U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-461/85-12(DRP)

Docket No. 50-461 License No. CPPR-137

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

Facility Name: Clinton Power Station

Inspection At: Clinton Site, Clinton, Il.

Inspection Conducted: February 5, 1985 through March 11, 1985

Inspectors: T. P. Gwynn

W. F. Christianson

P. L. Hiland

Approved By: R. C. Knop, Chief
Reactor Projects Section 1C

3-15-85
Date

Inspection Summary

Inspection on February 5 through March 11, 1985 (Report No. 50-461/85-12(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 IE bulletins and circulars, employee concerns, independent inspection of the overinspection program, plant procedures review, maintenance procedures review, preoperational test program implementation verification, and site activities of interest. The inspection involved a total of 245 inspector-hours onsite by three resident inspectors, including 36 inspector-hours onsite during off-shifts.
Results: Of the eight areas inspected, no items of noncompliance or deviation were identified.

DETAILS

1. Personnel Contacted

Illinois Power Company (IP)

D. Antonelli, Supervisor - Plant Operations
K. Baker, Staff Engineer, Licensing Operations
S. Brown, Compliance Analyst, Compliance & Configuration Control (CCCD)
*R. Campbell, Director - Quality Systems and Audits
*W. Connell, Manager - Quality Assurance
*J. Cook, Assistant Power Plant Manager, Operations
*H. Daniels, Project Manager
*S. B. Fisher, Manager, Nuclear Support
L. Floyd, Supervisor - Quality Systems
W. Gerstner, Executive Vice-President
D. Glenn, Director - Safeteam
*K. Graf, Director - Nuclear Support
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
D. Holtscher, Supervisor, Technical Assessment
J. Jones, Supervisor, Mechanical Maintenance
H. Lane, Director - Construction and Startup Engineering
*J. Loomis, Construction Manager
J. Miller, Director - Startup Programs
J. Palchak, Supervisor - Compliance & Configuration Control Department
J. Patten, Director - Nuclear Training
*J. Perry, Manager - Nuclear Program Coordination
S. Rasor, Supervisor - Construction QA
T. Reese, Staff Engineer, Licensing Administration
R. Richey, Assistant Power Plant Manager - Maintenance
D. Schweikert, Senior Compliance Analyst, CCCD
*F. Spangenberg, Director - Nuclear Licensing and Configuration
*J. Sprague, QA Specialist
*J. Taylor, Supervisor, Nuclear Records
L. Tucker, Director - Startup Testing
D. Wier, Electrical Lead Startup Engineer
*H. Victor, Manager - Nuclear Station Engineering
D. Wilson, Supervisor, Licensing Administration

Baldwin Associates (BA)

*C. Anderson, Manager - Quality Engineering
*A. King, Project Manager
*L. Osborne, Manager - Quality and Technical Services

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 1DO18010G 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 supplemental response (dated February 20, 1985) to the Notice of Violation (NOV) and found that it satisfactorily addressed all items cited in the NOV. The inspector reviewed the status of corrective actions and found that actions to address the inspection findings were either in progress or completed. This item remains open pending completion and verification of all corrective actions.

b. (Open) Deviation (461/84-30-02): Nonconformance reports (NCRs) dispositioned "Use As Is" and designated "Type B" were not sent to the architect engineer (AE) for justification of the disposition as required by the CPS Construction Quality Assurance (QA) Manual.

The inspector reviewed changes made to the CPS Construction QA Manual dated March 5, 1985. Those changes clearly identified that only those NCRs designated by IP were required to have engineering justification provided by the AE. However, the QA Manual changes did not identify an alternate engineering organization with responsibility to provide disposition justification for those NCRs not sent to the AE. This matter was discussed with the applicant's QA department who committed to the following:

(1) Perform a surveillance inspection of NCRs not sent to the AE and dispositioned "Use As Is" or "Repair" to assure that the current QA program does provide engineering justification for the disposition of those NCRs.

(2) To include a requirement in the next revision of the IP Construction QA Manual to reflect the former QA Manual requirement for engineering justification for NCRs dispositioned "Use As Is" or "Repair" and not sent to the AE.

This matter is unresolved (461/85-12-01).

The inspector noted that changes to be made to the CPS Final Safety Analysis Report are still pending and will be reviewed in a subsequent inspection.

