

U. S. NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT

REGION IV

Report No. 50-498/80-27; 50-499/80-27

Docket No. 50-498; 50-499

Category A2

Licensee: Houston Lighting and Power Company  
Post Office Box 1700  
Houston, Texas 77001

Facility Name: South Texas Project, Units 1 and 2

Inspection at: South Texas Project, Matagorda, Texas

Inspection Conducted: October 1980

Inspector: *J. S. Phillips* 12/16/80  
H. S. Phillips, Resident Reactor Inspector Date

Approved: *W. A. Crossman* 12/16/80  
W. A. Crossman, Chief, Projects Section Date

Inspection Summary:

Inspection of October 1980 (Report 50-498/80-27; 50-499/80-27)

Areas Inspected: Routine, announced inspection by the Resident Reactor Inspector (RRI) included follow-up inspections relative to noncompliances, unresolved matters, and Show Cause Order items. This inspection involved one hundred fifty-nine inspector-hours by one NRC inspector.

Results: One violation was identified in one of three areas inspected (Violation - failure to follow procedures - paragraph 2.b.(3)(a) 4).

## DETAILS

### 1. Persons Contacted

#### Principal Licensee Employees

G. W. Oprea, Executive Vice President  
R. A. Frazar, Quality Assurance Manager  
R. A. Carvel, Project QA Supervisor (Civil/Structural)  
T. J. Jordan, Supervisor Quality Systems  
J. W. Soward, QC Supervisor  
L. D. Wilson, Project QA Supervisor (Mechanical)  
J. B. Anderson, Quality Systems  
P. G. Guidry, Quality Systems

#### Management Analysis Company (MAC)

W. J. Friedrich, QA Manager for Brown and Root (B&R)  
D. J. Harris, Quality Engineering Manager for B&R  
J. L. Ruud, Quality Engineer for B&R

### 2. Licensee Action on Show Cause Order, April 30, 1980

The RRI reviewed Show Cause Order, Section V.A., Items 1, 2, 3, 5, 6, 7, 8, 9 and 10 in a general manner and determined that action had been taken or was sufficiently complete to allow the RRI to recommend the restart of AWS welding on a limited basis. Items 2, 3 and 10 were reviewed by discussing those items with the RIV inspectors responsible for these items. The RIV inspectors' input on Items 2, 3 and 10 was positive relative to recommending limited work.

The RRI determined that Items 1, 5, 6 and 9, assigned to the RRI, should receive a more detailed review and/or follow-up inspection prior to recommending resumption of any work activity that was stopped. The following are the results of that review:

(Open) Show Cause Order, Item V.A.(1): Management Consultant Review. HL&P Management of Program to Control All Aspects of the South Texas Project; Revision of Organizational Responsibilities to Control the Design, Procurement and Construction Activities of the Licensee's Prime Contractor, Brown & Root, Inc. (B&R), and HL&P Overall Responsibility for QA/QC Program.

#### a. Review of Bechtel Audit

The RRI determined that the Houston Lighting & Power Company (HL&P) Audit Group was tracking the status of the Bechtel audit findings. The disposition of the audit findings appeared to be acceptable. On October 19, 1980, HL&P began an audit of HL&P and B&R organizations to verify implementation of corrective action.

- (1) The RRI reviewed the Bechtel audit which was conducted by eleven senior auditors during the period March 4, 1980, through May 21, 1980. The audit consisted of 232 separate checklists. The audit was broken down into increments as follows:

Audit A - Organization, Program, Instructions/Procedures/  
Drawings, Records, Audits

Audit B - Construction Site Design Control

Audit C - Procurement Document Control and Document  
Control

Audit D - Purchase of Materials and Identification/  
Control of Purchased Materials, Handling, Storage and  
Shipping

Audit E - Inspection, Test Control, Control of Measuring/  
Test Equipment, Inspection/Test, Operating Status

The report was issued July 24, 1980, and included 146 findings.

The RRI review placed particular emphasis on findings which the licensee took exception to, findings currently open, and findings similar to NRC Investigation 79-19 findings. All findings, which impacted procedures, were reviewed to determine if procedures were changed or in the process of being changed as recommended by the consultant. This audit was comprehensive and met the Show Cause Order requirement to review all aspects of the South Texas Project.

