

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

REGION III

Report Nos. 50-373/81-02; 50-374/81-02

Docket Nos. 50-373; 50-374

License Nos. CPPR-99; CPPR-100

Licensee: Commonwealth Edison Company
P. O. Box 767
Chicago, IL 60690

Facility Name: La Salle County Station, Units 1 and 2

Inspection At: Reactor Controls, Inc. (RCI), San Jose, CA
Earthquake Engineering Systems, Inc. (EES)
San Francisco, CA
La Salle Site, Marseilles, IL
Sargent and Lundy Engineers (S&L), Chicago, IL

Inspection Conducted: January 12-14, 1981 at RCI
January 15, 1981 at EES
January 19, 1981 at the site
January 22-23, 1981 at S&L

Inspector: *D. H. Danielson*
for I. T. Yin

2/12/81

Accompanying Personnel: D. H. Danielson
(January 12-15, 1980) R. H. Brickley (RIV)

Approved By: *D. H. Danielson*
D. H. Danielson, Chief
Engineering Support Section 2

2/12/81

Inspection Summary

Inspection on January 12-14, 15, 19, 22, and 23, 1981 (Reports No. 50-373/81-02;
50-374/81-02)

Areas Inspected: Followup inspection of RCI control rod drive system (CRD)
suspension system design control and QA program. The inspection involved a
total of 44 inspector-hours at licensee contractor offices and at the site.

Results: No items of noncompliance or deviation were identified.

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DETAILS

Persons Contacted

Inspection at RCI on January 12-14 ,1981

Commonwealth Edison Company (CECo)

- B. R. Shelton, Project Engineering Manager
- *E. Wendorf, Field Engineer
- *R. L. Scott, Senior Engineer

RCI

- *J. C. Millett, Vice President, Engineering
- *R. K. Crum, QA Manager
- *R. C. Weitenstein, Engineering and Construction Manager
- *G. Secchi, Engineering and Construction Manager
- *J. C. Murray, Engineering and Construction Manager
- *A. Vonstockhausen, Manager of Stress Analysis
- *W. Frohn, Project Engineer

Bechtel Power Corporation

- *J. R. Valdez, Project Quality Assurance Engineer

USNRC

- *D. H. Danielson, Section Chief, RIII
- *R. H. Brickley, Principal Inspector, RIV

*Denotes those attending the management exit interview on January 14, 1981.

Inspection at EES on January 15, 1981

CECo

- *E. Wendorf, Field Engineer
- *R. L. Scott, Senior Engineer

EES

- *R. E. Hamati, Manager of Operations
- *H. Suryoutomo, Division Manager

RCI

- *R. K. Crum, QA Manager
- *G. Secchi, Engineering and Construction Manager
- *D. Hill, Hanger Specialist

USNRC

- *D. H. Danielson, Section Chief, RIII
- *R. H. Brickley, Principal Inspector, RIV

*Denotes those attending the management exit interview on January 15, 1981.

Inspection at the Site on January 19, 1981

CECo

- *B. R. Shelton, Project Engineering Manager
- *E. Wendorf, Field Engineer
- *W. Donaldson, Station Construction
- *T. Quaka, Site QA Superintendent

RCI

- *J. Courtney, Manager

*Denotes some of those attending the management exit interview on January 19, 1981.

Inspection at S&L on January 22-23, 1981

CECo

- *R. L. Scott, Senior Engineer
- E. Wendorf, Field Engineer
- B. R. Shelton, Project Engineering Manager
- T. E. Watts, Project Engineer

S&L

- R. J. Mazza, Project Director
- *R. H. Pollock, Mechanical Project Engineer
- *J. M. Nosko, Mechanical Engineer
- G. C. Jones, Mechanical Project Engineer
- *J. L. Western, Senior Engineer
- *S. M. Kazoni, Supervising Design Engineer
- A. Sereika, Designer
- *L. P. Dolder, QA Coordinator

NSC

- B. Chatel, Liaison Engineer

*Denotes those attending the management exit interview on January 23, 1981

Licensee Action on Previous Inspection Findings

(Closed) Unresolved Item (373/80-40-01; 374/80-26-01): RIII request for a 100% re-evaluation of previously designed and installed hangers and restraints based on the recently revised program provisions. The inspector reviewed the S&L Project Instruction PI-LS-22, "S&L Divisional Interfaces to Complete the Design of 2-Inch and Smaller Seismic Process and Seismic Instrumentation Piping", Revision 3, dated September 3, 1980, and considered it to be acceptable.

(Closed) Unresolved Item (373/80-40-02; 374/80-26-02): The NSC design flowchart and inter and intra organizational interfaces had not been established. During inspection at S&L, the inspector reviewed NSC QUAD-7-80-039, "Work Instruction for NSC - Field Activities", Revision 7, dated December 17, 1980, where Exhibit 5 contained "NSC - Field ECN Flowchart", and Exhibit 6 contained "Small Bore Work Flowchart". The inspector has no further questions.

Functional or Program Areas Inspected

In conjunction with RIII Reports No. 50-373/80-48; 50-374/80-30 and the licensee's stop work order of RCI CRD system design and installation activities, the inspector performed followup inspections at RCA, EES, the site, and S&L to observe corrective actions and the progress being made towards lifting the stop work order.