In addition, the inspector reviewed a recent IP audit of Nuclear Station Engineering Department (NSED) design responsibility and a recent IP surveillance finding related to NSED processing of NCRs (IP Audit Report No. Q38,85-02; IP Surveillance Report No. 0-84-332). These documents identified deficiencies in the program being implemented by NSED in carrying out their design responsibilities. This matter will be reviewed in a subsequent inspection.

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

The inspector reviewed four detailed investigation files maintained by the Safeteam investigative staff to ascertain the status of actions taken by Safeteam to address concerns identified in inspection report (50-461/84-30). Those concerns and their current status were as follows:

(1) Safeteam review committee comments had not been incorporated or justification provided for non-incorporation.

The Safeteam director stated that the Safeteam review committee now holds weekly face to face meetings with the Safeteam staff to provide resolution of review committee comments. All comments are resolved with the committee members prior to the response being accepted by the committee. The inspector reviewed investigative packages identified as concerns 10032 and 10218. There were no open issues contained in these packages.

This change in methodology satisfied the inspector's concern.

(2) Two of the responses reviewed were based on documents which had not been finalized at the time of the response. Tracking of these open items was left to individual investigators.

The Safeteam now employs a computerized tracking system and identifies open items in their response letters. The inspector reviewed concern response 10037 and verified that the open item identified was being tracked by the Safeteam.

This satisfied the inspector's concern with regard to this matter.

(3) The response to concern No. 10024-A was not complete. Review of the matter documented in the concern indicated that additional action had been taken by the applicant to resolve the identified concern which was not reflected in the Safeteam response.

The Safeteam director provided additional information in the investigative file to substantiate the Safeteam response and stated that no additional response was required. The inspector requested that the Safeteam provide one additional piece of information prior to closure of this item. The Safeteam director stated that he would provide the requested information. This item will be reviewed further in a subsequent inspection.

In addition, the inspector reviewed additional examples of Safeteam responses to employee identified concerns. This review was primarily conducted to determine that there was no indication of wrong doing associated with the identified concerns. The following list identifies those concerns reviewed:

Concern Number	Concern Number	Concern Number
10006-A	10012-B	10019-B
10029-A	10032-A	10037-A
10039-A	10039-C	10040-A
10044-A	10087-D	10094-D
10105-A	10120-D	10139-A
10142-A	10148-A	10176-A
10176-B	10192-E	10192-F
10195-A	10210-A	10222-A
10224-E	10225-A,B	10225-A
10258-A	10268-A	10272-C
10277-A	10279-A	10286-A
10290-B	10292-A,B,C	10298-B,E,G
10304-A	10304-C	10321-B
10333-A	10356-F	10370-A
10396-A	10404-A	10416-A
10416-B	10427-B	10437-B,D
10442-B	10450-A	10451-A
10483-C	10484-A	10508-A
10515-C	10519-A	10563-A
10564-A	10573-B	10586-A
10600-A	10633-A	10636-C
10640-A	10663-B	10666-A
10682-B	10712-A	10717-A
10724-E	10730-B	10732-A
10735-A	10760-A	10768-B
10776-A	10801-A	10813-A
10836-B	10848-A	10856-C,D
10868-B	10891-A	10902-A

Concern Number	Concern Number	Concern Number
10920-B	10955-B	10969-A
10983-B	10990-A	10996-A
11002-A	11015-A	11018-A
11042-A	11122-C	11125-C
11134-B	11143-A	11207-B,C
11209-A	11210-A	11227-A
11228-A	11229-A	11235-B
11236-A,D	11246-A	11260-C
11264-A	11273-A	11284-B
11300-A	11302-C	11304-A
11307-A	11308-A	11313-A
11314-A	11314-B	11320-A
11321-A	11331-C	11332-B
11333-D	11340-A	11352-A
11363-A	11367-A,B	11392-A,B
11401-A	11404-C	11406-B
11421-A,B	11439-A	11454-A
11477-A	11491-A	11507-A
11512-B	11535-A	11583-A
11634-A	11644-B	11651-A
11684-A	11708-B	11743-A
11749-C	11755-A	11757-A
11764-A	11774-A	11785-A
11801-A	11817-A	11818-A
11824-A	11832-A	11836-A
11838-A	11838-B	

No items of noncompliance or deviation were identified.

