

U. S. ATOMIC ENERGY COMMISSION
REGION I
DIVISION OF COMPLIANCE

Report of Inspection

CO Report No. 286/69-3

Licensee: CONSOLIDATED EDISON COMPANY
Indian Point No. 3
License - Not Issued

Dates of Inspection: March 18 and 24, 1969

Date of Previous Inspection: February 19, 1969

Inspected by: A. A. Varela 5/2/69
A. A. Varela, Reactor Inspector (Construction) Date

Reviewed by: N. C. Moseley 5/2/69
N. C. Moseley, Senior Reactor Inspector Date

Proprietary Information: None

SCOPE

A routine announced inspection of Consolidated Edison Company's (Con Ed), Indian Point No. 3 (IP-3) site at Buchanan, New York, was made by Messrs. A. A. Varela and D. E. Whitesell, Reactor Inspectors (Construction) on March 18, 1969, and to the Con Ed New York office on March 24, 1969. The inspection effort was directed toward the overall quality assurance program and the applicant's involvement in implementing the program as outlined in the Quality Assurance Supplement to the PSAR.

SUMMARY

The applicant has expanded his quality assurance program by creating a Quality Assurance Task Force composed of representatives from the various engineering disciplines and construction departments within Con Ed's organization. The duty of this Task Force is to expedite the development of quality assurance written procedures for the program.

The work progressing under the exemption to 10 CFR 50.10, is controlled by written procedures developed by United Engineers and Constructors (UE&C).

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The procedures listed in Appendix E of the Quality Assurance Supplement to the PSAR are scheduled to be written in final form on or about July 1, 1969.

DETAILS

A. Persons Contacted:

1. At the Site

Mr. John Verbeyst, Assistant Construction Engineer, Con Ed

Mr. Ed. Dadsen, Quality Control Engineer, Con Ed

Mr. R. Kern, Assistant Construction Engineer, Con Ed

Mr. John Dragosits, Welding Specialist, Con Ed

Mr. Glynn Waldrop, Quality Control Engineer, Westinghouse

Mr. Jim Fant, Quality Control Engineer, UE&C

2. At the New York Office

Mr. George Wasilenko, Assistant Engineer, Con Ed

Mr. John Coulch, Quality Control Staff Member, Con Ed

Mr. Ed Dadsen, Quality Control Engineer, Con Ed

Mr. C. G. Durfee, Manager, Quality Control & Reliability,
Westinghouse

Mr. C. H. McDonnell, Manager Nuclear Service Division,
U. S. Testing Company

B. Quality Assurance Organization and Function

1. Con Ed

a. Con Ed has created a Quality Assurance Task Force consisting of 10 to 14 members representing each of the engineering disciplines, procurement and construction departments within the Con Ed organization.

The purpose of this Task Force is to expedite the development of the procedures listed in Appendix E of the Quality Control Supplement to the PSAR.

- b. Continuous monitoring and auditing of the site work and records is performed by the Site Superintendent with the assistance of engineers in structural work, mechanical, welding and other specialists as required. While the site personnel are a part of the applicant's Construction Department, their function on this turnkey job is an auditing and reporting function. All matters relative to quality control are reported to the engineer directly responsible for quality assurance, Mr. E. Dadson.
- c. The inspectors were informed that the applicant would participate in the auditing and inspection of the contractors and vendors either by utilizing their own personnel or the services of their independent testing laboratory and/or consultants.
- d. The inspectors asked as to when the written procedures, specifically listed in Appendix E of the Quality Assurance Supplement, would be available for review. Mr. Wasilenko informed the inspectors that the target date for implementing QAP5 - "Procedure for Continuous Monitoring of Construction on Site" was June 1, 1969, and the balance (QAP1 thru QAP8) would be on or about July 1, 1969.
- e. In response to a question as to how a deficiency or deviation, in the work progressing under the exemption, would be handled in the interim, Mr. Dadsen showed the inspectors a form that had been developed by the QA Task Force for this purpose. The form provides for a description of the deficiency, whether or not an engineering evaluation is required, the resolution and/or disposition is noted, or description of corrective action taken and space provided for signatures and dates. The form also provides space for acceptance of corrective action taken by Construction and Engineering personnel in charge. These records will be kept in a deviation report folder for audit and review.

