U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-461/85-05(DRP)

Docket No. 50-461

License No. CPPR-137

Licensee: Illinois Power Company 500 South 27th Street Decatur, 11 62525

Facility Name: Clinton Power Station

Inspection At: Clinton Site, Clinton, Il.

Inspection Conducted: January 5, 1985 through February 4, 1985

Inspectors: T. P. Gwynn

W. F. Christianson

P. L. Hiland

Approved By: R. C. Knop, Chief Knop

Reactor Projects Section 1C

Inspection Summary

Inspection on January 5, through February 4, 1985 (Report No.

50-461/85-05(DRP)) Areas Inspected: Routine safety inspection by resident inspectors of construction and pre-operational testing activities including applicant action on previous inspection findings, applicant action on 10CFR50.55(e) items, applicant action on IE bulletins and circulars, employee concerns, safety evaluation report review and followup, regional requests, independent inspection of the overinspection program, plant procedures review, comparison of as-built plant to FSAR description, preoperational test program implementation verification, and site activities of interest. The inspection involved a total of 161 inspector-hours onsite by three resident inspectors, including 15 inspector-hours onsite during off-shifts. Results: Of the eleven areas inspected, no items of noncompliance or deviation were identified.

DETAILS

Personnel Contacted

Illinois Power Company (IP)

D. Antonelli, Supervisor - Plant Operations

*R. Campbell, Director - Quality Systems and Audits

*W. Connell, Manager - Quality Assurance

*J. Cook, Assistant Plant Manager

*H. Daniels, Project Manager

L. Floyd, Supervisor - Quality Systems *W. Gerstner, Executive Vice-President

D. Glenn, Director - Safeteam

T. Grebel, Supervisor - Licensing Operations

J. Greene, Manager - Startup *D. Hall, Vice President, Nuclear

M. Hassebrock, Director - Quality Engineering and Verification

D. Holesinger, NSSS Lead Startup Engineer

H. Lane, Director - Construction and Startup Engineering

J. Loomis, Construction Manager

*J. Miller, Director - Startup Programs
*J. Palchak, Supervisor - Plant Protection
J. Patten, Director - Nuclear Training

K. Patterson. Director - Site Purchasing

*J. Perry, Manager - Nuclear Program Coordination

*S. Rasor, Supervisor - Construction QA

R. Richey, Assistant Power Plant Manager - Maintenance

*F. Spangenberg, Director - Nuclear Licensing and Configuration

*J. Sprague, QA Specialist

- L. Tucker, Director Startup Testing
 D. Wier, Electrical Lead Startup Engineer
- *H. Victor, Manager Nuclear Station Engineering

*S. Zabel, Attorney

Baldwin Associates (BA)

C. Anderson, Manager - Quality Engineering

A. King, Project Manager

*L. Osborne, Manager - Quality and Technical Services
*D. Schlatka, Senior Superintendent - Construction

WIPCO/Soyland Power

*J. Greenwood, Manager - Power Supply

*Denotes those attending the monthly exit meeting.

The inspectors also contacted others of the construction project and operations staffs.

2. Applicant Action On Previous Inspection Findings

a. (Open) Noncompliance (461/84-30-01): The installation of pipe support 1D018010G violated several procedural requirements. These violations were not identified in the quality reviews performed by the applicant's contractor.

The inspector reviewed the applicant's written response dated January 9, 1985. The response did not address the first item of the notice of violation (NOV) dealing with the failure of Baldwin Associates document review group (DRG) to identify certain document deficiencies during final document review. The remainder of the response was acceptable.

The inspector contacted the applicant's representatives and discussed the need for a supplemental response to the NOV. The applicant committed to provide the additional response. That response and corrective actions taken in response to this NOV will be reviewed in a subsequent inspection.

b. (Closed) Noncompliance (461/84-04-03): Nonconformance report (NCR) 15334 was closed in process (invalidated) by quality control even though the hardware condition remained in nonconformance with the ASME Code and the design specification.

NCR 15976 was initiated to document and disposition the improper closure of NCR 15334. As part of the disposition of NCR 15976, field change request (FCR) 24730 was initiated and subsequently incorporated in hanger detail drawing MO9-1001N. Specifically, the design notes on drawing MO9-1001N, sheet 10, revision N, now delineate the acceptance of threads located in the load bearing part of a hanger shank. In addition, Baldwin Associates Procedure (BAP) 1.0, "Nonconformances", was revised to eliminate the close in process (invalidation) mechanism. All NCRs now require the review and approval of a "third party" prior to closure. This item is closed.

c. (Open) Open item (461/84-25-02): Review of Safeteam responses to employee identified concerns.