1. Inspection at RCI on January 12-14, 1981

The inspector reviewed the RCI QA manual and some of the implementing procedures including:

WP-100, "Welding Procedure for Mild Steel to Mild Steel for CRDHS Fabrication and Installation", Revision 2, dated November 12, 1980.

WP-200, "Welding Procedure for Stainless Steel to Mild Steel for CRDHS Fabrication and Installation", Revision 3, dated November 11, 1980.

WP300, "Welding Procedure for Stainless Steel to Stainless Steel for CRDHS Fabrication and Installation", Revision 2, dated November 12, 1980.

WP-600, "Weld Repair Procedure for CRDHS Fabrication and Installation", Revision 1, dated November 12, 1980.

QAI-8-2, "Installation Procedure for Component Support", Revision 0, dated December 4, 1980.

QAI-10-1, "Instruction for QC Inspection", Revision 0, dated December 4, 1980.

VE-10, "Visual Examination Procedure for Structural Steel Welds - Component Supports (ASME III - NF)", Revision 1, dated April 14, 1980.

QAI-6-3, "Instruction for Document Transmittal for Approval", Revision 0, dated December 4, 1980.

QAI-3-2, "Instruction for Drawing Changes", Revision 0, dated December 4, 1980.

QAI-3-1, "Instruction for Interfaces Between Engineering and Stress Analysis", Revision 0, dated December 19, 1980.

QAI-3-11, "Instruction for the Recommended Format of the Stress Analysis Report", Revision 0, dated January 9, 1981.

RDSA-1, "Procedure for Review of Design or Stress Analysis Reports Submitted by Vendors or Subcontractors", Revision 0, dated December 4, 1980.

As a result of the review, the inspector commented that, prior to the lifting of the CECO stop work orders, the following areas should be clarified by RCI:

- a. Personnel authorities, duties, and qualification requirements.
- b. Training program implementation prior to safety related work activities.
- c. Formal training program to maintain personnel proficiencies.
- d. Design manuals to contain design bases and methods.
- e. Acceptable tolerance for suspension system installation and Quality Control inspection.
- f. Hanger inspection detailed checklists.
- g. Walkdown procedure to document existing installed CRD system conditions.
- h. Verification of effectiveness of document control systems.
- i. WPS and PQS for P-1000 Unistrut material.
- j. VT procedure to include specific QA inspection checklists and acceptance criteria.

2. Inspection at EES on January 15, 1981

The inspector reviewed the following manuals and procedures:

EES80010, "Criteria and Instruction - La Salle County Nuclear Station, Units 1 and 2 for RCI, Inc., San Jose", Revision 1, dated October 22, 1980.

EES Nuclear QA Manual, Section II, Nuclear QA Program, Revision 1, dated August 11, 1980.

After the review, the inspector stated:

- a. The personnel qualification and performance evaluation program appeared acceptable.
- b. The design basis for Unistrut structures should be based on actual tests. The RCI representative indicated that destructive tests for Unistrut P-1000 material were underway.

3. Inspection at the Site on January 19, 1981

The inspector reviewed licensee correspondence, including:

RCI QA Manager letter RKC-01, dated January 8, 1981, to CECo Director of QA, subject: Approval of LS-1, Revision for La Salle County Nuclear Station. The document transmitted was Addendum LS-1 QA Manual for LACS Specification J-2922, dated December 1, 1980.

RCI Engineering and Construction Manager letter, dated January 8, 1981, to CECo Station Construction Department, subject: Document Transmittal in Response to RCI Action Item List. The documents transmitted included 14 Nondestructive Examination Personnel Qualification Manual procedures (NDEPs), QA Instructions (QAIs), Review of Design or Stress Analysis procedures (RDSAs), QC Inspection Personnel procedures (QCIPs), and WPs.

The licensee representatives stated that they had not reviewed and accepted the RCI procedures. In discussion, the licensee stated their intention to allow partial lifting of the RCI stop work at the site for performing walkdown inspection and documentation of the existing system configuration and conditions. This activity will be carried out after procedures approval and the completion of required personnel training. The inspector was in concurrence with the licensee approach in resolving the problems.

4. Inspection at S&L on January 22-23, 1981

- a. The inspector reviewed the S&L PI-LS-15, "Processing of CECo NCRs and S&L ECNs", and had no adverse comments. The inspector also reviewed all ECNs applicable to S&L Specification J-2922, "Reactor Internals Installation and CRD System Erection, LSCS, Units 1 and 2", Revision CA, dated September 13, 1976 and considered the document control to be acceptable.

b. The inspector reviewed S&L calculation and design of the CRD hydraulic control unit support frames including:

- (1) S&L Calculation 38A, "CRD Hydraulic Unit Support Framing", dated November 13, 1980. The calculation consisted of static analysis based on peak acceleration at the floor elevation.
- (2) S&L Drawing S-1338, "Reactor Building CRDHCU Frame Support at Elevation 761' 0", Revision B.

No problem area was identified as a result of the review.

Exit Interview

The inspector met with the licensee representatives at the conclusion of each inspection. The inspector summarized the purpose and findings of the inspection.