

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-461/86063(DRS)

Docket No. 50-461

License No. CPPR-137

Licensee: Illinois Power Company  
500 South 27th Street  
Decatur, Illinois 62525

Facility Name: Clinton Nuclear Power Station, Unit 1

Inspection At: Clinton Site, Clinton, IL

Inspection Conducted: September 23-25, 1986

Inspector: J. H. Neisler

*J. H. Neisler*

10/9/86  
Date

Approved By: F. J. Jablonski

*F. J. Jablonski*

10/10/86  
Date

Inspection Summary

Inspection on September 23-25, 1986 (Report No. 50-461/86062(DRS))

Areas Inspected: Routine unannounced safety inspection of licensee Quality Assurance Program Administration, design change and modifications, surveillance, QA Record, and test equipment controls (35740), (35744), (35745), (35748), (35750).

Results: No violations or deviations were identified.

8610200094 861010  
PDR ADCK 05000461  
G PDR

## DETAILS

### 1. Persons Contacted

#### Principle Licensee Employees

\*W. Gerstner, Executive Vice President  
\*D. Hall, Vice President  
\*K. Patterson, Director, Material Management  
\*J. Fertic, Director, Quality Systems and Audits  
\*G. Bell, Assistant Manager, SOM  
\*R. Campbell, Manager, Quality Assurance  
\*J. Penny, Manager, Nuclear Programs Coordination  
\*J. Weaver, Director, Licensing  
\*J. Cook, Assistant Plant Manager  
\*J. Wemlinger, Supervisor, Operations Training  
\*K. Baker, Supervisor, I and E Interface  
R. Lebkuecher, Licensing  
J. Brownell, Licensing  
C. Hollon, Quality Assurance, Records  
J. Franke, Quality Assurance, Audits  
J. Taylor, Nuclear Records Supervisor  
A. Mueller, Quality Assurance  
J. Friend, Supervisor, Audits  
D. Majeres, Quality Assurance  
B. Williams, Calibration Laboratory Supervisor  
F. Oleander, Surveillance Coordinator

\*Denotes those persons attending exit interview. The inspector also contacted other site personnel in the engineering, quality assurance and document control areas.

### 2. Quality Assurance Program (QA/QC Administration)

The licensee's Quality Assurance Program defines the structures, systems, components, documents and activities to which the program applies. The program identified testing, operations, maintenance and repair, refueling, modifications, radiological and environmental monitoring, radioactive material packaging and shipment, fire protection and security as applicable activities. Applicable structures, systems and components are defined as those structures, systems and components listed in Table 3.2-1 of the Clinton FSAR.

To verify that procedures and responsibilities had been established, the inspector reviewed the licensee's quality assurance procedures, records management procedures, and corporate nuclear procedures including:

QAP 105.01A05, Preparing and Revising, Quality Assurance Procedures

QAP 105.01A10, Processing Advance Changes to Quality Assurance Procedures

QAP 105.05 Document Review

QAP 118.07 Independent Audit of Illinois Power Quality Assurance Program

In addition the inspector reviewed the 1985 overall QA Program Evaluation required by QAP 102.03. Weaknesses identified in the program were addressed and appropriate changes implemented to strengthen the program.

No violations or deviations were identified.

3. QA Program (Design Changes and Modifications)

The licensee has established procedures to control design changes and modifications. These procedures include methods for initiating changes, provisions for reviews and evaluations, responsibilities for design control and independent verifications, interfaces, approvals, drawing control, implementation of changes and modifications, and post modification and acceptance. To verify that design and modification controls exist the inspector reviewed the following:

a. Corporate Nuclear Procedures (CNP)

CNP 2.06, Configuration Management, Revision No. 1,  
August 23, 1985

CNP 4.05, Plant Modification Program, Revision No. 1,  
October 14, 1985

CNP 4.08, Plant Modification System, Revision No. 0,  
October 14, 1985

CNP 4.13, Fire Protection Program, Revision No. 0,  
August 5, 1985

CNP 1.09, Nuclear Safety Reviews, Revision No. 1,  
June 17, 1986

b. Nuclear Station Engineering Department Procedures

D.20, Processing Plant Modifications, Revision No. 5, July 15, 1986

D.21, Processing Plant Modifications, (minor) Revision No. 1,  
June 11, 1986

D.22, Engineering Interdisciplinary Review and Impact Assessment for  
Plant Modifications, Revision No. 7, September 5, 1986

D.23, Plant Modification Supplement, Revision No. 3, August 26, 1986

D.25, Test Procedure Review and Approval for Plant Modifications,  
Revision No. 2, December 10, 1985

D.26, Test Results Review and Approval for Plant Modification,  
Revision No. 4, August 8, 1985

- D.28, Cost and Feasibility Analysis and Conceptual Design, Revision No. 4, July 15, 1986
- D.29, Preliminary Design, Revision No. 4, July 15, 1986
- D.30, Final Design, Revision No. 4, July 15, 1986
- D.33, Design Interface, Revision No. 0, July 15, 1986
- D.35, Design Control Program, Revision No. 0, July 15, 1986
- D.36, Design Input, Revision No. 0, July 15, 1986
- D.37, Design Verification, Revision No. 0, July 15, 1986
- D.38, Management of Engineering Services, Revision No. 0, June 13, 1986
- E.2, Safety Evaluation (Including 10 CFR 50.59 Safety Evaluations) Revision No. 3, July 2, 1986

The inspector also reviewed Quality Assurance Instruction 305.02A13, Design Document Review for Quality Requirement Revision No. 0, October 9, 1985 and Audit Reports Q38-86-31, Q38-86-48 and Q-38-86-08, all relating to modifications and design control.