The inspector reviewed additional examples of Safeteam responses to employee identified concerns as follows:

10271
10420
10739
10989
11205
11401

The inspector identified no further concerns regarding implementation of the Safeteam program. The inspector will continue to review Safeteam actions taken on employee identified concerns. This item will remain open to track that review.

No items of noncompliance or deviation were identified.

3. Applicant Action on 10CFR 50.55(e) Items

(Closed) 50.55(e) Item (461/77-03-EE): Second actuation of safety/relief valves (SRV's) following a reactor isolation transient could involve more than the single valve assumed in the containment design basis.

This matter was associated with a generic boiling water reactor deficiency reported to the NRC by General Electric Company (GE) under the requirements of 10CFR21. The generic deficiency was resolved by GE in revision 1 of the GE Standard Safety Analysis Report II, Appendix 3B.

Review of applicant documentation related to this item indicated that the generic resolution provided by GE had been incorporated in the Clinton design by amendment 1 to the Clinton Power Station Final Safety Analysis Report, paragraph 7.3.1.1.1.4.2.6. That amendment was reviewed by the NRC Office of Nuclear Reactor Regulation. The results of their review were documented in NUREG-0853, Safety Evaluation Report related to the operation of Clinton Power Station, paragraph 7.3.3.6. These actions, with attendant design changes, provide a sufficient basis for closure of this item.

No items of noncompliance or deviation were identified.

4. Applicant Action On IE Bulletins And Circulars

a. IE Bulletin Followup

For the IE bulletin listed below, the inspector verified that the bulletin was received by management and reviewed for applicability to the facility.

(Closed) IE Bulletin (461/84-01-BB): Cracks in boiling water reactor (BWR) Mark I containment vent headers.

The Clinton Power Station (CPS) utilizes a General Electric Company Mark III containment design. This bulletin was not applicable to CPS.

b. Status Of Open IE Bulletins And Circulars Applicable To CPS

The inspector met with the applicant's representative on February 1, 1985, in order to ascertain the current status of all IE bulletins

and circulars applicable to the CPS docket. Several items were discussed specifically with regard to the applicant's schedule for completion. The inspector suggested that the applicant prioritize action on bulletins and circulars such that those actions required to be complete prior to fuel load would be complete when required. The applicant agreed that prioritization of actions on bulletins and circulars was desireable from a licensing perspective and stated that such action was already in progress.

As a result of this meeting, the applicant agreed to provide the current status of 3 bulletins and 15 circulars in a subsequent meeting, scheduled to be held in approximately two weeks. The inspector agreed to provide the inspection status of 3 bulletins in that same meeting.

In addition, the applicant agreed to provide regular status updates to the NRC senior resident inspector as Illinois Power completes actions on IE bulletins and circulars.

No items of noncompliance or deviation were identified.

5. Employee Concerns

The resident inspectors reviewed concerns expressed by site personnel from time to time throughout the inspection period. Those concerns related to regulated activities were documented by the inspectors and submitted to Region III. One concern was transmitted to the regional office during this report period.

6. Safety Evaluation Report (SER) Review and Follow-up

The following items from NUREG-0853, Safety Evaluation Report related to the operation of Clinton Power Station, and supplements to NUREG-0853 were referred by the Office of Nuclear Reactor Regulation, Division of Licensing to Region III for confirmation of applicant actions.

- a. SER and SSER2, paragraph 3.9.2 Verify piping vibration, thermal expansion, and dynamic effects testing are performed during the preoperational test program. Open item (461/85-05-01).
- b. SER, paragraph 3.9.2 Verify that a reactor vessel internals vibration measurement and inspection program is performed during the preoperational testing program. Open item (461/85-05-02).
- c. SER, paragraphs 3.9.3 and 4.6 Verify capping of the control rod drive water return line nozzle and conduct of demonstration tests. Open item (461/85-05-03).
- d. SER, paragraph 4.6 Verify modification of the scram discharge system to meet acceptance criteria. Open item (461/85-05-04).

