

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

REGION III

Report No- 50-461/80-26

Docket No. 50-461

License No. CPPR-137

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

Facility Name: Clinton Power Station, Unit 1

Inspection At: Clinton Site, Clinton, IL

Inspection Conducted: November 3-26, 1980

Inspector: H. H. Livermore

12/5/80

Approved By: R.G. Knop, Chief  
Projects Section 1

12/5/80

Inspection Summary

Inspection on November 3-26, 1980 (Report No. 50-461/80-26)

Areas Inspected: Routine inspection by the IE Regional Resident Inspector (SRI) of safety related construction activities including material laydown and storage areas, fire prevention/protection, handling and installation of Power Generation Control Consoles (PGCC), welding of recirculation system spool pieces, handling and installation of the top sections of the containment dome liner, rigging of safety related pipe, and the radiographic testing of pipe by U.S. Testing Co. This inspection involved 78 inspector hours by one NRC resident inspector.

Results: No items of noncompliance or deviation were identified.

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DETAILS

Persons Contacted

Principal Licensee Employees

\*G.M. Brashear, Site Manager, Clinton  
\*R.J. Canfield, Director-Construction  
\*A.J. Budnick, Director-QA  
\*E.E. Connon, Assistant Director-Construction  
\*L.W. Dozier, Assistant Director-Construction  
\*D.E. Korneman, Construction  
\*J.F. Hampton, Supervisor-QA  
R.W. Folck, QA Specialist  
\*J.S. Spencer, Director-Engineering  
R. Backen, QA Specialist  
R. Weber, QA Engineer  
R. Becker, QA Consultant  
J.M. King, Assistant Director-Construction  
\*L.J. Koch, Vice President  
\*J. McHood, Vice President  
\*J. Geier, Manager-General Engineering  
W.L. Calhoun-Electrical Construction  
R. Campbell-QA Consultant  
B. Spicer, QA Consultant  
W.M. Berry-Supervisor Construction  
\*F. Schwarz-Civil Engineer  
\*M.C. Hollen, Supervisor-QA  
\*W.C. Gerstner, Executive Vice President  
\*T.F. Plunkett, Plant Manager  
\*E. Panganiban, Piping Supervisor  
\*T.L. Stromberski, Construction Engineer  
R. Morgenstern, QA Engineer  
J. Karr, QA Engineer

Baldwin Associates

\*J.W. Smart, QA Manager  
\*T. Selva, Manager, Quality and Technical Services  
\*J. Linehan, QC Manager  
\*W.H. Harrington, Project Manager  
\*J.E. Findley, Project Engineer  
\*R.D. Bennett, Manager, Technical Services  
\*G. Lane, Electrical, QC  
\*T.G. Yearick, Assistant to Manager  
\*C.E. Winfrey, QC Civil  
\*W. O'Brien, QC Piping  
\*H.R. Swift, Assistant Project Engineer  
\*D.N. Smither, Assistant Project Manager  
\*L.A. Gelbert, QC Supervisor  
\*D.F. Stephens, Sr. Electrical Engineer  
\*G.B. Browne, Manager, Subcontracts  
\*T. Morrow, QC Inspector

General Electric Company

\*S.G. Hall, Quality Control  
\*J.L. Dempster, Site Manager

ANI

M.J. King

U.S. Testing Co.

\*J.A. Grimm, Site Project Supervisor

RCI

\*G.S. Guarneri, QC Supervisor

Other staff and personnel were contacted during the reporting period.

\* Denotes those attending at least one of the exit meetings.

Functional or Program Areas Inspected

1. Site Tours

At periodic intervals during the report period, tours of areas of the site were performed. These tours were intended to assess the cleanliness of the site; storage conditions of equipment and piping being used in site construction; the potential for fire or other hazards which might have a deleterious effect on personnel and equipment, and to witness construction activities in progress.

No items of noncompliance or deviation were identified.

2. Inspection of Material/Component Storage Areas

The resident inspector toured storage areas in the outside laydown yard and within the power block several times during the month. The areas were randomly selected. The inspection was in relation to the requirements of ANSI N45.2.2; material protected and stored off the ground, caps on pipe ends, and segregation of safety and non-safety material. Storage and maintenance were adequate.

No items of noncompliance or deviation were identified.

3. Recirculation System Piping

The resident inspector performed two surveillance inspections on the fit up and partially completed welding of the reactor recirculation pump discharge piping at five vertical spools and horizontal manifold pipe interfaces. The inspector observed the fit up and subsequent Authorized Nuclear Inspector (ANI) inspection. The weld areas were clean and free of foreign material. Fit up dimensions were correct.

The inspector later viewed the partially completed welds. Bead widths were within specifications and the welds appeared visually sound.

No items of noncompliance or deviation were identified.

#### 4. Rigging from Safety Related Piping

During a surveillance tour of containment, the inspector noted that a steam line pipe installation was in progress using rigging attached to an installed residual heat removal system pipe (safety related). This practice is prohibited by Baldwin Project Procedure BAP 2.11 Section 5.1.1 unless specifically approved in writing beforehand. No written approval had been granted. The inspector determined through discussions with the journeymen and foreman involved, that the incident was an isolated case and caused by inadequate indoctrination. A nonconformance report was processed and dispositioned satisfactorily on the involved applied pipe loads. The Contractor has reinstructed all containment personnel on correct rigging procedure (signature lists) and will so instruct all new personnel. Personnel in other piping areas will be rebriefed through their superintendents. The inspector has no further concerns in this area.

No items of noncompliance or deviation were identified.

