

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

HOUSTON LIGHTING & POWER
COMPANY, ET AL.

(South Texas Project,
Units 1 and 2)

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Docket Nos. 50-498 OL
50-499 OL

March 2, 1981

Applicants' Identification of
Witnesses and Substance of Testimony

Applicants hereby identify the following individuals as the witnesses they presently intend to call in this proceeding and the substance of their testimony.

Mr. Donald D. Jordan, President and Chief Executive Officer of Houston Lighting and Power Company (HL&P), will testify concerning the general management organization of HL&P, HL&P's background and policy in dealing with the public and regulatory agencies, and the reaction of the highest management levels of HL&P to the NRC Show Cause Order.

A panel of witnesses including Mr. J. H. Goldberg, HL&P's Vice President, Nuclear Engineering and Construction, and Mr. Richard A. Frazar, HL&P's Manager, Quality Assurance, will testify concerning HL&P's current management of the

overall project activities of STP, including the quality assurance (QA) program relating thereto. Mr. Goldberg will describe HL&P's organization and staff resources for such management and how HL&P is fulfilling its management responsibilities. Mr. Frazar will similarly describe HL&P's organization and staff resources for management and implementation of its QA responsibilities relating to design and construction, and how those responsibilities are being properly discharged.

A panel of witnesses including Mr. George W. Oprea, Jr., HL&P's Executive Vice President, Mr. Joseph W. Briskin, HL&P's Project Manager-Houston Operations, Mr. Frazar, and Mr. John M. Amaral, Manager of Quality Assurance of Bechtel Power Corporation (Bechtel), will testify concerning experience of HL&P in the design and construction of STP prior to the NRC investigation (79-19) and Show Cause Order and the actions taken by HL&P as a result thereof. Mr. Oprea will provide an overview of STP's compliance history, including the evolution of HL&P's QA program, and will discuss HL&P's actions with respect to QA concerns before the Show Cause Order, and how HL&P's management reacted promptly and fully to the NRC investigation and Show Cause Order. Mr. Briskin will describe the organization and work of the task force formed by HL&P to respond to the Show Cause Order. Mr. Frazar

will discuss the changes which have been made in the administrative controls in the STP QA program as a result of the Show Cause Order. Finally, Mr. Amaral will describe Bechtel's recommendations regarding the STP QA organization and explain the basis for such recommendations.

A panel of witnesses including Dr. Knox M. Broom, Jr., Senior Vice President of the Brown & Root, Inc. (B&R) Power Group and Mr. Raymond J. Vurpillat, B&R's Manager of Power Group Quality Assurance, will testify on B&R's implementation of the STP QA program, B&R management's actions with respect to QA concerns before the NRC investigation and Show Cause Order and the B&R changes in personnel, organization and procedures in implementation of the STP QA program subsequent to the Show Cause Order. This testimony will also include a discussion of B&R's attitude toward QA/QC from a management perspective.

Three panels of witnesses will testify concerning the concrete placement program at STP and related matters. The first panel will include Mr. Joseph F. Artuso, President of Construction Engineering Consultants, Mr. Gerald R. Murphy, B&R's STP Assistant Civil-Structural Project Engineer, and Mr. Ralph R. Hernandez, HL&P's Supervising Engineer, Civil-Structural Engineering. Mr. Artuso and Mr. Murphy will describe the organization and scope of activities of

the task force established to review STP concrete placements in response to the Show Cause Order, the studies and analyses conducted by the consultants retained to review the concrete placements, and the conclusions reached as a result of the efforts of the task force and the consultants, including the conclusion that the STP concrete construction satisfies the design requirements and is comparable to or better than construction of similar facilities subject to similar requirements. Mr. Hernandez will discuss HL&P's role in the concrete task force effort.

The second panel, including Mr. Albert D. Fraley, Project General Superintendent of Brown & Root Construction, Mr. Gordon R. Purdy, B&R's Quality Engineering Manager, and Mr. Robert A. Carvel, HL&P's Project QA Supervisor, Civil-Structural, will describe recent improvements made in the STP concrete program and the status of the restart program for complex concrete placements.

