

U.S. NUCLEAR REGULATORY COMMISSION  
REGION I

Report No. 84-15

Docket No. 50-443

License No. CPPR-135

Priority -

Category A

Licensee: Public Service Company of New Hampshire  
Post Office Box 330  
Manchester, New Hampshire 03105

Facility Name: Seabrook Station, Unit 1

Inspection At: Seabrook, New Hampshire

Inspection Conducted: October 15-19, 1984

Inspector: L. Narrow  
L. Narrow, Lead Reactor Engineer

11/27/84  
date

Approved by: J. P. Durr  
J. P. Durr, Chief, Materials and  
Processes Section, EPB, DETP

12/15/84  
date

Inspection Summary:

Inspection on October 15-19, 1984 (Report No. 50-443/84-15)

Areas Inspected: Routine, unannounced inspection by one region-based inspector for review of procedures for work performance and inspection of HVAC systems; and for final inspection of as-built conditions and preparation of as-built records. The inspection involved 31 hours of direct inspection time on site.

Results: No violations were identified.

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## DETAILS

### 1. Persons Contacted

#### New Hampshire Yankee (NHY)

- \*J. O. Azzopardi, QA Engineer
- \*F. W. Bean, QA Engineer
- R. R. Cliche, Pipe Support Program Supervisor, Construction
- \*R. A. Cummings, Jr., Member, Independent Review Team
- R. E. Guillette, QA Engineer
- \*G. A. Kann, Startup Test Department
- \*G. F. McDonald, Construction QA Manager
- \*J. L. Marchi, Startup QC Manager
- \*J. A. Philbrick, PSNH Construction
- \*J. W. Singleton, QA Special Projects Manager
- \*J. L. Weibold, QA Engineer

#### United Engineers and Constructors (UE&C)

- P. A. Giansiracusa, Lead Piping Engineer
- B. J. Huselton, Project Engineering Manager
- \*D. C. Lambert, Project Field QC Manager
- J. E. McGarrigan, Project QA Manager
- P. M. Samain, Supervisor, Mechanical Services
- K. Stidham, QC Supervisor, Mechanical Services
- J. R. Vassallo, Project Field QA Manager

#### Pullman Higgins (P-H)

- R. G. Davis, QA Manager
- M. J. Herlihy, Assistant Chief Field Engineer
- C. A. Scannell, Assistant Resident Manager

### 2. Facility Tour

The inspector observed work in progress and completed work during a tour of the reactor building and the primary auxiliary building. Work is concentrated on piping and pipe supports. Work items were examined for obvious defects or noncompliance with NRC requirements. Control and protection of materials and equipment was observed as well as general housekeeping conditions.

No violations were identified.

### 3. Organization and Procedures

The inspector discussed the recent reorganizations at the site and particularly the effect of assignment of work and QC activities, which had previously been the responsibility of separate subcontractors, to UE&C.

Although ultimately this should result in improved control and potentially have a favorable effect on quality, initially it has resulted in a requirement for new or revised work and QC procedures accompanied by some confusion concerning responsibilities. Some examples are discussed in later sections of this report. No adverse effects were identified on the quality of the work performed and it is recognized that the relatively small size of the work force and the concentration on limited areas of work has mitigated the adverse effects of the changes.

No violations were identified.

#### 4. Heating, Ventilation and Air Conditioning (HVAC) Procedures

The controlling HVAC work and QC procedure is UE&C Procedure FMP-3, Revision 0, dated 9/6/84, "Fabrication, Installation, Erection of HVAC Duct, Equipment and Supports. This procedure is presently being revised.

Review of this procedure showed that:

- Paragraph 6.5.1.6 (shop fabrication) and paragraph 6.6.3 (support installation) permitted fit-up inspection by craft as well as by craft supervision or QC personnel. The inspector questioned the use of craft without restriction since it permits inspection by the same personnel performing the work, and
- There was no requirement for final configuration inspection.

These questions were discussed at the exit meeting and the licensee agreed that they would be corrected by the revision then in progress.

This item is unresolved pending revision of the procedure and its review by an NRC inspector. (50-443/84-15-02)

#### 5. As-Built/As-Constructed Records

The inspector reviewed the procedures listed below and discussed final inspection of P-H installed piping and supports, preparation of as-built/as-constructed records and transmittal of as-constructed records to UE&C Engineering for stress reconciliation with representatives of NHY, UE&C and P-H.

##### a. UE&C Procedures

- AP No. 39, Revision 5, dated 7/12/84, "As-Constructed Engineering Document Program (As-Built)"
- TP-26, Revision 0, dated 8/1/84, "Technical Procedure for 'As-Constructed' Requirements of Piping Systems"

b. Pullman Power Products Procedures

- X-4, Revision 10, dated 4/10/84, "Final Inspection"
- X-24, Revision 00, dated 4/10/84, "Procedure for As-Building Piping"
- JS-1X-6, Revision 12, dated 4/10/84, "Installation and Inspection of ASME III Pipe Supports"

Piping isometric drawings showing all required engineering information are provided to P-H by UE&C engineering. P-H then adds information (proprietary information) as necessary for installation and welding. After completion of the installation, P-H Field Engineering performs an as-built verification and prepares marked-up drawings and approved changes showing the as-built configuration. However, the marked-up documents are retained by P-H until completion of the ASME III data sheets. P-H submits documentation confirming the as-constructed condition of the work to UE&C. However, this documentation may be a listing of drawings, vendor documents and change documents, etc. Therefore, the information submitted to UE&C may not include changes to "proprietary information" which have been made by P-H.

Separate discussions with P-H and UE&C engineering personnel indicated that this question as well as others concerning coordination with respect to as-constructed records required clarification.

A meeting was held on October 18, 1984, with representatives of NHY, UE&C and P-H to resolve these questions. The NHY representative stated that they were aware of problems with the as-built/as-constructed program and have been working on resolutions of these problems. An understanding was reached with respect to all questions except how and in what time frame UE&C engineering will be informed of changes made by P-H to "proprietary information" as required for performance of stress reconciliation.

This item is unresolved. (50-443/84-15-01)

6. Unresolved Items

Unresolved items are items about which more information is required to ascertain whether they are acceptable, violations or deviations. Unresolved items are discussed in paragraphs 4 and 5.

7. Exit Interview

The inspector met with licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on October 19, 1984. The Senior Resident Inspector, Mr. A. L. Cerne, and the Resident Inspector, Mr. H. M. Westcott, were also present. The inspector summarized the purpose and scope of the inspection and the findings. At no time during this inspection was written material provided by the inspector to the licensee.