- (2) The RRI verified, as a result of the Bechtel review, that the HL&P and B&R QA organizations had been revamped to "overcome noted weaknesses and to ensure that an aggressive QA function is carried out by qualified professionals."
- (3) The RRI reviewed the description of the strengthened HL&P responsibilities for the QA/QC program. The procedures described increased HL&P involvement.

The Bechtel audit contained six basic recommendations as follows: procedures, documentation and analysis of defects, training and qualification, system controls, audit system, and management involvement. HL&P letter, dated September 24, 1980, committed to implementing all six recommendations.

b. Review of Licensee Response

HL&P response, dated July 28, 1980, to Show Cause Order, Item V.A.(1) generally described how the recommendations have been or will be implemented.

The RRI reviewed the Response to Show Cause Order, Item V.A.(1) and verified implementation of specific commitments as follows:

(1) Management Involvement

(a) Pages 1-1 through 1-7 of Response to Order

This part of the response described the commitment to have a consultant review the HL&P QA/QC program and the basis for the HL&P recommendation to revamp the QA organizational structure. Bechtel was retained and the audit was performed as described above.

(b) Pages 1-8 through 1-9 of Response to Order

The HL&P reorganization was described on these pages and was portrayed in Exhibits 2, 3 and 4. Current HL&P and B&R organizational charts and procedures show that these commitments have been implemented except for minor changes. One change is in the description of the HL&P's performing mini audits. HL&P will fulfill the audit function by Houston's audits of site activities. The HL&P site discipline QA group will perform continuing implementation reviews of site activities instead of mini audits. The second change pertains to the B&R Site Audit group, assigned to the Site QA Manager, which has been changed to a surveillance group. The B&R audit function will be performed by the Site Audit group which reports to the Houston Corporate Audit Section. Exhibit 4 of the Show Cause Response shows that the Houston audit section is independent of all other site organizations.

(c) Pages 1-10 through 1-13 of Response to Order

The RRI reviewed the status of the implementation of the HL&P QA Management structure as follows:

1. Three layers of off site QA supervisors have been removed and the HL&P QA Department Manager has been assigned to the site. He reports directly to the HL&P Executive Vice President who is now mainly assigned to South Texas Project duties.
2. The Discipline Quality Assurance group was established to perform a quality engineering function in each of the major disciplines. Implementation of duties described in recently revised Procedures PSQP-A1, A6 and A9 began on October 10, 1980. This group was staffed, however, two resignations in the civil discipline created two vacancies. Fourteen of sixteen positions are staffed. Two temporary employees from a

consultant filled two of the vacancies the last week in October 1980, and an additional permanent employee is due on November 10, 1980.

3. The Quality Systems group was established to prepare QA procedures and analyze B&R trends/data and audit findings. Implementation of duties described in recently revised Procedures PSQP-A1 and A8 was effective on October 10, 1980. Six of six positions are staffed.
4. The operations QA group existed under the old organizational structure and this group is responsible for preoperational, startup, and plant operations activities. They also coordinate in-service inspection. The status of procedures for this group are commensurate with the status of the project.
5. The Quality Control group was established to perform inspections to compare HL&P inspection results to B&R inspection results. The supervisory position and four inspector (temporary) positions are staffed. Two inspector positions remain vacant. This staff level should provide an adequate surveillance/inspection effort at this time. Permanent inspectors are currently being recruited to eventually replace the temporary personnel. Procedures PSQP A-10 and A-11 and the QC Instruction are in draft. Checklists are being developed. Interim Instructions are in place in the meantime.
6. The HL&P Procurement QA group was established to provide programmatic direction to the B&R auditing and surveillance functions. The group coordinates between the B&R and HL&P vendor surveillance group. Three of three positions have been staffed. No procedures have been established to date.