2. United States Testing Company (UST)

- a. Con Ed has retained the services of UST to perform independent audits, tests, surveillance and evaluations of the quality assurance programs implemented by the various contractors, vendors and suppliers furnishing materials, components and equipment.

Each independent audit and surveillance is reported in writing to the applicant and a copy of each report is available at the site for review. The inspectors reviewed a copy of two reports, (1) evaluating QC procedures by UE&C and Westinghouse, and (2) performance evaluation in connection with the concrete work for Indian Point No. 3. No deviations were noted.

- b. The inspectors reviewed the preliminary drafts of written procedures developed by UST and submitted to Con Ed for review and comment. One is titled "Guide for Quality Control Surveillance of Vendor Plants." The other was titled "Procedures for Reviewing Quality Control and Quality Assurance Audits." The first document is a guide and check list to be used in evaluating contractor's and vendor's quality control programs and capabilities. The second document is a detailed guide for auditing specific components and for materials in construction work, and covers the audit from the purchase specifications through to final acceptance.

3. Southern Nuclear Engineering (SNE)

- a. Con Ed has retained the services of SNE to act as consultants to their Nuclear Bureau. SNE's specific duties are to assist in the review and evaluation of the safety analyses, design and materials as required. They also perform independent calculations involving specific technical tasks in engineering and physics as required in the areas of design, construction and operation.

- b. The inspectors reviewed a preliminary draft of SNE's written procedures titled "Procedure for Review and Evaluation of Conceptual Design." This document briefly describes the flow of work from its receipt, distribution to the various disciplines involved, resolutions and the method and lines of communications for reporting the results of their findings.

4. Westinghouse

- a. The inspectors were shown a copy of Westinghouse's "Quality Assurance and Reliability" manual dated February 12, 1969, which was developed to establish an overall quality assurance program for the control of the fabrication of components and equipment not only by vendors and suppliers but also work performed by their own personnel. This overall quality assurance manual is supplemented by written procedures covering specific items such as pumps, valves, etc., to establish procurement specifications, material controls, establish hold points, and witness of prescribed tests, required nondestructive testing and records to be maintained. Receiving, identification, storage, handling and shipping, were also provided for. Copies of this manual has been submitted to Con Ed for review and comments.
- b. The inspectors inquired as to what procedures are being followed for the control of components which are presently ordered and being fabricated. Mr. C. G. Durfee of Westinghouse showed the inspectors two procedures. One was QCS-1 - "Manufacturing Quality Control Systems Requirements" Revision 3, dated May 18, 1967, and the other was No. 55823 - "Administrative Specification for the Procurement of Nuclear Steam Supply System Components" dated April 25, 1968. The contents of both documents were found to be essentially as outlined in Appendix C of the QA Supplement to the PSAR.

5. United Engineers and Constructors, Inc. (UE&C)

- a. The inspectors reviewed the written procedures for the control of the concrete work, rebars, cadweld splices and containment liner welding. It was noted that the procedures defined the scope of work, required inspections, tests and records. They provide for receiving inspections, storage and handling, identification of material and equipment, reporting deviations or deficiencies, etc., all within the framework of UE&C's Quality Assurance Program for Indian Point No. 3, as published in Appendix D of the QA Supplement to the PSAR. The written procedures adequately cover all phases of the work authorized by the exemption.
- b. None of the procedures indexed at III-A-10 in Appendix D were available for review, but will be audited at a future date.

C. Exit Interview

1. A formal exit interview was held with Messrs. Wasilenko, Coulch, and Dadsen of Con Ed; Mr. C. H. McDonnell, UST and Mr. C. G. Durfee, Westinghouse.
2. The inspectors told the applicant that the work authorized under the exemption to 10 CFR 50.10 was being performed in accordance with the written procedures, and the written procedures essentially complied with the PSAR.
3. The inspectors expressed a desire to review quality assurance procedures when available and were assured that copies would be available for review as soon as they were officially published.

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