3. Applicant Action On IE Bulletins And Circulars

a. IE Bulletin Followup

For the IE bulletin listed below, the inspector reviewed applicant records to determine that the bulletin was received by management and reviewed for applicability to the facility; that the response provided was technically adequate; that the requirements established by the bulletin were satisfied; and that the response represented the actions taken by the applicant.

(Open) IE Bulletin (461/84-03-BB): Refueling cavity water seal.

The applicant's response to this bulletin indicated that a study was conducted to evaluate the potential for and consequences of a refueling cavity water seal failure at Clinton Power Station (CPS). The study purportedly evaluated the likelihood of seal failure, maximum leak rates due to seal failure, potential effects on stored fuel and fuel in transfer, and emergency operating procedures.

The inspector reviewed the applicant's response and backup documentation maintained on file at the site. In addition, several additional plant records were reviewed. The results of this review revealed that there was no objective evidence tc support the claim that the study conducted had evaluated emergency operating procedures, as recommended by the bulletin. In addition, the inspector noted that the applicant's study had not addressed the operability of certain annunciators discussed in the backup documentation and had not included a review of refueling procedures to be used at CPS. These matters were discussed with the applicant who stated that an additional response would be provided to address the concerns identified above. This bulletin will remain open pending review of that additional response.

b. IE Circular Followup

For the IE Circulars listed below, the inspector verified that the circular was received by management and reviewed for applicability to the facility; that the applicant had evaluated applicable circulars to determine any corrective actions required; and that the corrective actions committed to address the concerns of the circular appeared adequate.

(1) (Closed) IE Circular (77-01-CC): Malfunctions of Limitorque valve operators.

(2) (Closed) IE Circular (78-16-CC): Limitorque Valve Actuators.

(3) (Closed) IE Circular (80-03-CC): Protection from toxic gas hazards

(4) (Closed) IE Circular (80-09-CC): Problems with plant internal communications systems.

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

The inspector met with the applicant's representative on February 20, 1985 in order to ascertain the current status of all IE bulletins and circulars applicable to the CPS docket. This meeting was held as a followup to the meeting held on February 1, 1985. Several items were discussed specifically with regard to the applicant's schedule for completion. Of the 13 bulletins and 15 circulars open at the time of the meeting, the applicant identified 4 bulletins and 10 circulars which they believe were ready for followup inspection and closure by Region III. These items were scheduled for followup inspection. Of the remaining 9 bulletins and 5 circulars, the applicant provided scheduled completion dates for 6 bulletins as follows:

Bulletin No.	Scheduled Completion Date
79-01-BB	March 1985
79-14-BB	December 1985
79-18-BB	December 1985
79-23-BB	January 1986
80-06-BB	June 1985
84-02-BB	December 1985

The inspector will continue to follow the applicant's activities in this area.

No items of noncompliance or deviation were identified.

4. 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. Two concerns were transmitted to the regional office during this report period.

5. 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 reviews started in Inspection Reports 50-461/84-41 and 50-461/85-05. This inspection was undertaken as part of Region III's effort to verify the validity of implementation of the IP Overinspection program.

This inspection included review of selected nonconformance reports (NCRs) initiated as a result of OI findings; review of selected OI inspection reports; and witnessing inspection activities performed by OI inspectors. The following paragraphs detail the results of this inspection.

a. 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
51682	52007	51936*
51877	52008**	51940
51915	52009**	51945*
51916	52026	51954*
51917	52027	51965
51955	52033	51966
51987	52037	52012
52047	52053	52013
52101	52075	52015
52103		52041

*For Electrical NCRs 51936, 51945, and 51954, the inspector requested additional information on the justification for the use as is disposition of minimum anchor bolt spacing violations. The applicant provided the following calculations in support of the disposition: NCR 51936, Calc# SDQ4500DG05 Rev.3 (pg. 25.6107); NCR 51945, Structural Calculation pg.25.716-25.718 (ECN 3761); NCR 51954, Calc# SDQ4500DG05 Rev.3 (pg.25.3296 & 25.3297).