The third panel will include Mr. Murphy, Mr. Gerald L. Fisher, B&R's STP Civil-Structural Project Engineer, Mr. Charles M. Singleton, B&R's STP Civil Discipline Quality Control Superintendent, Mr. Hernandez, Mr. David G. Long, HL&P's Senior Engineer, Site Engineering, and Mr. Artuso. Their testimony will describe several activities comprised

within or related to the STP concrete work, including containment shell placement, cadwelding, installation of waterproofing membranes and rebar erection. In the course of their testimony, the members of this panel will cover the contentions of the intervenors which relate to the foregoing activities. With respect to Contention 1(2) (alleged voids in the concrete wall enclosing the containment building), the testimony will describe the extensive investigation that has been performed of potential voids in the STP containment building walls, the repairs that have been performed, and the assurances that significant voids do not exist. With respect to Contentions 1(3), and 1(6) (alleged lost documentation relating to cadweld inspections and alleged cadwelds not capable of being verified), the testimony will explain the cadwelding process, the applicable requirements, and the steps followed in making, inspecting, documenting and testing cadwelds; will provide the results of cadweld testing at STP; will describe the basis for concluding that such cadwelds are adequate; and will respond to allegations concerning missing documentation. With respect to Contention 1(4) (alleged damaged membrane seals in the containment structure), the testimony will explain the purpose and use of waterproofing membranes at STP, the QA-QC program relating thereto and the assurances of the adequacy of existing waterproofing membranes.

With respect to Contention 1(5) (alleged missing reinforcing steel bars in the containment), the testimony will explain the process for designing, installing and inspecting rebar at STP, and will describe the review performed of alleged missing rebar and the basis for concluding that the as-built rebar configurations meet the structural design requirements.

Three panels of witnesses will testify concerning the placement and compaction of backfill at STP. The first panel will include Mr. Bernt Pettersson, B&R's Assistant Civil-Structural Project Engineer, Mr. Charles S. Hedges, Project Manager for Woodward-Clyde Consultants, Mr. W. S. McKay, Corporate Quality Assurance Manager for Pittsburgh Testing Laboratory (PTL), and Mr. Timothy K. Logan, formerly HL&P's Lead Engineer, Civil QA. Mr. Pettersson, Mr. Hedges and Mr. McKay will describe the development of the backfill placement and inspection program at STP (including applicable requirements), the resolution of problems identified before the Show Cause Order, the backfill verification program undertaken as a result of the Show Cause Order, and the current backfill placement program. Mr. Logan will discuss HL&P's surveillance of backfill placement at STP and HL&P's participation in the backfill verification task force.

The second panel will include Mr. Stanley D. Wilson, a private geotechnical consulting engineer, and Mr. Thomas Kirkland, Senior Principal Engineer of Shannon & Wilson, Inc., Consulting Geotechnical Engineers. They will describe the evaluation of the engineering adequacy of the Category I structural backfill at STP performed by a committee of independent geotechnical engineering experts, which was chaired by Mr. Wilson and supported by Mr. Kirkland and his staff. They will state and explain the conclusions reached by the committee, including its overall conclusion that the condition of the backfill is entirely adequate for the design requirements at STP.

The third panel will include Mr. Pettersson and Mr. Jon G. White, HL&P's STP Licensing & Technical Coordinator, who will testify on the alleged false statements in the FSAR concerning laboratory testing on backfill materials and inspection of backfill placement referred to in the Show Cause Order and will demonstrate that these statements were not "false". Mr. Pettersson will explain how the FSAR sections were drafted and reviewed, the programmatic requirements described therein, certain deviations from those programmatic requirements, and the review and evaluation of the significance of those deviations. Mr. White will explain

HL&P's procedure for preparation and review of the FSAR, including the sections at issue.