(d) Pages 1-13 through 1-15 of Response to Order

The RRI reviewed the status of implementation of the B&R QA Management structure as follows:

1. B&R has established a Project QA Manager function at the site. The Assistant QA Manager function was eliminated. The site QA organization was reorganized and is comprised of Quality Engineering, Quality Control, Quality Assurance Systems, Site Surveillance and Houston QA Coordination groups (located in Houston). B&R QA Manual, Section 1.0 and Quality Assurance Procedure ST-QAP-1.1 (Revision 5) were developed or revised to describe the new QA function and the

authority, duties/responsibilities. Organizational charts in ST-QAP 1.1 have been revised to reflect the current organization; however, the revision of Section 1 of the QA Manual has not been approved.

2. The B&R Quality Engineering group was established to resolve quality problems; verify corrective action; perform QE design reviews; review purchase orders; review engineering changes and nonconformance reports; and prepare QA/QC procedures and checklists. The procedures, which will describe how these duties will be performed or controlled, will be described in Quality Engineering Instructions "(e.g. NCR Processing - QE 1-15) which correspond to the applicable section of the QA Manual." These procedures have not been completely established and will be developed on an "as needed" basis.
3. The Quality Control, STP Vendor Surveillance, Quality Systems and Site Surveillance groups will continue to perform duties similar to those performed before QA/QC was restructured. The Vendor Surveillance group was a function which was placed under the Project Site QA function. The Data Analysis Section, under the Quality Systems group is new. The Site Internal Surveillance Section is a new function under the Site Surveillance group. Procedures are in place for these groups.
4. The Project QA organization appears to be staffed commensurate with the level of work activity at this time. Full staffing is targeted for January 1, 1981.

The RRI recommended to RIV management that all B&R QA procedures be established before ASME welding and complex concrete activities be restarted as proposed by HL&P letter (ST-HL-AE-555), October 2, 1980. The procedures were completed by November 1, 1980.

(2) Licensee Involvement in the Project

(a) Pages 1-16, 1-19, 1-20, 1-21 of Response to Order

Upper management has participated in site activities during the past several months to review progress and solve problems. HL&P's Executive Vice President participated in monthly meetings with Project QA on July 30 and August 27, 1980. Middle managers also participated in these meetings. On

June 20, 1980, a special QA/QC seminar was held for HL&P and B&R executive management. Annual audits by an outside independent consultant will assess the QA program as well as the attitudes and management support for the QA Program.

(3) Qualification and Training

(a) Pages 1-16, 1-17, and 1-19 of Response to Order

1. Review of All Key Personnel

Objective evidence relative to this review was not available since the commitment was to accomplish this by November 1, 1980.

2. Management Analysis Corporation (MAC) Help Until Permanent Staff Can be Recruited

The RRI reviewed eleven resumes of MAC personnel currently providing managerial, quality engineering and other services to the HL&P and B&R QA organizations to verify the quality engineering and nuclear experience.

3. NUS Corporation Review of QA Vault Area

NUS Consultant personnel have performed an evaluation of the QA records vault. This system is being revamped. This item will be reviewed in detail when Show Cause Order V.A.(8) is inspected.

4. B&R Upgrade of QA/QC Qualifications Association with MAC Personnel

The RRI has observed this association; however, it has not been possible to verify that B&R personnel qualifications have been upgraded through this contact.

The RRI has observed several instances where statements or decisions had been made that did not appear to demonstrate proper quality control attitude as follows:

Decision to continue safety-related concrete placement (noncomplex) on July 23, 1980, in the Auxiliary and Fuel Handling Buildings even though the RRI pointed out that the traceability of embeds was indeterminate. See NRC Report 50-498/80-18; 50-499/80-18, Appendix A, Item A and page 9 for details.

On September 25, 1980, the RRI interviewed thirty-one B&R QC inspectors. During the course of this inspection, at least five inspectors stated that during a meeting with QC inspectors and construction personnel, it was advocated that QC inspectors sign off inspections based on verbal assurance from a craftsman if the B&R inspector had known the craftsman to be reliable through past experience. Since this is contrary to quality assurance and inspection principles, the RRI requested that the licensee assure that this matter be reviewed and if such statements were made, the statements should be retracted and clarified.