No violations or deviations were identified.

#### 4. QA Program (Surveillance Testing and Calibration Control)

The inspector reviewed the master schedule for surveillance testing and calibration. The schedule established frequencies for each activity, the plant group responsible for performing the activity, and the current status of each test.

The licensee has a full-time surveillance coordinator whose responsibility is maintaining the master surveillance test, calibration, and inspection schedule. The inspector reviewed 24 completed tests that were included in the master schedule. These tests were:

9382.01	125Vdc Battery Pilot Cell Check
9061.08	Main Stream Drain Valves Operability
9601.05C001	Closed Fire Door Inspection
9069.03	Shutdown Service Water Flow Path Verification
9944.02	Reactor Water Conductivity Recorder Channel Check
9015.04	Standby Liquid Control Tank Heater Operability
9815.01	Diesel Fuel Oil System Pressure Test
9281.05	Diesel Fuel Oil Cleanliness
9910.72C001	Exhaust Duct PRM Calibration Check
9071.18	Fire Protection Hose House Equipment Visual Inspection for Safety Related Hydrants
9080.08	Diesel Generator Operability
9053.03	ECCS Division 2 Operability
2210.01	Startup Source Receiving, Handling, Storage, Inspection

9061.07	Reactor Water Clean-up System Isolation Valve Operability
9213.01	Control Rod Drive Housing Support Visual Inspection
9431.13	Source Range Monitor C51-K600A, B, C and D Channel Calibration
9974.01	Sealed Source Contamination Leak Test
9437.14	Meteorology System Loop Calibration
9433.06	Reactor Vessel Water Level Channel Calibration
9831.01	Motor Operated Valve Overload Bypass Device Verification
9333.02	Division 2, 4.16KV Bus Undervoltage Relay Calibration
9275.03	Snubber Stroke Test
9382.07	Battery Capacity Discharge Test

No violations or deviations were identified.

5. QA Program (Records)

The licensee has established a records control program that requires the collection and maintenance of records of plant testing and operations, maintenance and modifications, safety committee meetings, procurement and receipt records, modifications and testing, design changes and drawings, nonconformances and deficiencies, personnel training and quality assurance audits, personnel qualification records and fire protection. Responsibilities for records maintenance and storage have been assigned to the nuclear records supervisor. To verify the adequacy of the records control program, the inspector reviewed:

a. Records Management Standards (RMS)

RMS Std. 1.01 Revision No. 1, January 29, 1986, Preparation and Control of Records Management System (RMS) Standards

RMS Std 1.02, Revision No. 0, October 9, 1985, Development of Required Record Lists (RRL)

RMS Std 2.01, Revision No. 0 July 31, 1986, Standard for the Collection and Review of Records

RMS Std 2.02, Revision No. 2, July 31, 1986, Standard for Records Quality

RMS Std 2.03, Revision No. 0, July 29, 1986, Disposition of Record Deficiencies

RMS Std 3.02, Revision No. 2, August 26, 1986, Records Storage, Preservation and Maintenance

RMS Std 4.01, Revision No. 0, January 13, 1986, Standard for the Receipt, Recording, Filing, Distribution and Maintenance of Controlled Documents

RMS Std 3.01, Revision No. 1, July 31, 1986, Maintenance of the Clinton Power Station Records Classification Code List (RCCL)



- b. Corporate Nuclear Procedure, CNP 1.14, Revision No. 0, July 21, 1986, Records Management

No violations or deviations were identified.

6. QA Program (Measuring and Test Equipment)

The inspector ascertained by review of procedures and calibration records, interviews with calibration laboratory personnel and cognizant quality assurance auditors that the licensee had established and implemented a program for the control of measuring and test equipment (M&TE).

Criteria and responsibilities for determining calibration frequency had been established. Each device had a unique equipment identification number (EIN). Before a piece of M&TE can be used on site it is sent to the calibration laboratory for validation and entry into the system.

Calibration records were being maintained on each device. These records included the traceability to the calibration source, as-found and as-calibrated data, standards used for calibration, limitations (if any) on use, date of last and next calibration and the person performing the calibration. Calibration standards were traceable to nationally recognized standards.

The inspector reviewed two QA department audits involving M&TE. Audit Q38-86-16 included M&TE used by the electric shop and the control and instrumentation shop. Audit Q38-86-25 included M&TE used by the radiation environmental monitoring section.

The plant has a central storage and issue point for M&TE and each shop withdraws instruments for use in the shop. Using shops have storage areas for the M&TE used by its personnel. Calibration standards are the responsibility of the calibration laboratory supervisor.

Recall of equipment and review of previous use of equipment when a device is lost or found out of calibration is covered by M&TE procedures. The inspector verified by review of records of lost and out of calibration equipment that the procedures had been implemented.

No violations or deviations were identified.

7. Exit Interview

The inspector met with licensee representatives (denoted in Paragraph 1) at the conclusion of the inspection and summarized the scope and findings of the inspection. The licensee representatives acknowledged the inspector's comments. The inspector also discussed the likely informational content of the inspection report with regard to documents or processes reviewed by the inspector during the inspection. The licensee did not identify any such documents/processes as proprietary.