**For Mechanical NCRs 52008 & 52009, the inspector requested clarification of the disposition which did not appear to address the stated nonconforming condition. The applicant stated that the elevation error identified in the "condition description" section of the NCR was pertaining to a pipe stand and the disposition correctly revised the instrument elevation on the affected document.

No items of noncompliance or deviation were identified.

b. OI Inspection Reports

During this report period the inspector reviewed completed OI inspection reports. For each of the inspection reports reviewed, one or more of the following attributes were observed: inspection report was complete; identified nonconformances were noted and NCR initiated; inaccessible items were properly noted and the corresponding inaccessible item report prepared.

INSPECTION REPORT	QAI CHECKLIST(S)
E-3931	QAI710.17
E-3957	QAI710.17
E-3960	QAI710.17
E-3982	QAI710.18
E-3981	QAI710.18
E-3971	QAI710.18
	QAI710.23
E-3967	QAI710.18
	QAI710.23

INSPECTION REPORT	QAI CHECKLIST(S)
E-3958	QAI710.17
E-3961	QAI710.22
E-3962	QAI710.22
M-4346	QAI710.11
	QAI710.15
	QAI710.21
	QAI710.23
M-4388	QAI710.15
	QAI710.23
M-4266	QAI710.14
	QAI710.21
M-4389	QAI710.15
	QAI710.23
M-4394	QAI710.15
	QAI710.23
M-4400	QAI710.15
	QAI710.23
M-4402	QAI710.15
	QAI710.23
M-3601	QAI710.15
	QAI710.21
	QAI710.23
M-4410	QAI710.15
	QAI710.21
	QAI710.11

INSPECTION REPORT	QAI CHECKLIST(S)
M-3629	QAI710.15
	QAI710.21
	QAI710.11

No items of noncompliance or deviation were identified.

c. OI Inspection Activities

During this report period, the inspector witnessed several inspections being performed by OI personnel. For the inspections witnessed, one or more of the following attributes were observed: inspector followed the appropriate procedure; conduct of the inspection was thorough; attributes identified on checklists were properly noted.

INSPECTOR	INSPECTION REPORT	QAI CHECKLIST(S)
1.	E-3979	710.18 710.23
2.	E-4031	710.18
3.	E-4051	710.17
4.	E-4047	710.22
5.	M-4500	710.15 710.21

No items of noncompliance or deviation were identified.

5. Plant Procedures Review

This inspection continued 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 plant 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) 10 CFR 50

(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

(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 1, 3/7/85, "Conduct Of 10 CFR 50.59 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 0, 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

(1) Review of CPS OAP 1001.04S, Facility Review Group Review of Assigned Documents, identified several minor discrepancies. Those discrepancies were corrected in revision 1 to CPS 1001.04 (new numbering system) which was issued during the course of the inspection.

(2) Review of CPS 1001.05, Preparation, Review, And Approval Of Station Procedures And Documents , identified a number of procedural deficiencies. Those deficiencies, documented below, were discussed in detail with responsible plant staff supervision. The deficiencies were acknowledged and action was taken during the inspection to provide resolution.

(a) Paragraph 8.1.2.9.1 b) allowed the referencing of applicable vendor manual sections in plant maintenance and/or calibration procedures. This is consistent with ANSI N18.7-1976. However, the procedure did not reflect the ANSI N18.7, paragraph 5.3.5(4) requirement that such procedures receive the same level of review and approval as operating procedures. This matter was addressed in revision 13 of CPS 1005.01. The changes made satisfied the ANSI standard requirement.

(b) Paragraph 8.1.2.9.1 c) addressed the subtopic "INITIAL/RECORD STEPS". The sixth sub-paragraph of that procedure paragraph addressed an unrelated ANSI N18.7 requirement for the use of checklists in complex procedures. The requirement was of sufficient importance to be highlighted in a separate subtopic heading to provide adequate assurance that procedure preparers achieved and maintained an awareness of the requirement. This change was made in revision 13 of CPS 1005.01.

(c) Paragraph 8.1.2.9.14 g) recommended that direction as to the final disposition of all documents generated by the procedure be given in the procedure. The inspector stated that the applicant should either make this a requirement, or demonstrate an equivalent level of control to provide adequate assurance that required records will be maintained.

Revision 13 of CPS 1005.01 now requires that disposition of all documents generated by station procedures either be provided in the procedure or in another applicable procedure.