This matter is unresolved. (50-499/80-27-01; 498/80-27-01)

On October 28, 1980, the RRI was informed that Nonconformance Report (NCR) S-C-5804 had been issued on October 27, 1980, relative to failure to perform cement user tests as required per B&R Specification 2A010CS027, Revision F, paragraph 5.3.1.b. A Corrective Action Report (CAR) dated October 27, 1980, stated, "the requirement for the subcontractor to obtain samples at the batch plant has been informally waived by Design Engineering with no revision to the specification."

The RRI raised the concern as to whether concrete placement would be stopped since ST-QAP-15.1, Revision 0, October 15, 1980, 3.0 General Requirements, paragraph 3.7 states, "Whenever practical, nonconforming items are identified with hold tags to prevent further processing until disposition by the Material Review Board."

Contrary to the above, no hold tag was applied until late evening on October 28, 1980, and as a consequence, concrete placement MEI-W047-048 (six cubic yards) was placed on the morning October 28, 1980, before the NCR was dispositioned. A temporary waiver request was approved on October 29, 1980. As a result of this failure to follow procedures, the licensee found that the nonconformance procedure was also a part of the problem in that the disposition repair or "use-as-is" described in paragraph 3.0 required that a Design Change Notice (DCN) be issued with each NCR. This impractical requirement was changed by ST-QAP 15.1, Revision 1, dated November 3, 1980.

The root cause of this problem appeared to be Design Engineering's informally waiving a specification requirement in approximately 1977. Procedures do not allow informal waiver of requirements. The licensee is attempting to determine who originally identified the problem and who issued an "informal waiver."

The licensee was informed that the failure to obtain cement user tests at the proper location and to place Hold Tags on the cement bins until the B&R NCR S-C-5804 could be dispositioned was in violation of Criterion V to Appendix B of 10 CFR 50.

5. Formal Training in Human Relations, Principles of Supervision, Technical Training for QA/QC Personnel and Crafts

The RRI is aware that training has been on going in these areas, however, objective evidence relative to the areas described above has not been reviewed to date.

c. Review of Licensee Show Cause Order Commitments

The licensee provided a list of Show Cause Order commitments in HL&P Letter (ST-HL-AE-533) dated September 18, 1980. The following items were closed:

<u>Item</u>	<u>Basis for Closing</u>
A1	Review of Bechtel Audit previously discussed.
A7	Organization was described in St-QAP-1.1, Revision 5, October 20, 1980.  B&R discipline QA engineer's authority and responsibilities were described in ST-QAP-1.1 and QE-1. Staffing is commensurate with work activity.
A11, H3 &	HL&P executive management's participation in B&R QA Management Review Board as described in paragraph a.(3) above.
A19	Annual audit by independent consultant required by STP-QA Plan, Section 8.2.
H5	Licensee letter (ST-HL-AE-533) dated September 18, 1980, tracked each Show Cause Commitment.

H6 FSAR update transmitted to NRR in licensee letter (ST-HL-AE-568) dated October 31, 1980.

H12 Licensee letter (ST-HL-AE-548).

H27 Licensee furnished RRI a copy of Public Law 96.295.

M30 B&R procedures ST-QAP-10, Rev. 0, and ST-QAP-15.1, Rev. 0, were effective October 27 and October 15, 1980, respectively.

The following items remain open pending the licensee's furnishing objective evidence sufficient to close the items: A2, A3, A4, A5, A6, A8, A10, A12, A13, A14, A15, A16, A17, A18, H1, H2, H4, H11, H13, H14, H15, H17, H31, M1, M2 and M6.

(Closed) Show Cause Order, Item V.A.(5): The Licensee Shall Define More Clearly the Stop Work Authority, Temporary or Otherwise, Including Implementation of the Stop Work Authority.

The RRI reviewed this item and determined that the licensee's and contractor's manuals authorized and required stop work; however, the lower tier procedures did not adequately describe how QC inspectors could exercise such authority. During the NRC Investigation 79-19, it was found that a letter had been issued by B&R management stating that inspectors had such authority. Some inspectors were aware of this letter and some were not, thus, some were not aware that they could stop a concrete placement.