Two panels of witnesses will testify concerning the welding program at STP. The first panel will include Mr. T. J. Natarajan, B&R's Materials Engineering Manager, Mr. M. Sullivan, NUTECH's Project Manager for STP, Mr. Purdy and Mr. Logan D. Wilson, HL&P's Project Quality Assurance Supervisor, Mechanical/NDE Discipline. Mr. Natarajan and Mr. Purdy will describe the development of the welding program and procedures at STP (including applicable requirements), the welding experience early in the project and the background of the issuance of the B&P welding Stop Work Order of April 11, 1980. Mr. Natarajan and Mr. Sullivan will describe the organization and activities of the welding task force, including work done in response to the NRC Show Cause Order, as well as the overall results of the task force activities. Mr. Wilson will describe HL&P's involvement in the development and implementation of the welding program at STP.

The second panel will include Mr. M. D. Muscente, B&R's Project Welding Manager, Mr. Purdy, Mr. James L. Hawks, B&R's Engineering Project Manager, Mr. J. R. Mollada, HL&P's Lead Project Engineer, Mechanical-Nuclear, and Mr. Wilson. Mr. Muscente and Mr. Purdy will describe the welding program

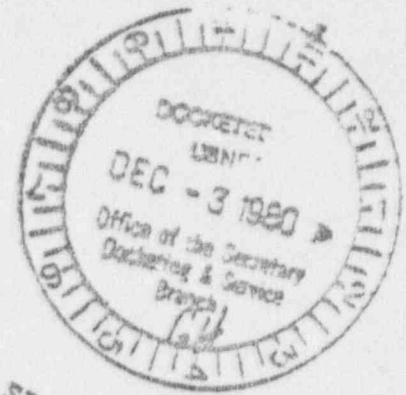
improvements since the issuance of the Stop Work Order on safety-related welding and the re-examination, repair and restart program, including schedule, manpower and results to date. Mr. Hawks will describe the program for engineering evaluation of inaccessible AWS structural welds being conducted by expert consultants, including the current status and schedule. Mr. Molleda and Mr. Wilson will discuss HL&P's role in the welding task force effort and in the revised STP welding program.

The following witnesses will testify on contentions of the intervenors, to the extent that these contentions have not been covered by the previous testimony. With respect to Contention 1(1) (surveying error in the basement of the Unit 2 Mechanical Electrical Auxiliary Building), Mr. Richard W. Peverley, B&R's Assistant Engineering Project Manager-Special Services, will describe the error and its cause, the limited significance of the error, the remedial redesign and its compliance with all applicable requirements. With respect to Contention 1(7)(a) (to the extent it alleges that QC inspectors have a role in the verification of design changes) and Contentions 1(7)(b) and (c) (alleged improper approval of design changes), Mr. Peverley will describe the procedures for approval of design changes and how they were properly implemented at STP. With respect to Contentions

1(7)(d) and (e) (alleged falsification of pour cards; alleged harassment and intimidation of QC inspectors) and Contention 1(7)(a) (to the extent it alleges that QC inspectors were thwarted in their communications with design engineers), testimony will be presented by a panel of witnesses including Mr. G. Thomas Warnick, B&R's former STP Quality Control Manager, Mr. Charles M. Singleton, and Mr. Logan D. Wilson. Messrs. Warnick and Singleton will describe the QA program at STP as administered at the working level and will explain alleged incidents of harassment and intimidation. Mr. Wilson will describe HL&P's actions in connection with alleged incidents of harassment and intimidation and falsification of pour cards. With respect to Contention 2 (alleged falsification of STP construction records), Mr. McKay and Mr. Logan will describe the incident of falsification by a FTL employee of concrete material test records as reported to the NRC by HL&P and the resulting investigations as identified in NRC Inspection Reports 77-03 and 77-05. In addition, Mr. Richard Buckalew, a B&R Systems Technician and former cadwelding foreman, and Mr. John B. Duke, a B&R Vendor Surveillance Inspector and former QC Inspector, will address the allegation regarding falsification of as-built cadweld location records for the Reactor Containment Building Unit 1 basement as investigated by the NRC in Inspection Report 78-09, and will explain why the falsification allegation is without basis.