- e. SER, paragraph 5.2.2 Verify that specified manual and automatic actuation of safety relief valves during preop testing is in compliance with Regulatory Guide 1.68. Open item (461/85-05-05).
- f. SER, paragraphs 5.4.1 and 6.3.2.3 Verify installation of automatic RCIC restart on low reactor water level. Open item (461/85-05-06).
- g. SER, paragraphs 5.4.1 and 7.3.3.3 Verify installation of a time-delay relay to logic of the RCIC system (TMI Item II.K.3.15). Open item (461/85-05-07).
- h. SER, paragraph 6.3.2.3 Verify that the high drywell pressure interlock on the HPCS injection valve is removed. Open item (461/85-05-08).
- i. SER, paragraph 7.3.2.3 Verify the installation of drywell vacuum relief valve position indicators. Open item (461/85-05-09).
- j. SER, paragraph 7.3.3.4 Verify that an ADS logic modification is installed prior to fuel load (TMI Item II.K.3.18). Open Item (461/85-05-10).
- k. SER, paragraph 8.2.3 Verify that testing of station electric distribution system voltages is in accordance with the guidelines in part 4 of BTP-PSB-1. Open item (461/85-05-11).
- SER, paragraph 8.3.1 Verify that preoperational testing and prototype testing of the division 1 and 2 diesel generators is in accordance with Regulatory Guide 1.108. Open item (461/85-05-12).
- m. SER, paragraph 8.3.1 Review division 3 diesel generator test results. Open item (461/85-05-13).
- n. SER, paragraph 8.3.1 Verify that a lockout bypass circuit is incorporated into the design for the division 1 and 2 diesel generator. Open item (461/85-05-14).
- o. SER, paragraph 8.3.2 Verify that a battery charger failure alarm is installed on the division 3 DC power system. Open item (461/85-05-15).
- p. SER, paragraph 8.3.2 Verify that the initial battery capacity discharge test is performed as part of the preoperational test program. Open item (461/85-05-16).
- q. SER, paragraph 8.4.7 Verify that covers are installed on raceways located below conduit that does not meet IEEE-384 and FSAR separation criteria. Open item (461/85-05-17).
- r. SER, paragraph 9.2.5 Verify that the sedimentation monitoring program is implemented. Open item (461/85-05-18).

- s. SER, paragraph 9.5.1 Verify that valves in the fire protection water supply system which are not electrically supervised are keylocked open with strict key control procedures and monthly verification of valve position. Open item (461/85-05-19).
- t. SER, paragraph 9.6.3.1 Verify installation of a heavy-duty turbo-charger drive gear assembly on all diesel generators. Open item (461/85-05-20).
- u. SER 9.6.3.1 Verify the applicant's implementation of no-load and light load DG operating procedures. Open item (461/85-05-21).
- v. SER, paragraph 9.6.3.2 Verify that tornado-missile protection is provided for diesel oil storage tank fill lines. Open item (461/85-05-22).
- w. SER, paragraph 9.6.5 Verify that dessicant type air dryers are installed upstream of diesel generator air start air receivers prior to fuel load. Open item (461/85-05-23).
- x. SER, paragraph 9.6.6 Verify that the manufacturer's recommended fix for prelubrication of diesel engines is implemented. If not implemented prior to fuel load, verify that the applicant has implemented manual prelubrication. Open item (461/85-05-24).
- y. SER, paragraph 10.6 Verify the installation of a flood-proof door between the turbine building and the auxiliary building, and flood-proofing of all penetrations up to the 731 ft. elevation. Open item (461/85-05-25).
- z. SER, paragraph 11.3.1 Verify inplace testing of air filtration and adsorption units in gaseous radwaste systems as an initial acceptance test. Open item (461/85-05-26).
- aa. SER, paragraph 11.5.1 Verify installation of noble gas effluent monitors. Open item (461/85-05-27).
- bb. SER, paragraph 12.3.1 Verify that procedures and a scheduled maintenance program are implemented to monitor leakage and reduce detected leakage outside containment (TMI Item III.D.1). Open item (461/85-05-28).
- cc. SER, paragraph 12.3.4.1 Verify installation of four high-range gamma monitors (TMI Item II.F.1.3). Open item (461/85-05-29).
- dd. SER, paragraph 13.1.2.1 Verify that a corporate management directive is prepared emphasizing management responsibility of the shift supervisor, and the establishment of a training program for shift supervisors to meet the guidelines of NUREG-0578 (TMI Item I.C.3). Open item (461/85-05-30).