#### 5. Radiographic Surveillance

The inspector performed a surveillance of two radiographic shots of a recirculation system pipe weld performed by U.S. Testing Company personnel. The radiograph was performed in containment during noon lunch hour using a 52 curies radiation source of iridium 192. The exposure source was cranked (driven) through a port in the bioshield wall at approximately the 750' level. The perimeter of the personnel restricted area was posted at the 737' entrances (?) to the dry well. The inspector determined that six workmen and a guard had been inside the restricted area during the radiation source exposure (radiograph). The workmen were at the 720' level between the bioshield and dry well walls and were unaware that radiograph exposures had taken place. U.S. Testing Company procedures specifically state that personnel not adequately monitored or aware of the radiation field shall not be allowed to enter a restricted area. Preliminary investigation indicates that the personnel involved were approximately 100' away from the exposure and were shielded by the bioshield wall. Calculations would indicate that no one was exposed to radiation approaching 2 mrem. This matter is still under investigation.

#### 6. Installation of Containment Liner

The resident inspector performed a surveillance of the rigging, lifting, and installation of the containment liner roof hip and dollar sections. The lifts were performed per procedure (MOO1) and were adequately covered by Baldwin and Chicago Bridge & Iron inspection personnel. The crane inspection record JV279 and the monthly wire rope inspection log JV280 were complete and signed off. Inspection Checklists were followed and

signed off by QC, Construction, and CB&I in chronological order. Baldwin QC completed a mechanical inspection report (JV 188) indicating that all operations were satisfactory.

No items of noncompliance or deviation were identified.

#### 7. Installation of Power Generation Control Consoles (PGCC)

The inspector performed a cleanliness surveillance on the 800' level of the Control Building prior to PGCC installation. The Contractor performed additional mopping and cleanliness activities. Termination cabinet openings were covered to prevent air flow from the floor below. Construction equipment was moved and segregated to one end of the room. Access control was established. The inspector monitored the uncrating, handling, loading, transportation, lifting, and installation (all or in part) of PGCC U706, 709, and 714. QC personnel were sufficient in number and followed the operation step by step. Lifting lugs MP test results were confirmed by signature, and the Lift Test Checklists were completed on both lift rigs. The inspector confirmed that torque wrench QC169 was within calibration (12/10/80). Procedure E005 and traveler H13-030 was followed and signed off by Construction and QC in chronological order with one exception. Construction bypassed one QC holdpoint when loading PGCC 709 on the flat-bed truck. The inspector notes that the incident seemed unintentional, an isolated case, and probably due to lack of coordination during a lunch hour. The Constructor took immediate action by reinstructing personnel involved in the importance of QC holdpoints and reassigning personnel to specific areas to insure continuous QC coverage. The inspector has no further concerns in this area.

No items of noncompliance or deviation were identified.

#### 8. Meetings/Site Visits

During this reporting period, the Resident Inspector was a member of the NRC Caseload Panel of November 12-14, 1980. The Clinton site was examined in detail in order to formulate a realistic fuel load date.

On November 18, 1980, Mr. D. Ross of NRC Nuclear Reactor Regulation visited the Clinton site. The resident inspector accompanied Mr. Ross on an extensive plant tour and attended discussions with Illinois Power Generation Engineering on the future licensing process.

#### Exit Meetings

The resident inspector attended exit meetings conducted by Region III inspectors D. Hayes, R. Gardner, R. Lee on November 7, 1980 and by C. Erb on November 21, 1980.

The resident inspector met with licensee representatives (denoted under Persons Contacted) on November 7, 17, 21 and 26, 1980. The inspector summarized the scope and findings of the inspections performed.

POOR ORIGINAL

PRELIMINARY INSPECTION FINDINGS

1. LICENSEE

III Power

2. REGIONAL OFFICE

III

3. DOCKET NUMBERS

50-461

4. LICENSE NUMBERS

5. DATE OF INSPECTION

11/10-14/80

6. Within the scope of the inspection, no items of noncompliance or deviation were found.

7. The following matters are preliminary inspection findings:

8. These preliminary inspection findings will be reviewed by NRC Supervision/Management at the Region III Office and they will correspond with you concerning any enforcement action.

W. Stevenson  
Nuclear Regulatory Commission Inspector

11/17/80

POOR ORIGINAL

OFFICE OF INSPECTION AND ENFORCEMENT

PRELIMINARY INSPECTION FINDINGS

1. LICENSEE

Illinois  
Power

2. REGIONAL OFFICE

III  
RESIDENT

3. DOCKET NUMBERS

50-461

4. LICENSE NUMBERS

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5. DATE OF INSPECTION

11/17-21/80

6. Within the scope of the inspection, no items of noncompliance or deviation were found.

7. The following matters are preliminary inspection findings:

8. These preliminary inspection findings will be reviewed by NRC Supervision/ Management at the Region III Office and they will correspond with you concerning any enforcement action.

H. H. Lawrence  
Nuclear Regulatory Commission Inspector

POOR ORIGINAL

OFFICE OF INSPECTION AND ENFORCEMENT

PRELIMINARY INSPECTION FINDINGS

1. LICENSEE

Illin Power

2. REGIONAL OFFICE

III  
RESIDENT

3. DOCKET NUMBERS

50-461

4. LICENSE NUMBERS

5. DATE OF INSPECTION

11/24-26/80

6. Within the scope of the inspection, no items of noncompliance or deviation were found.

7. The following matters are preliminary inspection findings:

8. These preliminary inspection findings will be reviewed by NRC Supervision/Management at the Region III Office and they will correspond with you concerning any enforcement action.

*W.H. Livermore*

Nuclear Regulatory Commission Inspector

11-26-80