The last panel of witnesses to be presented by HL&P will include Mr. Oprea, Mr. Goldberg, Mr. Robert I. Moles, HL&P's STP Plant Superintendent, and Mr. Frazar, who will testify concerning HL&P's planned organization for operation of the STP. Mr. Oprea will describe HL&P's policies for the conduct of operation and will present an overview of the organization and plans for operation, including a discussion of how the review of construction problems has affected such organization and plans. Mr. Moles will describe HL&P's planned organizational structure and staffing, qualifications and training of personnel, and development of procedures for operation. Mr. Goldberg will discuss the planned organizational structure for technical support for STP operations, the transition from construction to operation, mechanisms for independent safety review, training programs for support personnel and procedures for approval of plant modifications. Mr. Frazar will describe the planned QA organizational structure, the qualifications and training of personnel, the development of QA procedures, the transition from construction to operation, and current QA activities relating to operation.

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Charles Bechhoefer, Chairman
Dr. James C. Lamb
Dr. Emmeth A. Luebke

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DEC 3 1980

In the Matter of

HOUSTON LIGHTING AND
POWER COMPANY, ET AL.

(South Texas Project,
Units 1 and 2)

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

SECOND PREHEARING CONFERENCE ORDER

(December 2, 1980)

On November 19, 1980, the Licensing Board held a prehearing conference in this operating license proceeding.

The conference was announced by our Order of October 30, 1980.^{1/}
At the conference, the following matters were discussed:

A. In our Memorandum and Order of September 24, 1980, we invited the parties to attempt to agree on issues to be heard in this proceeding as a result of the Commission's Memorandum and Order of September 22, 1980, CLI-80-32, 12 NRC _____. The Applicants forwarded their initial proposals to us by

^{1/} That Order was published in the Federal Register of November 17, 1980 (45 Fed. Reg. 75820).

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letters dated October 6 and 22, 1980. The NRC Staff submitted its first proposal by letter dated October 15, 1980. Neither of the intervenors (CCANP and CEU) responded to our invitation to submit proposals for such issues. Because of differences between the Applicants' and Staff's initial proposals, and in response to their suggestions, we convened the November 19, 1980 prehearing conference to determine, inter alia, the issues to be heard concerning QA/QC matters, the subject of the Commission's Memorandum and Order.

Prior to the conference, by letter dated November 14, 1980, the Staff transmitted to the Board and parties a revised statement of issues upon which it and the Applicants had agreed. At the prehearing conference, we were informed that both intervenors had essentially agreed with the Staff's October 15 statement of issues (Tr. 209, 236, 250). For that reason, they had not submitted proposals of their own (Tr. 236). But they strongly disagreed with the revised statement (Tr. 209-12, 234-36). Additionally, they complained that they had not been brought into the recent negotiations between the Applicants and Staff which led to that revised statement (Tr. 206-10, 263-64). (They stressed that they had been consulted concerning the Staff's earlier statement, with which they agreed (Tr. 205, 236).) Particularly in light of our September 24, 1980 invitation to all parties to attempt to agree upon issues, the Board regards the

Applicants' and Staff's negotiations which excluded the intervenors as discourteous at best and as inconsistent with the spirit if not the letter of our earlier directive. When we invite parties to attempt to reach agreement on particular matters, we expect that negotiations will normally include all parties who may wish to participate. Henceforth, we will look with disfavor upon any failure by the Applicants or Staff to include the intervenors in negotiations of this sort.