(e) Paragraph 8.2.2, "REQUIRED REVIEWS", identified the individuals and organizational units that were required to review station procedures prior to approval. Due to the use of the word "should" rather than "shall", the procedure did not demonstrate compliance with ANSI N18.7-1976, paragraph 5.2.15, which states in part that rules shall be established which clearly delineate the review of procedures by knowledgeable personnel other than the originator; or with draft technical specification 6.5.3.1.a which requires that each procedure, program, or procedure change which affects nuclear safety be independently reviewed by an individual knowledgeable in the area affected other than the individual who prepared the procedure, program, or procedure change. The procedure required that the responsible Assistant Power Plant Manager/Department Head ensure compliance with requirements, technical accuracy, and have a clear meaning; however, the procedure did not require an individual perform an independent technical review.

Revision 13 of CPS 1005.01 included a requirement for independent technical review of safety-related procedures. In addition, that revision required that the independent technical review of specified procedures be completed and documented prior to fuel load in order to demonstrate compliance with the facility technical specifications. This matter was documented in CPS Condition Report 1-84-09-053 and is an unresolved item (461/85-12-02A).

(f) Paragraph 8.2.4.1 provided recommendations concerning the resolution of comments generated during the review and approval cycle. However, the procedure did not require the resolution of significant technical comments prior to procedure approval.

Revision 13 to CPS 1005.01, paragraph 8.3, now requires that significant technical comments be resolved prior to procedure approval.

(g) Paragraph 8.3.2.5.6 directed the return of procedures to the applicant's Compliance and Configuration Control Department (CCCD) upon completion of FRG review. This requirement conflicted with CPS OAP 1001.04S, paragraph 8.1.4.2.1, FRG Review of Assigned Documents, which directed an FRG member to forward the procedure to the Power Plant Manager for his signature.

Revision 1 to CPS 1001.04 no longer conflicts with 1005.01 concerning the processing of procedures subsequent to FRG review.

(h) Paragraph 8.3.2.5.9 provided that, if a license change or an unreviewed safety question was involved, the procedure revision was to be maintained in a file pending concurrence by the Nuclear Review and Audit Group (NRAG). There were no additional instructions concerning the processing of procedures involving a change to technical specifications or an unreviewed safety question. In particular, there was no apparent mechanism to transmit the procedures to NRAG, to obtain NRAG and NRC approval of license changes, tests, and experiments, or to release the procedures for approval and implementation once all required prior approvals were obtained. The missing information was not identified by a "LATER" in the body of the procedure as required.

Revision 13 to CPS 1005.01 and revision 1 to CPS 1001.04 now provide instructions for further processing of the subject procedures.

(i) Paragraph 8.3.5 provided instructions for correcting clerical errors identified in approved procedures prior to distribution. The instructions did not identify the individual(s) authorized to make such corrections, and did not require the approval of the originating organization for corrections made using these instructions.

Revision 13 to CPS 1005.01 now provides the necessary instructions.

(j) Paragraph 8.3.2.5.4 relied on the Operating Manual Status Report (OMSR) to determine if the Facility Review Group (FRG) was required to review the procedure and if a 10 CFR50.59 Safety Evaluation was required. Reference to CPS 1005.03, OMSR, paragraph 8.1.4.3.1, revealed that the determining factor (CLASS CODE) was based on an evaluation performed by the responsible department head, as evidenced by the department head's signature on the procedure approval page. The inspector noted that CPS 1005.01 was used to provide for review and approval of plant procedures; that CPS 1005.01 did not require the responsible department head to evaluate the class code for correctness; and that therefore the reference to CPS 1005.03 was apparently inappropriate.

The applicant made a temporary change to CPS 1005.03 to provide the necessary controls and stated that the temporary change will be incorporated in the next revision to the procedure. In addition, as part of the corrective action under CPS Condition Report 1-84-09-053 (refer to paragraph 5.c(2)(e) above), the applicant will perform a review of all procedures with a class code of N (non-safety related) or F (non-safety related, FRG review required) to assure that all identified procedures have been properly classified and have received all required reviews. The inspector noted that 19 procedures of the 10XX series administrative procedures were misclassified as non-safety related, no FRG review required. This matter is unresolved (461/85-12-02B).