- ee. SER, paragraph 13.1.2.2 Review the operating organization when it can be observed functioning in more areas (6 to 9 months before fuel load). Open item (461/85-05-31).
- ff. SER, paragraph 13.5 Verify that procedures to ensure independent verification of system lineups are complete before fuel loading (TMI Item II.K.1.10). Open item (461/85-05-32).
- gg. SER, paragraph 15.2.1 Verify that the automatic recirculation pump trip is installed and ATWS operating procedures are in place. Open item (461/85-05-33).
- hh. SSER2, paragraph 3.5.1.1 Verify that reinforcing plates are welded to 14 fan housings. Open item (461/85-05-34).
- ii. SSER2, paragraph 6.2.2 Verify that the applicant performed leakage testing of the secondary containment volume as part of the preoperation test program. Open item (461/85-05-35).
- jj. SSER1, paragraph 6.3 Inspect records and procedures on site to confirm that the requirements of NUREG-0737, Item II.K.1.5. have been satisfied prior to license issuance. Open item (461/85-05-36).
- kk. SSER1, paragraph 9.5.6 Verify that plant administrative controls and procedures related to the fire protection program are in place prior to fuel load. Open item (461/85-05-37).
- 11. SSER1, paragraph 12.3.2 Verify that additional shielding has been provided around the post accident sampling panel and that the exhaust from the Main Steam Isolation Valve Leakage Control System has been routed into the Standby Gas Treatment System. Open item (461/85-05-38).
- mm. SSER2, paragraph 6.2.4.1 Verify that debris screens are installed in both the high and low volume purge systems prior to fuel load. Open item (461/85-05-39).
- nn. SSER2, paragraph 7.3.3.7 Verify that modifications have been made to certain balance of plant valves, prior to fuel load, to prevent them from reverting to their normal operating position upon reset of a LOCA isolation signal. Open item (461/85-05-40).
- oo. SSER2, paragraph 7.4.3.2 Verify installation of loss of voltage alarms prior to fuel load. Open item (461/85-05-41).
- pp. SSER2, paragraph 7.5.3.5 Verify that modifications to satisfy the applicant's commitments related to TMI Item II.K.3.27 have been made. Open item (461/85-05-42).
- qq. SSER2, paragraph 9.3.5.2 Verify that commitments listed in this section of the SSER are incorporated into the Clinton core damage procedure prior to fuel load (TMI Item II.B.3). Open item (461/85-05-43).

- rr. SSER3, paragraph 4.4.1 and SSER1, paragraph 4.4.1 Verify that loose parts monitoring systems are operational prior to fuel load. Open item (461/85-05-44).
- ss. SSER3, paragraph 9.5.1.4 Verify redundant fire alarm circuits for all circuits running between local supervisory fire alarm control panels and the main fire alarm indicator in buildings that contain safety related equipment are installed. Open item (461/85-05-45).
- tt. SSER3, paragraph 9.5.5 Verify that procedures have been developed for repair of certain division 2 RHR valve cables to achieve cold shutdown and that any materials needed for these repairs are stored on site. Open item (461/85-05-46).

These items are open and will be reviewed in subsequent inspections.

No items of noncompliance or deviation were identified.

7. Inspection of Regional Requests

a. Review Of Certification And Training Records

The inspector reviewed the certification and training records of a former Baldwin Associates (BA) quality assurance (QA) employee at the request of Region III. The inspection consisted of a review of BA QA employment, training, and certification records, and discussion with cognizant supervisory personnel. The qualifications of the individual were reviewed with respect to the requirements and recommendations of ANSI N45.2.6-1978 and the employee's BA job description. This individual had been terminated by BA for falsification of employment records (education) in August 1984.

The inspection revealed that the individual had been hired by BA in June 1983; that BA had certified the individual prior to completion of background verification checks; that BA had been unable to verify education the individual claimed to have achieved through graduation from two institutions of higher education; that there was no documentary evidence provided to confirm the individual had attained a high school education or equivalent prior to August, 1984; and that the individual did not have sufficient previous quality experience, by itself, to satisfy the requirements of the ANSI standard or the BA job description, even if a high school education had been attained prior to certification.

The inspector concluded that, without additional documentary evidence to support the individual's educational background, the individual was not qualified to perform the duties and responsibilities reflected by the job description.

In light of the above findings, the inspector requested that BA provide evidence of the corrective action taken at the time the individual was terminated. In particular, the inspector was concerned that the individual had worked onsite for over a year

before the educational background problem was identified. In addition, the inspector was interested in the quality of work performed by the individual during the time the individual was improperly certified. BA was unable to provide the requested evidence.

