

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-461/84-13(DE)

Docket No. 50-461

License No. CPPR-137

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

Facility Name: Clinton Nuclear Power Station, Unit 1

Inspection At: Clinton Site, Clinton, IL

Inspection Conducted: May 16-18, 1984

Inspector: *DH Danielson*
W. J. Key

6/12/84
Date

Approved By: *DH Danielson*
D. H. Danielson, Chief
Material and Processes Section

6/12/84
Date

Inspection Summary

Inspection on May 16-18, 1984 (Report No. 50-461/84-13(DE))

Areas Inspected: Review of the HVAC contractors implementation of the revised Quality Assurance Program since lifting of Stop Work Orders 014, 015, and 20; licensee's corrective action related to a 50.55(e) report. This inspection involved a total of 21 onsite hours by one NRC inspector.

Results: No items of noncompliance or deviations were identified.

DETAILS

1. Persons Contacted

Illinois Power Company (IP)

- *D. P. Hall, Vice President
- *W. C. Gerstner, Executive Vice President
- *G. E. Muller, Supervisor Licensing
- *E. W. Kant, Director
- *J. G. Cook, Assistant Plant Manager
- *J. R. Sprague, Q.A. Specialist
- *M. D. Hassebrock, Director QE&V
- *R. E. Campbell, Director QS&A

Baldwin Associates (BA)

- *A. E. King, Jr., Project Manager
- *L. Young, Assistant Manager, Q&TS
- *H. E. MacNeil, HVAC Manager
- *A. Shevade, Superintendent Subcontracts

The Zack Company (Zack)

- W. Mack, QA Manager
- R. Christenson, QC Manager
- G. Richards, Training Officer
- D. Lewis, Lead QC Inspector
- M. Washburn, Document Control Supervisor

*Denotes those present at the exit meeting.

2. Licensee Action on 50.55(e) Item

(Closed) 50.55(e) Item (50-461/82-05): On June 21, 1982, the licensee contacted the Region III office to report a potential deficiency with the HVAC contractor reportable pursuant to 10 CFR 50.55(e). They indicated that they were conducting further investigations.

On October 18, 1982, the licensee contacted the Region III office informing them that the deficiency was reportable pursuant to 10 CFR 50.55(e) and that further corrective actions were being taken.

The Region III staff conducted inspections of the corrective actions taken by the licensee and the HVAC contractor. The results of these inspections are documented in Region III Inspection Reports No. 50-461/83-17(DE) and 50-461/83-24(DE). Based on the results of those inspections and the continuing corrective actions being taken by the licensee and HVAC contractor, this item is considered closed.

3. Review of HVAC Activities

a. Procedure Evaluation

To better evaluate the HVAC contractor's revised QA program and procedures, checklists were developed using the revised procedures to determine whether or not HVAC installation activities were meeting design specifications and regulatory requirements.

Inspection checklists were developed from the following procedures:

- . FQCP-1, Revision 2, Field Receiving Inspection
- . FQCP-2.1, Revision 0, Indoctrination and Training Program
- . FQCP-2.2, Revision 1, Certification and Qualification of QA/QC Personnel
- . FQCP-8, Revision 3, Nonconformance
- . FQCP-8.0, Revision 1, Identification and Control of Materials and Components
- . FCP-2, Revision 2, Storage and Housekeeping

b. Field Receiving Inspection

Field receiving inspections are performed on items sent to the site from the HVAC contractor's off-site manufacturing plant.

Inspections are performed by QC inspectors to verify that all documentation is received with the materials, that it has sustained no damage during shipment and that all items are identified with a unique material control number (MCN).

Items rejected during receiving inspections are placed in a holding area until dispositions can be made. The HVAC contractor has no program to release any item for installation or fabrication in the site fabrication shop prior to being accepted.

The Lead QC Inspector/Documentation and Receiving (LQCI/DR) maintains a log of equipment received from the off-site plant.

Replacement items fabricated in the site fabrication shop are assigned a unique MCN by the contractor's engineering staff. These numbers are assigned to each piece of material by a QC inspector as it is cut.

Prior to release of equipment from the off-site manufacturing plant for shipment to the site, the equipment is inspected and documentation reviewed by the constructor's inspectors. The inspector reviewed the inspection reports listed below of equipment received on site.

Inspection Report/Load

Date

No. 291

4/4/84

Ticket No.

Item

SF3234
SF4472
SF4493

18 Ga. sheet steel, Ht. No. 421W8481
Weld Wire - Lot No. X5007L316
Channel Steel, Ht. No. OR4274
Angle Steel, Ht. No. A27706
I-Beam, Ht. No. 19232

No. 262

1/6/83

P. O. No. C560

Ruskin Balancing Dampers
S/N P-119133-1 - OVJ 101Y
S/N P-119133-2 - OVJ 102Y S/N
P-119133-3 - OVJ 97Y S/N P-119133-4 -
OVJ 100Y S/N P-119133-5 - OVJ 103Y S/N
P-119133-6 - OVJ 93Y S/N P-119133-7 -
OVJ 96Y S/N P-119133-8 - OVJ 98Y S/N
P-119133-9 - OVJ 99Y

No. 283

2/3/84

SF3198
SF5549
SF4372
SF3218
SF4466

Duct Silencers
Balancing Dampers
SS Access Doors
Fire Dampers
22 Ga. Galv. Sheet, Coil No. 753

No. 285

3/1/84

SF4479
SF4440
SF3230

SS Sheet Metal Screws
1/4" x 1" Galv. Bolts
Fire Dampers

c. Indoctrination and Training Program

The HVAC contractor's QA Supervisor has designated a training officer to implement the revised training program.