In any event, the primary difference between the views of the intervenors, on the one hand, and the Applicants and Staff, on the other, was the emphasis they chose to accord to the past practices of the Applicants which had given rise to the Staff's April 30, 1980 Order to Show Cause. In CLI-80-32, the Commission had observed that those practices, in themselves, might be found serious enough to warrant denial of operating licenses (slip op., p. 18). The intervenors sought to raise as an issue that very question--i.e., whether those past practices, standing alone, would warrant denial of such operating licenses. They read paragraph 1.A of the Staff's letter of October 15, 1980 (with which they agreed) as raising that issue (Tr. 250). In contrast, although agreeing that past practices should be looked at, the Applicants and Staff claimed that issues which raise the past practices should also encompass the sufficiency of corrective actions adopted or proposed by the Applicants. Indeed, the Applicants expressed the view

that the past practices could not meaningfully be considered apart from the corrective actions (Tr. 233-34, 239-40, 267-69). However, CEU, in particular, expressed the view that the corrective actions should not even be examined during the expedited hearing on QA/QC issues but should only be considered in the event of a finding that the past practices in themselves would not warrant the denial of operating licenses (Tr. 257, 303).

As indicated at the prehearing conference, we agree with the intervenors that the Commission Memorandum and Order does contemplate the adjudication of whether past practices in themselves would be sufficient to deny the application for operating licenses. We therefore accepted an issue raising only that question. As we also indicated, however, the Atomic Energy Act and NRC regulations contemplate that operating license determinations must be based on predictive findings whether an applicant will comply with applicable requirements. Further, where past deficiencies are demonstrated, an applicant is permitted to attempt to demonstrate whether (and how) those deficiencies have been or will be remedied. See, e.g., 10 CFR §§ 50.40, 50.54(e) and (f), 50.55(e); 10 CFR § 2.201(a).^{2/}

^{2/} We note that, in providing us guidance with respect to the possible denial of operating licenses by virtue of past managerial practices, the various Commissioners in their separate statements in CLI-80-32 cited two decisions which stress the totality of a licensee's operation and the importance of matters which may mitigate the significance of adverse findings concerning prior practices. Cosmopolitan Broadcasting Co. v. FCC, 581 F.2d 917 (D.C. Cir. 1978); Atlantic Research Corp., ALAB-594, 11 NRC 841 (1980).

For these reasons, and because the Commission clearly indicated in CLI-80-32 that the expedited QA/QC hearing was part and parcel of the operating license proceeding, we also accepted as a separate issue the extent to which the Applicants may have corrected the effects of past practices (or may have taken steps to assure that past practices do not recur).

We have set forth in the attachment to this Order the issues we have accepted for consideration at the expedited QA/QC hearing.

B. After discussion with the parties, we adopted the following schedule for further discovery on, and hearing of, the QA/QC issues:

1. January 16, 1981 Last date for the Applicants or NRC Staff to file discovery requests or motions to compel (except (a) depositions of witnesses or (b) discovery based on new information in Staff's SER).
2. February 2, 1981 Last date for intervenors to file discovery requests or motions to compel (except (a) depositions of

witnesses or (b) discovery based on new information in SER). Note: with respect to discovery requests filed by intervenors subsequent to January 16, 1981, intervenors must telephone the Applicants and Staff on or before the filing date and make available discovery requests for messenger pickup.

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| 3. February 16, 1980
(approximate) | Issuance of SER on QA/QC issues. |
| 4. February 23, 1981
or 30 days after
service of discovery
request (whichever
is earlier) | Filing of responses to
discovery (except on SER). |
| 5. 15 days after
service of SER | Last date for filing discovery requests based on
new information in SER. |

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| 6. | 30 days after
service of request
based on new infor-
mation in SER. | Filing of responses to
discovery |
| 7. | March 2, 1981 | Identification of witnesses
and substance of testimony
by all parties. |
| 8. | Week of March 16,
1981 | Prehearing Conference. |
| 9. | April 1, 1981 | Last date for depositions
of witnesses. |
| 10. | April 15, 1981 | Filing of written testimony. |
| 11. | Week of May 4, 1981 | Commencement of evidentiary
hearing. |

In view of the Commission's emphasis upon an expedited hearing, we expect the parties to adhere to the foregoing schedule as closely as possible. Modifications will not be granted absent a strong showing of good cause.