As a result of the above request, BA QA wrote corrective action request (CAR) 221 dated January 24, 1985, to provide for review of the individual's previous work. That CAR was amended by BA letter JLT-85-1689 dated January 28, 1985, to address corrective action proposed to assure that minimum qualification requirements are met prior to certification. This matter is <u>unresolved</u> pending review of corrective action commitments and results under CAR 221 (461/85-05-47).

b. Review Of Plant Housekeeping And Control Room Behavior

Region III requested an evaluation of the applicant's performance in the area of housekeeping and control room behavior. The inspector performed the requested evaluation, including a review of recent NRC inspection findings, a review of applicant procedures, discussion with on shift operating personnel, and the performance of augmented plant tours concentrating in the areas of housekeeping and control room behavior.

The results of this evaluation were as follows:

The control room and most other plant areas have not been turned over from construction to operations. As such, this evaluation was based on limited observation of the applicant's control room activities.

Construction housekeeping practices at Clinton have been commensurate with those applied at other Region III plants. The applicant and his contractor have extensive quality assurance programs and procedures governing housekeeping and cleanliness control. In most cases, those programs and procedures have been effective in maintaining an acceptable level of general housekeeping. Some specific problem areas have been identified from time to time through the construction of the facility, and housekeeping has been the subject of discussion at recent management meetings onsite.

The Clinton control room was being maintained at a high state of cleanliness commensurate with maintaining the quality of sensitive plant equipment installed therein. In addition to the control room, other plant areas under the custody of the operating organization were generally at a higher level of cleanliness than those areas under construction control.

Procedures and administrative directives currently provided for the operation of the station, if properly implemented, should provide a high level of assurance that plant structures, systems, and components will not be degraded as a result of housekeeping practices; and that the accessibility of plant areas and equipment will not be degraded as a result of poor storage and maintenance practices. In particular, a recent management policy statement issued by the Vice President -Nuclear, Administrative Practice Number 6 - Plant Inspection Program, assigned responsibility to certain plant managers to personally tour and inspect designated areas of the plant to verify implementation of housekeeping and cleanliness controls on a scheduled basis. That policy statement requires each cognizant manager to provide a monthly report to the Vice President indicating the results of each inspection and corrective action taken on identified deficiencies. That directive indicates a current awareness on the part of upper management of the need for good housekeeping.

In addition, during a plant tour in 1983, the Regional Administrator criticised the Clinton project for its objectionable graffiti. The results of that criticism included a site-wide effort to remove the objectionable graffiti and to preclude its recurrence. That effort was reasonably successful, with only limited graffiti still apparent in hard to get at areas and in areas where graffiti is difficult to control.

Control room discipline, including conduct of operations and personnel, was an area for which only very limited first-hand observations were possible because of the stage of construction of the facility. However, administrative controls for plant operations were in place and partially implemented. Those administrative controls provide direction to control room operators, senior operators, and shift supervisors to assure that plant operational activities are conducted in accordance with the Commissions requirements.

In particular, there were provisions for control of control room access for operations, startup, and construction personnel and visitors; a clear designation of authority to limit control room access and to clear the control room of unnecessary personnel, when required; restrictions on the type of reading materials allowed to be present and the use of personal radios; a panel operating area had been defined and will be enforced; there were prohibitions against excess noise, loose objects in the area of control panels, and eating in the control room; and other standard practices were applied, such as the requirements for shift relief and turnover, minimum control room complement, and control room housekeeping (in addition to the general plant program).

In addition to the above, the applicant was preparing to negotiate with the bargaining unit concerning the wearing of unique, applicant supplied clothing by the licensed operating staff. Funds have been allocated for the initial issue of such clothing and typical plant specific designs were being considered.

The above results were provided to Region III in accordance with their request. The results related to construction housekeeping were the subject of discussion between the NRC senior resident inspector and the applicant's quality assurance surveillance supervisor. The inspector subsequently noted a significant increase in surveillance reports concerning housekeeping, and some improvement in general plant cleanliness.

The area of control room behavior and plant housekeeping will continue to be reviewed as part of routine inspection activities.

No items of noncompliance or deviation were identified.

8. Independent Inspection Effort - IP Overinspection (OI) Program

The IP Overinspection Program was described in Inspection Report 50-461/84-16. This inspection is a continuation of the review started in Inspection Report 50-461/84-41. This inspection was undertaken as part of Region III's effort to verify the validity of implementation of the Overinspection program.