Brown & Root Stop Work Notice Log indicates that the licensee and/or contractor have directed that work be stopped twenty-five times between January 1, 1976, and September 11, 1980. This record does demonstrate that work has been stopped when a generic problem was recognized. For example, safety-related concrete placements were stopped on June 25, 1979, when voids in the concrete were found and were resumed on September 10, 1979 when corrective actions were completed.

The RRI determined that the concern relative to this item was largely the result of inadequate procedures. Therefore, this item was closed based on the review of the procedures to assure that commitments in the response stating improvements were integrated into the procedures.

a. Review Licensee Response

<u>Response</u>	<u>Procedure</u>
Description of individuals who have stop work authority, (Page 5-1 of the response)	HL&P STP QA Plan, Revision 5, Oct. 29, 1980, Paragraph 6.3.6. HL&P QA Department, Procedure QAP-12 A, Revision 0, July 3, 1980, Paragraph 5.3.

HL&P PSQP-A7, Revision 1,  
July 25, 1980, Paragraph 6.1  
and 6.4.

B&R QA Manual, Section 15,  
July 17, 1980, Paragraph 15.12.

B&R ST-QAP-15.2, Revision 0,  
August 14, 1980, Paragraph 3.3.

B&R Concrete Procedure CCP-25,  
Rev. 2, September 27, 1980,  
Paragraph 9.3.2.

HL&P and B&R Stop Work  
(Pages 5.1, 5.2, 5.3, 5.4  
and 5.5 of the response)

HL&P QAP-12A, Paragraph 6.0  
HL&P PSQP-A7, B&R QA Manual  
Section 15, Paragraph 15.12.

B&R ST-QAP-15.2, Paragraph 4.0 -  
4.4. CCP-25, Paragraph 9.3.2

Implementation of Stop  
Work Authority

RRI described instances above  
where stop work was directed.  
New procedures were implemented  
as follows:

HL&P STP QA Plan  
October 29, 1980

HL&P QAP-12-A  
September 22, 1980

HL&P PSQP-A-7  
July 25, 1980

B&R ST-QAP-15.2  
August 15, 1980

B&R CCP-25  
July 21, 1980

b. Review of Licensee Show Cause Order Commitments

List of commitments in HL&P Letter (ST-HL-AE533) was reviewed and  
closed as follows:

<u>Item</u>	<u>Basis for Closing</u>
M29	The procedures referenced in the preceding paragraph adequately describe stop work. The commitment dates were met.

A116

ST-QAP 15.2 was issued on August 15, 1980.  
Training was given on this procedure on  
August 15, 1980.

(Open) Show Cause Order, Item V. A.(6): The Licensee Shall Develop A More Effective System To Provide For The Identification and Correction of the Root Causes of the Nonconformances Which Occur.

a. Review of Licensee Response

The licensee's response addressed two major topics: (1) Identifying and Documenting Nonconformances, and (2) Trend Analysis. The following procedures described the improved system and were reviewed to assure that commitments in the response were incorporated into procedures and that procedures were implemented.

<u>Procedure</u>	<u>Subject/Area Described</u>
HL&P STP QA Plan, Section 6.	Paragraphs 6.3.4.11 and 6.3.4.12 describe the requirement for a nonconformance and trending system.
HL&P-QAP-12, Rev. 0, Sept. 17, 1980.	Described HL&P (Houston) responsibility/procedure for control of nonconformances resulting from Houston audits, including site and off site vendors. Trending of these nonconformances was also described. The effective date of this procedure was September 22, 1980.
HL&P-PSQP-A 3, Rev. 11, June 3, 1980	This procedure describes the HL&P Site. Discrepancy Administration which parallel the B&R nonconformance reporting system.
HL&P-PSQP-A 8, Rev.0, July 14, 1980	This procedure describes the HL&P/B&R trend analysis program/interface.
B&R QA Manual, Section 15, Revised Aug. 19, 1979	Describes the requirements that the nonconformance system must meet.
B&R ST-QAP- 15.1, Rev. 1, Nov. 1, 1980	This is the implementing procedure which describes the nonconformance system. Paragraphs 3.0 and 4.0 described detailed requirements and nonconformance reporting responsibilities and processing. Effective date was November 3, 1980.

