work packages" which can be effectively reviewed as individual tasks. A work package is an assemblage of documents which describes the design, scope and the extent of completion status of the engineering. The work packages are evaluated to assess the status and adequacy of the design, including its interfaces with other elements of the plant design.

B. Identification of Work Packages

To determine the general status of design and to identify the breakdown of work packages, BPC Engineering has reviewed the basic STP documentation. The basic documentation included:

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SAR with all amendments

STPEGS Design Manual (Technical Reference Documents and System Design Descriptions)

STP Engineering Procedures Manual

Specification and drawing logs

Design drawings

From this review 182 work packages have been identified to date. These include 170 discrete work packages covering systems, structures and major components and 12 work packages covering interdisciplinary matters. Taken together the work packages address the entire plant scope. The listing has changed as the review has progressed and it became apparent that some of the packages should be combined or divided.

C. Review of the Work Packages

The process of review and evaluation will vary according to the nature of the work under review. In general, during the transition, BPC Engineering will evaluate the design assumptions and methods of analysis; determine whether the design satisfies the applicable criteria and addresses the necessary technical requirements; review design interfaces with vendor supplied equipment and design work of other disciplines; check for proper reference to computer output; assess the adequacy of design verification; review the design drawings; and determine if specifications and drawings are up to date.

The result of BPC's efforts for each work package will be documented in a report to HL&P, which will present:

- (1) a brief summary of the work covered by the package;
- (2) the present status of engineering, design, documentation and licensing, including any applicable Quadrex concerns;
- (3) any recommendations for remedial actions;
- (4) any unresolved items;
- (5) the status of deficiencies reported under 10CFR50.55(e) or 10CFR21;
- (6) a summary of work to go, plan for transfer of remaining work, and statement of work which may require other organizations' participation;

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- (7) a list of related work packages; and
- (8) any additional references, assumptions or special conditions.

The report for each work package will be prepared in draft form, and presented to HL&P. Comments generated in the review process will be resolved and incorporated, as appropriate, into the final report.

The extent to which the work by BPC Engineering may repeat previous B&R design effort will depend on the completeness and clarity of the B&R documentation. Where there is sufficient evidence of the completeness and adequacy of calculations, design verifications and other design activities that were performed by B&R, the previous work will be accepted. If there are instances where that is not the case, specific aspects of the work will be identified for further engineering action as part of the post-transition activities. In short, BPC Engineering will perform the design reviews necessary to satisfy BPC of the adequacy of the work so that it can be relied upon for use in further design.

II. Quadrex Work Package

An inter-disciplinary work package has been established to address Quadrex findings and is identified as EN-619 (Quadrex). The effort for this work package consists of (1) review of the discipline work packages to extract a summary of their evaluation of related Quadrex finding and (2) evaluation and disposition of generic and discipline Quadrex findings not addressed in discipline work packages.

The generic findings are being primarily addressed by EN-619, although some of them are also being addressed by the discipline work packages, if applicable. The discipline work package review are comprehensive and the large volume of material being reviewed is providing insight to the significance and pertinence of the findings, whether generic or discipline (which were based on a relatively small sampling). All findings are being addressed and dispositioned to assure that either required corrective action is taken or that there is adequate justification for determining that no further action is needed in the completion of the design and continuation of the Project.

Quadrex Section 4.9 issues, relating to In-Service Inspection are also being addressed by EN-619. A work package division of responsibility was made and the Disciplines are now reviewing the issues.

Although the Bechtel Task Force Report recommends "No Further Action" for the Category 7 findings, these and all other findings are being addressed by EN-619 and assigned to the work packages as appropriate. The work package reviews of the B&R turnover material and any other related information developed during the reviews, will provide the necessary verification of the information relied upon by the Task Force and the "more detailed evaluation" recommended in the report. If additional

effort for the Category 7 findings is found to be appropriate, this will be undertaken until all findings are closed out.

III. Procedural Aspects of Program

The procedural controls used in developing, reviewing and approving the work packages are the means for assuring that a disposition of each Quadrex finding is developed. Highlights of the transition procedural requirements associated with Quadrex findings are:

- A. The Quadrex Report is used as a reference for individual discipline review checklists.
- B. Section 2.0 of each Final Report summary will be the section that is to address the Quadrex findings.
- C. Corrective actions are to be identified and will be entered on the Action Item List, project schedule or in detailed work plans.

The following related actions by BPC have occurred:

- A. A division of responsibility document was issued to the Engineering Group Supervisors (EGS) that assign Quadrex findings to the appropriate work package.
- B. Copies of the entire Quadrex Report and the Bechtel Task Force Report have been made available to the EGS.
- C. Volumes 2 and 3 of the Quadrex Report are receiving a detailed review and cross correlation with Volume 1 as part of the EN-619 activity.

The review by HL&P Project Engineering of the discipline work packages and EN-619 will explicitly include review of the BPC assessment and recommendations on Quadrex findings. To enable the Engineering staff to perform its review, copies of the Quadrex Report and Bechtel Task Force Report have been made available.