This inspection included a review of the applicant's surveillance of OI activities and selected nonconformance reports (NCRs) initiated as a result of OI findings. The following paragaphs detail the results of this inspection.

a. IP Surveillance of OI

During this report period, the inspector reviewed the surveillance activities of IPQA relative to the Overinspection Program. A significant increase in surveillance activities was noted during this report period. For each of the surveillance reports reviewed, the following attributes were observed: details of surveillance; results of surveillance; evaluation consistent with results noted.

Report No.	Date	Subject	<u>Checklists</u>
Y-26405	1/85	Cable Installation	QAI-710.01 QAI-710.22
Y-26406	1/85	HVAC (Heating, Ventilating & Air Conditioning)	QAI-710.20 QAI-710.23
Y-26409	1/85	Electrical Conduit Support	QAI-710.18 QAI-710.23

Y-26411	1/85	HVAC	QAI-710.20
Y-26412	1/85	Auxillary Steel	QAI-710.23 QAI-710.12
1-20112	1,00		QAI-710.23
Y-26413	1/85	Electrical Conduit	QAI-710.18
		Support	QAI-710.23
Y-26414	1/85	Electrical Conduit	QAI-710.18
		Support	QAI-710.23
Y-26415	1/85	Component Support	QAI-710.11
			QAI-710.15
			QAI-710.21
Y-26421	1/85	HVAC	QAI-710.20
			QAI-710.23
Y-26422	1/85	Component Support	QAI-710.15
			QAI-710.21
Y-26425	1/85	Structural Steel	QAI-710.12
			QAI-710.23
Y-26426	1/85	Cable Termination	QAI-710.17
Y-26431	1/85	Structural Steel	QAI-710.12
			QAI-710.23
Y-26433	1/85	Pipe/Valve	QAI-710.14
			QAI-710.21
Y-26434	1/85	Structural Steel	QAI-710.12
	. 105		QAI-710.23
Y-26435	1/85	HVAC	QAI-710.11
			QAI-710.20
V 05400	1.705	Florender 2 Conduits	QAI-710.23
Y-26438	1/85	Electrical Conduit	QAI-710.19
Y-26440	1/85	Electrical Equipment	QAI-710.16 QAI-710.14
Y-26445	1/85	Instrumentation	QAI-710.14
V DEAAG	1/05	Electrical Conduit	QAI-710.16
Y-26446	1/85	Support	QAI-710.18
Y-26448	1/85	Structural Steel	QAI-710.12
1-20440	1/05	Boiting	Qn1-/10.12
Y-26449	1/85	Structural Steel	QAI-710.12
1-20443	1/03	Structurar Steel	QAI-710.23
Y-26451	1/85	Component Support	QAI-710.11
1-20431	1,00	component support	QAI-710.15
			QAI-710.21
Y-26452	1/85	Electrical Conduit	QAI-710.19
Y-26457	1/85	Structural Steel	QAI-710.12
			QAI-710.23
Y-26459	1/85	Component Support	QAI-710.15
			QAI-710.23
Y-26452	1/85	Component Support	QAI-710.15
			QAI-710.23
Y-26464	1/85	Large Bore Pipe	QAI-710.14
			QAI-710.21
Y-26469	1/85	Mechanical Equipment	QAI-710.13

Y-26475	1/85	Mechanical Equipment	QAI-710.13
Y-26477	1/85	Component Support	QAI-710.15
			QAI-710.21 QAI-710.23

No items of noncompliance or deviation were identified.

b. OI Nonconformance Reports

During the report period, the inspector reviewed NCRs generated by the Overinspection organization. For the NCRs reviewed, the following attributes were observed: disposition responded to stated problem; disposition was appropriate; corrective action was timely.

Structural	Mechanical	Electrical
51828	51869	51678
51831	51881	51847
51833	51882	51850
51848	51883	51852
51857	51886	51870
51860	51887	51911
51868	51891	51921
51876	51892	51930
51877	51893	51933
51879	51918	51944
51926	51919	51961
31320	51932	
	51967	
	51971	
	51972	
	51988	

No items of noncompliance or deviation were identified.