B&R ST-QAP  
15.4, Rev. 0  
July 14,  
1980.

This procedure generally described  
trend analysis and procedure. This  
procedure was effective July 15, 1980.

b. Review of Show Cause Order Commitments

The RRI reviewed commitments listed in the licensee's letter dated September 18, 1980 as follows:

<u>Item</u>	<u>Basis for Closing</u>
A9	NCR disposition feedback to inspectors described in ST-QAP-15.1, "Control of Nonconforming Items," paragraphs 4.1(7) and 4.1(17).
A117	Quality/Concrete Procedure CCP-25, Rev. 2.
A118 & A119	July 21, 1980, paragraph 9.0 and attached reference tables identify inspection requirements including hold points as well as other inspection frequencies. These results must be reported on various inspection forms.
A120	ST-QAP-15.1, paragraph 4.1(5) requires that construction foreman concur with an NCR if the discrepancy can be corrected by a standard repair plan or by rework to the original design. If other than rework, standard, or concurrence cannot be obtained the NCR is forwarded to the Materials Review Board (composed of a design engineer, quality engineer, and representative from construction and Project General Management).
A121	Formal procedures for trending by September 15, 1980, were described in the paragraph 4.1 of Procedure ST-QAP-15.4.
A122 & A123	A uniform code system was developed as required in ST-QAP-15.4, paragraph 4.2.
A124	Procedure ST-QAP-15.4, paragraph 4.1 lists the documents which must be trended.
A125	Procedure ST-QAP-15.4, paragraph 3.0 identifies the B&R organizations responsible for trending.

- A128 Procedure ST-QAP-15.4, paragraph 4.5 requires that a monthly and quarterly trend analysis report be issued to various levels of HL&P and B&R Management.
- A129 HL&P Procedure PSQP-A 8, Rev. 0, paragraph 7.0, July 14, 1980.
- H28 Clarification of nonconformance reporting procedure if construction does not concur with discrepancy. ST-QAP-15.1, paragraph 4.1(5) is clear and will not compromise the system.
- M3 Trending for failure to follow procedures was required by ST-QAP-15.4, paragraph 4.2.

The following items were not closed because objective evidence was not available or the item was not reviewed: A65, A69, A126, A127, H29, and M30.

(Open) Show Cause Order, Item V.A.(9): The Licensee Shall Develop and Implement an Improved Audit System.

The RRI previously reviewed this item during the July 1980 inspection period and results of that review were documented in NRC Reports No. 50-498/80-18; 50-499/80-18. Specific instances were identified where the audit process had not been corrected and a noncompliance was issued. HL&P correspondence (ST-HL-AE-564), dated October 23, 1980, outlined corrective action which had been taken. The licensee and contractor have improved the audit system, in that, additional auditors have been added and managers are now more actively participating in the audit process.

The RRI continued the review of this item during the current inspection and the following are the results of that review.

a. Review of Licensee Response

Pages 9-2 through 9-5 of the response describe commitments which were incorporated into HL&P and B&R procedures to develop and implement an improved audit system. The audit procedures were reviewed to assure that commitments were incorporated into procedures and were implemented. Upgraded staffs were also reviewed.

<u>(1) Procedure</u>	<u>Subject/Area Described</u>
HL&P STP QA Plan, Section 8, Rev. 5, Oct. 29, 1980	Paragraph 8.4.2 requires supplemental audits. Paragraph 8.6.2 requires that audits include review of objective evidence and observation of work.