A training matrix has been developed showing each employee's training requirements. New employees receive indoctrination training to the licensee's constructor's orientation program that is documented in the employee's record as well as any on-the-job training received.

The training officer maintains a schedule of planned training classes. Lesson plans developed by the training officer are reviewed by the QA Manager for accuracy and acceptability of the training.

The LQCI/DR maintains a file of original training records. The training program requires mandatory reading of the contractor's procedures, Title 10 Code of Federal Regulations, Part 50, Appendix B, and ANSI N45.2.

The contractor's QA Manual and the design specification for fabrication and installation of the HVAC systems are also included as a part of this training.

When procedures are revised, training on the revised procedures is conducted and documented.

The following lesson plans were reviewed by the inspector:

- . Plan No. 33, Title 10, Code of Federal Regulations, Part 21.
- . Plan No. 34, Title 10, Code of Federal Regulations, 50.55(e).
- . Plan No. 23, Indoctrination of Personnel to the Requirements of FQCP-1.
- . Plan No. 31, Indoctrination of Personnel to the Requirements of FQCP-5.
- . Plan No. 43, Indoctrination of Personnel to the Requirements of FCP-23.
- . Plan No. 96, Indoctrination of Personnel to the Requirements of FCP-19.
- . Plan No. 30, Indoctrination of Personnel to the Requirements of QA Instruction (QAI) No. 26.
- . Plan No. 79, Indoctrination of Personnel to the Requirements of Departmental Instruction (DI) No. 9.
- . Plan No. 124, Indoctrination of Personnel to the Requirements and Responsibilities for HVAC Engineering Walkdown.

Periodic surveillance of indoctrination and training is performed by the Quality Assurance Engineer. The inspector reviewed the below surveillance reports:

- . Surveillance Report No. 032, 4/13/84, FCP-5 and FQCP-8.0.
- . Surveillance Report No. 019, 3/7/84, FQCP-2.1.

Training records of the below listed new employees were reviewed by the inspector.

<u>Name</u>	<u>Employment Date</u>
F. Klein	3/7/84
D. Tuttle	3/8/84
K. D. Miller	3/8/84
M. Goode	3/8/84
E. F. Hickey	3/6/84
W. J. Zehnacker	2/7/84
J. A. Crose	2/7/84
R. A. Risley	2/7/84

d. Certification and Qualification of QA/QC Personnel

The below listed QA/QC personnel certification records were reviewed by the inspector.

S. L. Golf, QAE	Level II
T. A. Frey, QAE	Level II
G. F. Richards, QAE	Level II (Training Officer)
G. W. Hight, QCI	Level II
J. E. Labarr, QCI	Level II
B. C. Rarrick, QCI	Level II

e. Nonconforming Material

Nonconforming items or components are tagged and segregated when possible until a disposition can be made. Nonconformance reports are logged and filed by the LQCI/DR. Nonconformance reports are categorized by the QAE and forwarded to the corporate office for trend analysis.

The NCRs listed below were selected from the NCR log and reviewed by the inspector.

<u>ZReport No.</u>	<u>BA Report No.</u>
R0031 Job Plan 20100 Dwg. M-14-1018-2, Rev. V Opened 10/25/83	12831 System VC, Control 825' Duct No. 43 Closed 4/30/84
R0069 Job Plan 20044 Dwg. M14C-7182-RA Opened 11/8/83	12951 System VC, Control 825' Hanger C7182
R0084 Job Plan 20131 Dwg. M14-1018-2, Rev. V Opened 11/3/83	12832 System VC, Control 825' Duct 217 & 519F

R0113
Job Plan 20103
Dwg. M14-1018-2, Rev. V
Opened 11/10/83

12950
System VC, Control 825'
Duct 55 & 56A
Closed 4/4/84

R0207
Job Plan 21074
Dwg. M14-1071-11-R-D
Opened 2/2/84

System VW, Radwaste 737'
Fire Damper, OVW 188Y

The following NCRs were generated since lifting of the stop work orders:

973
Dwg. M14-1016-1-RY
Opened 1/18/84

14876
System VT, Control 719'
Support C1091
Closed 4/4/84

998
Job Plan 20991
Dwg. M14-H-1061, RA
Opened 2/3/84
New NCR generated No. 1150

14957
System H, Screenhouse
Hanger - H1061
Closed 3/28/84 (Rejected)

1013
Job Plan 20909
Dwg. M14-1107-3, RQ
Opened 2/10/84

15026
System VH, Screenhouse
Duct 501R
Closed 3/9/84

1027
Job Plan 20980
Dwg. M14C-1089, R.A.
Opened 2/27/84

15684
System VT, Control 719'
Hanger - C1089
Closed 3/29/84

f. Identification and Control of Materials and Components

All duct, conduit, and structural steel is required to be identified by a material control number (MCN). When subdividing materials the MCN shall be transferred and verified by the QC inspectors.

Marking of materials and components is done with Nissen markers or stainless steel tags. This identification is included on the job plans and other related documentation. Since lifting of the stop work orders all hangers are identified by the design engineers with individual hanger number and drawings (IHD).

The inspector examined materials in storage at the fabrication shop and being fabricated. Dampers are stored in trailers and are identified with stainless steel tags.

In the areas examined, no items of noncompliance or deviations were identified.

4. Exit Interview.

The NRC Resident and staff inspectors met with licensee representatives (denoted in Persons Contacted paragraph) at the close of this inspection on May 18, 1984. A summary of the scope and findings of the inspection were discussed.