9. Plant Procedures Review

This inspection commenced a review of procedures to be used in the plant operations phase to confirm that the scope of the plant procedures system is adequate to control safety related operations within applicable regulatory requirements, and to verify the adequacy of management controls in implementing and maintaining a viable procedure system.

a. Applicable Regulatory Requirements and Applicant Commitments

(1) 10CFR50

(2) Regulatory Guide 1.33, revision 2, Quality Assurance Program Requirements (Operation)

(3) ANSI N18.7-1976, Administrative Controls And Quality Assurance

For The Operational Phase Of Nuclear Power Plants

(4) ANSI N45.2-1977, Quality Assurance Program Requirements For Nuclear Facilities (5) CPS Final Safety Analysis Report (FSAR), through amendment 32

(6) CPS Draft Technical Specifications

b. Procedures Reviewed

The following applicant procedures were determined to be within the scope of this inspection and were under review at the completion of the inspection period.

- (1) CPS No. OAP 1001.04S, Revision 0, 6/4/82, "Facility Review Group Review of Assigned Documents", through TCF 84-383 dated 7/19/84.
- (2) CPS No. 1005.01, Revision 12, 9/7/84, "Preparation, Review, and Approval of Station Procedures And Documents, through TCF 85-002 dated 12/28/84.
- (3) CPS No. 1005.04, Revision 11, 11/30/83, "Distribution And Control Of Station Procedure And Revisions", through TCF 84-635 dated 12/5/84.
- (4) CPS No. 1005.05, Revision 5, 7/23/84, "Standing Orders", through TCF 84-616 dated 12/6/84.
- (5) CPS No. 1005.06, Revision 0, 11/30/83, "Conduct Of 10CFR50.59 Reviews".
- (6) CPS No. 1005.07, Revision 1, 11/2/84, "Revision To, Temporary Changes To, And Cancellation Of Station Procedures And Documents", through TCF 84-644, dated 12/11/84.
- (7) CPS No. 1005.08, Revision O, 11/30/84, "Periodic Review Of Station Procedures And Documents", through TCF 85-032, dated 1/8/85.
- (8) CPS No. 1006.01, Revision 3, 6/8/84, "Document Control", through TCF 84-553, dated 10/23/84.
- (9) CPS No. 1006.03, Revision 1, 11/28/83, "Document Review", through TCF 84-520, dated 9/28/84.
- (10) CPS No. 1017.01, "Plant Records Preparation, Transmittal, And Retention", Revision 6, 8/9/84.
- (11) CPS No. 1038.01, "Control Of Technical Specifications", Revision 1, 1/26/84.
- (12) CPS No. 1106.01, Revision 4, 8/30/84, "Plant Services Department Document Control".

c. Results

This inspection was in progress at the end of the inspection period. The results of the inspection will be identified in a subsequent report.

No items of noncompliance or deviation were identified.

10. Comparison Of As-Built Plant To FSAR Description

The inspector selected four safety-related systems on a sampling basis to verify that the as-built mechanical and fluid systems conformed to commitments contained in the FSAR. The results of the verification of three systems was documented in inspection report 50-461/84-41(DRP). The fourth system of the four selected was examined by direct observation to determine that the physical installation was in agreement with the latest revision of the P&ID contained in the FSAR.

In addition to verifying the as-built configuration, the inspector reviewed the systems for potential operational problems in the areas of component accessibility, maintenance and ALARA (as low as reasonably achievable).

The following paragraphs present the results of this review:

Drywell Purge and Standby Gas Treatment System

The latest issue of the P&IDs, drawing MO-51110, revision J for the Drywell Purge System and drawing MO5-1105, revision H for the Standby Gas Treatment System (SGTS), were used for the system "walkdown". The system isometric drawings were also compared with the as-built configuration. No significant discrepancies were identified.

Valve accessibility appeared to meet the following recommendations of Regulatory Guide 8.8:

- a. Work platforms, catwalks and ladders were permanently installed for providing access for maintenance, calibration, in-service inspection and operability to meet the intent of the ALARA program.
- b. Major valves were reasonably accessible for operation during abnormal conditions.

The inspector reviewed the Drywe'l Purge System operating procedure, IOP3321.01S, revision 0, for technical adequacy. Three system valves were not on the procedure valve check list and three valves were improperly positioned for normal operation. The body of the procedure failed to address three dampers necessary for a mode of operation.

The Drywell Purge Filter Trains (3) had moisture separator drain valves to loop seals (3). Those valves will normally be open during operation and the loop seal will prevent gas bypass if a water level is maintained in the seal. The inspector noted that this procedure did not address loop seal filling/checking and that there were no provisions for filling/checking or draining seals for cleanout. The standby gas treatment system (SGTS) also had similar loop seals, however, a water supply was piped to those seals. The SGTS loop seals did not have a positive means to assure the loops would remain sealed.