<p>HL&amp;P QAP-5A, Rev. 6 July 3, 1980</p>	<p>This procedure described training and qualification of auditors.</p>
<p>HL&amp;P QAP-5B, Rev. 6, July 3, 1980</p>	<p>Paragraph 6.9 requires that audit deficiencies be reviewed for trends and adverse trends be reported to the HL&amp;P Executive Vice President. Paragraphs 6.1.1, 6.1.2 and 6.1.3 require annual/quarterly audit schedules.</p> <p>Paragraphs 6.2, 6.3 and 6.5 describe pre-post audits and follow up.</p>
<p>HL&amp;P PSQP-A8</p>	<p>This procedure outlines documents to be trended and requires that the site QA group identify such trends to management.</p>
<p>PSQP-A9, Rev. 0, Sept. 26, 1980.</p>	<p>HL&amp;P restructured the Site QA organization to include a QA Discipline Group (Civil, Electrical, Mechanical) who will perform "Implementation Reviews." These reviews will be one step above surveillances and one step below qualifying as an audit. The main audit function will be performed by Houston auditors; however, audits and implementation reviews will compliment each other.</p>
<p>B&amp;R ST-QAP-18.1, Rev. 0, July 14, 1980</p>	<p>Paragraph 6.6 described supplemental audits. Paragraphs 3.0 and 5.0 require that objective evidence be reviewed and that QA program effectiveness be verified.</p> <p>Paragraph 5.4 requires and describes audit scheduling.</p> <p>Paragraphs 7.1, 7.3, 7.4, and 7.5 require pre and post audit meetings and follow up to assure management involvement.</p> <p>Paragraph 9.0 requires audit deficiency trending. Trend reports must be sent to the QA Manager.</p>
<p>ST-QAP-2.4 Revision of Nov. 1, 1979</p>	<p>This describes auditor training/qualifications requirements and procedures.</p>

(2) Upgraded Audit Staffs

HL&P audit staff consisted of five full time auditors in January 1980. As of October 29, 1980, the audit staff had increased to seven full time auditors and four auditors in training. Two additional auditors were being recruited. The audit staff has received the following training:

<u>Date</u>	<u>Subject</u>
April 2-6, 1980	LWR Fuel Technology
April 21-25, 1980	General Atomic Codes and Standards
April 23, 1980	Thread Gage Know How
May 6, 1980	RT Testing Requirement
May 28, 1980	PWR Plant Design Requirements
June 19, 1980	Auditing Procedure
July 1-4, 1980	RT: Gamma Ray Sources
August 21, 1980	Stop Work Authority

B&R audit staff consisted of fifteen auditors as of May 28, 1980. As of October 1, 1980, the staff was increased to sixteen auditors for Houston plus eight auditors on site. Five of the eight site auditors were furnished by consultants and will be replaced by permanent employees as they can be recruited. The upgrading, through training, was reviewed. The staff had received training on Auditing Procedure ST-QAP-18.1 and Work Instructions WI-1 through WI-6.

b. Review of Licensee Show Cause Order Commitments

The RRI reviewed commitments listed in the licensee's letter dated September 18, 1980, as follows:

<u>Item</u>	<u>Basis for Closing</u>
A152	Organizational structure was changed and this group reports directly to the HL&P Executive Vice President. Additional auditors have been hired. Procedures QAP-5A, 5B and 5C were revised to improve the audit system.
A153	HL&P training classes were described above. The RRI considered the B&R training to be minimal until upgraded. The B&R Audit Section Manager stated that other training is being

considered. Therefore, A153 remains open until such training is planned and/or received.

- A154 & A155 Houston Annual Audit Plan dated, June 5, 1980, was reviewed. B&R correspondence No. ST-7362 contained Annual Audit Plan, dated May 1, 1980.
- A156, A160, & A163 HL&P memo, dated September 29, 1980, contained the quarterly audit schedule for the remainder of 1980.
- B&R correspondence STQ-7362 contained this quarterly audit schedule for third quarter 1980.
- A157 & A158 HL&P prepared a detailed matrix of B&R procedures/organizations to be audited.
- H16 Audit by outside independent consultant each year is required by STP-QA Plan, Section 8, paragraph 8.2.5.
- H29 Executive Management August, September 1980 Reports listed status of ADR.
- M4 & M42 B&R augmented audit staff as described above.

The following items remain open pending receipt and/or review of objective evidence: A150, A151, A153, A159, A161, A162, H31.

### 3. Licensee Action on Previous Inspection Findings

(Closed) Noncompliance (50-498/79-19-48; 50-499/79-19-48): Failure to Perform Audits on Prescribed Frequency.