C. We discussed with the parties possible locations for holding future prehearing conferences and the evidentiary

hearings. We announced that, in accord with usual NRC practice, the hearings would begin in Bay City, Texas, near the site. Limited appearance statements will be taken at that time. (We add that we will likely also desire at that time a site tour to view deficiencies and remedial action taken.) Because the hearing facilities in Bay City are apparently not ideal, we discussed holding conferences and other hearing sessions in Houston, San Antonio, or Austin. The Applicants preferred the first two cities (although not objecting to Austin for prehearing conferences); the intervenors preferred the latter two cities. We deferred any decision on this matter, but indicated that portions of the hearing might be held at differing locations.

D. We informed the intervenors of the Commission's new program of procedural assistance for intervenors. Both CCANP and CEU requested such assistance (Tr. 342). We determined that both parties would be afforded xerox copies of transcripts reproduced by NRC, and that they would share a single overnight copy of the transcript during the evidentiary hearings.

IT IS SO ORDERED.

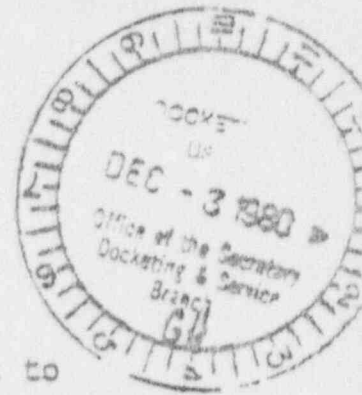
FOR THE ATOMIC SAFETY AND
LICENSING BOARD

Charles Becknoeter
Charles Becknoeter, Chairman

Dated at Bethesda, Maryland
this 2nd day of December 1980.

Attachment

QA/QC ISSUES



In addition to Contentions 1 and 2 (attachment to Memorandum and Order dated August 3, 1979), the following QA/QC issues are admitted into controversy as a result of the Commission's Memorandum and Order dated September 22, 1980 (CLI-80-32):

Issue A. If viewed without regard to the remedial steps taken by HL&P, would the record of HL&P's compliance with NRC requirements, including:

- (1) the statements in the FSAR referred to in Section V.A.(10) of the Order to Show Cause;
- (2) the instances of non-compliance set forth in the Notice of Violation and the Order to Show Cause;
- (3) the extent to which HL&P abdicated responsibility for construction of the South Texas Project (STP) to Brown & Root; and
- (4) the extent to which HL&P failed to keep itself knowledgeable about necessary construction activities at STP,

be sufficient to determine that HL&P does not have the necessary managerial competence or character to be granted licenses to operate the STP?

Issue B. Was HL&P taken sufficient remedial steps to provide assurance that it now has the managerial competence and character to operate STP safely?

Issue C. In light of (1) HL&P's planned organization for operation of the STP; and (2) the alleged deficiencies in HL&P's management of construction of the STP (including its past actions or lack of action, revised programs for monitoring the activities of its architect-engineer-constructor and those matters set out in Issues A and B), is there reasonable assurance that HL&P will have the competence and commitment to safely operate the STP?

Issue D. In light of HL&P's prior performance in the construction of the STP as reflected, in part, in the Notice of Violation and Order to Show Cause dated April 30, 1980, and HL&P's responses thereto (filings of May 23, 1980 and July 28, 1980), and actions taken pursuant thereto, do the current HL&P and Brown & Root (B&R) construction QA/QC organizations and practices meet the requirements of 10 CFR Part 50, Appendix B; and is there reasonable assurance that they will be implemented so that construction of STP can be completed in conformance with the construction permits and other applicable requirements?

Issue E. Is there reasonable assurance that the structures now in place at the STP (referred to in Sections V.A.(2) and (3) of the Order to Show Cause) are in conformity with the construction permits and the provisions of Commission regulations? If not, has HL&P taken steps to assure that such structures are repaired or replaced as necessary to meet such requirements?

Issue F. Will HL&P's Quality Assurance Program for Operation of the STP meet the requirements of 10 CFR Part 50, Appendix B?