The matter of loop seal filling and maintenance was also reviewed in inspection report 50-461/85-04 and is the subject of an open inspection item identified in that report.

The discrepancies noted above and the observations concerning loop seals were discussed with the applicant. The applicant stated that loop seal filling and maintenance will be addressed.

No items of noncompliance or deviation were identified.

11. Preoperational Test Program Implementation Verification

At periodic intervals during the report period, surveillance tours of areas of the site were performed. Those surveillances were intended to assess: cleanliness of the site; storage and maintenance conditions of materials and equipment; potential for fire hazards which might have a deleterious effect on personnel or equipment; and to witness construction, maintenance, and preoperational test activities in progress. Only limited testing activities were observed during the report period.

The subject of housekeeping was discussed in detail in paragraph 7.b above.

No items of noncompliance or deviation were identified.

12. Site Activities Of Interest

a. Reactor Pressure Vessel Cold Hydrostatic Test

The applicant began preparations for and performance of the reactor vessel cold hydrostatic test (XTP-CH-O1) during this inspection period.

The reactor vessel cold hydrostatic test is a ASME Code required pre-service examination of the integrity of the reactor coolant pressure boundary. That boundary consists of the reactor pressure vessel (RPV), the nuclear steam supply system, and some balance of plant steam piping.

The test is conducted by raising the pressure in the RPV to 125% of design pressure (1563 psig) for 10 minutes by means of a test pump. The pressure is then reduced to 1375 psig while system piping and components are visually checked for water leakage.

The inspector attended numerous daily briefings and maintained close contact with IP Startup personnel in order to coordinate Region III inspection and witnessing of the reactor pressurization.

At the conclusion of the inspection period, the applicant's schedule indicated that the reactor vessel pressurization, originally scheduled for January 19, 1985, would take place about February 9, 1985. Once XTP-CH-O1 is completed, reactor vessel and reactor recirculation pump internals installation will be completed in preparation for ECCS full flow testing and RPV hot operations.

b. IP Management Changes

The IP Supervisor Compliance and Configuration Control Department (CCCD) left his position with the company. The former IP Supervisor, Plant Protection was named to the CCCD vacancy. The applicant is actively pursuing qualified applicants for both the Plant Manager and the Supervisor Plant Protection vacancies.

c. Radiation Exposure Incidents

The applicant notified the NRC senior resident inspector of a minor radiation exposure incident involving U.S. Testing (UST) Co., the site radiographic contractor, at 3:10 a.m. on January 5, 1985. That incident was referred to Region III radiation protection specialist inspectors who investigated the circumstances of the incident. The results of their investigation are detailed in inspection report 50-461/85-04.

A second minor radiation exposure incident, again involving UST radiographers, was brought to the attention of the NRC senior resident inspector by a telephone call, on January 17, 1985, from a radiographers assistant who had been recently terminated by UST. That individual was referred to the U.S. Department of Labor, Wage and Hour Division, the IP Quality Concern Hotline, and NRC Region III.

d. ASME Survey

The applicant informed the inspector that the American Society of Mechanical Engineers (ASME) performed an onsite survey of the applicant's quality program between January 14 and 16, 1985.

The survey team recommended to the ASME accreditation committee that an "N" Certificate of Authorization be granted to Illinois Power Company.

13. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, items of noncompliance, or deviations. One unresolved item disclosed during this inspection is discussed in paragraph 7a.

14. Open Items

Upen items are matters which have been discussed with the applicant, which will be reviewed further by the inspector, and which involve some action on the part of the NRC or applicant or both. Forty-six open items disclosed during this inspection are discussed in paragraph 6.

15. Exit Meetings

The inspectors met with applicant representatives (denoted in paragraph 1) throughout the inspection and at the conclusion of the inspection on February 4, 1985. The inspectors summarized the scope and findings of the inspection activities. The applicant acknowledged the inspection findings and the SER confirmatory items.

The inspectors attended exit meetings held between Region based inspectors and the applicant as follows:

Inspector	Date
Hasse, Paul, and Gill Martin, Williams, and Hills Pirtle and Christoffer	1/7/85 1/17/85 1/24/85 1/25/85
Jablonski, Jones, and Jacobson	1/31/85