HL&P had developed a matrix to assure all procedures will receive proper consideration when planning audits. A review of current schedules showed that all procedures/organizations are planned or are being audited. The RRI has no further questions on this item but will continue to monitor the frequency of audits during future routine inspections.

(Closed) Thirteen Point Response to NRC Investigation 79-19, February 7, 1980, (Item 13): HL&P QA Did Not Perform a Comprehensive Audit of the STP QA and Construction Procedures.

The RRI reviewed objective evidence relative to HL&P audits and determined that HL&P had developed a matrix of procedures to audited, revised procedures to require review of objective evidence and observation of work. (See review and discussion of Show Cause Order, Item V.A.(9) in previous paragraphs.)

(Closed) Unresolved Item (50-498/79-19-43; 50-499/79-19-43): Procedure for NCR's Lacks Processing Approvals, Feedback, and Records Retention Details.

The RRI reviewed B&R QA Procedure QAP 15.1, Rev. 0, dated October 15, 1980, and determined that it describes proper processing, approval, feedback, and filing actions. The RRI has no further questions.

(Closed) Unresolved Item (50-498/79-19-45; 50-499/79-19-45): No Procedures for Trending FREAs and Reviewing Cumulative Impact of All Changes.

The RRI reviewed B&R QA Procedure QAP 15.4, Rev. 0, dated July 14, 1980, and determined that procedures were developed to require the trending of Construction Field Change Requests, which have replaced the Field Request for Engineering Action (FREAs). Engineering Design Change Notices will also be trended. B&R had performed a review of the cumulative effect of FREAs and action was taken to resolve deficiencies.

(Closed) Unresolved Item (50-498/79-19-46; 50-499/79-19-46): Unsatisfactory Conditions Identified During In-Process Inspection/Examination Checklist Review Were Not Being Documented.

The RRI reviewed B&R QA procedure ST-QAP-15.5, Rev. 0, dated October 15, 1980, which now requires that reworkable discrepancies identified prior to scheduled inspection be documented in Field Inspection Reports. QC is responsible for assuring that such items are closed out. Any discrepancy that cannot be reworked must be documented in a nonconformance report. The RRI has no further questions.

(Closed) Unresolved Item (50-498/79-19-52; 50-499/79-19-52): Question of Whether All B&R Procedures Have Been Audited by B&R Houston. Design Control Not Audited in 1978.

The RRI met with the B&R Audit Section Manager to review a matrix showing which B&R procedures/organizations had been audited. Design control had been scheduled but was cancelled, thus this area was not audited within the required time frame. An audit matrix has been developed to assure all items are audited. The RRI has no further questions regarding this item.

(Closed) Unresolved Item (50-498/79-19-54; 50-499/79-19-54): Inadequate Response to Findings in that Bases for Closeout Lacking.

B&R performed a review of all audit files to assure all audit files contained adequate objective evidence that audit findings were corrected. The RRI has no further questions regarding this item.

#### 4. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, items of noncompliance, or deviations. One unresolved item regarding Show Cause Order, Item V.A.(1) is discussed in paragraph 2.b.(3)(a) 4.

5. Management Meetings

The following meetings were held during the subject inspection period:

<u>Attendees</u>	<u>Subject</u>	<u>Date</u>
Houston QA Manager	Show Cause Order Response V.A.(9)	Oct. 2-3, 1980
HL&P Executive Vice President, Manager QA STP	Review Status of Show Cause Items	Oct. 6, 1980
HL&P QA Systems Supervisor	Show Cause Order Response V.A.(1), (5), (6), (7)	Oct. 14, 1980
HL&P Manager QA STP; RIV Investigators	Allegations	Oct. 15 & 30, 1980
HL&P Manager QA STP; RIV Show Cause Task Force	Discuss NRC Follow Up Inspection Objectives and Results	Oct. 20 & 22, 1980
HL&P Manager QA STP; QA Discipline Supervisor (Civil)	Discuss NRC Inspection Findings Relative to Cement User Test	Oct. 31, 1980