The inspector provided several additional comments, which were of a clerical nature, to the applicant during the course of this procedure review.

(3) Review of CPS 1005.04, 1006.01, 1006.03, and 1106.01 revealed that these procedures, which were used to implement the requirements of 10CFR50, Appendix B, Criterion VI, Document Control, and numerous other ANSI standard and quality assurance program requirements, were misclassified as non-safety related, no FRG review required. This matter was discussed in paragraph 5.c.(2)(j) above. Since these procedures were improperly classified, and in view of certain inconsistencies identified, the inspector requested that the IP Quality Assurance Department perform a detailed programmatic audit to assure the integrity of the IP document control program. The review of these procedures will remain open pending applicant action to properly classify the procedures; review of applicant audit results; and completion of required reviews. Open item (461/85-12-03).

(4) Review of CPS 1005.05, Standing Orders, revealed that the procedure was in compliance with all requirements inspected except the class code was incorrect. Refer to paragraph 5.c.(2)(j) above.

(5) Review of CPS 1005.06, Conduct of 10CFR50.59 Reviews, revealed that the procedure was in compliance with all requirements inspected.

(6) Review of CPS 1005.07, Revision To, Temporary Changes To, and Cancellation of Station Procedures and Documents, identified one minor discrepancy which was corrected by the applicant during the course of the inspection.

(7) Review of CPS 1005.08, Periodic Review of Station Procedures and Documents, revealed that the procedure was in compliance with all requirements inspected.

(8) Two procedures, CPS 1017.01 and CPS 1038.01, were determined not to be within the scope of this inspection.

In addition to the above, the inspector reviewed the following power plant standing orders to determine that they had been issued in accordance with the controls established in CPS 1005.05 and that they were not being used in place of procedures requiring appropriate reviews and approval:

Standing Order No.	Standing Order No.
ASO-002	ASO-009
ASO-012	CHSO-012
CSO-008	CSO-018
CSO-060	MSO-004
MSO-009	MSO-015
OSO-007	OSO-009
OSO-010	OSO-011
OSO-017	OSO-018
OSO-030	PMSO-001
PMSO-005	PMSO-009
PSO-010	PSO-013
RPSO-002	RPSO-004
RPSO-008	RWSO-009
RWSO-011	RWSO-014
SSO-003	TSO-001
TSO-012	

No items of noncompliance or deviation were identified.

6. Plant Maintenance Procedures Review

The inspector examined plant maintenance procedures to confirm that the procedures are prepared to adequately control maintenance of safety related systems within applicable regulatory requirements.

a. Applicable Regulatory Requirements and Applicant Commitments

(1) 10 CFR 50

(2) Regulatory Guide 1.33, revision 2, "Procedures for Performing Maintenance"

(3) ANSI N18.7-1976, "Administrative Controls and Quality Assurance for Operational Phase of Nuclear Power Plants"

(4) ANSI N45.2-1977, "Quality Assurance Program Requirements for Nuclear Facilities"

(5) CPS No. 1005.01, revision 12, "Preparation, Review, and Approval of Station Procedures and Documents"

b. Checklist

The inspector utilized NUREG/CR-1369, revision 1, "Procedures Evaluation Checklist for Maintenance, Test and Calibration Procedures Used in Nuclear Power Plants". The checklist imposes no requirements on the applicant and was used by the NRC inspectors solely as an aid in evaluating procedural characteristics and procedural deficiencies that could lead to errors in the performance of the procedures.

c. Procedures Examined

The inspector examined the procedure content in the following categories:

- Procedures for Performing Maintenance: includes preventive maintenance and repair procedures.

- Procedures for Control of Measuring and Test Equipment: includes calibration and test procedures

- Surveillance Procedures: includes mechanical (ME) and instrumentation and control (IC) surveillance procedures

The inspector examined and is continuing examination of procedures for performing maintenance. Preliminary results are identified in this report; the final inspection results will be identified in a subsequent inspection report.

The following CPS safety related mechanical maintenance procedures were examined:

(1) CPS No.8106.03, revision 0, Crane Inspection, Maintenance and Testing

(2) CPS No. 8106.04, revision 0, Sling Inspection and Testing

(3) CPS No. IMP 8109.01, revision 0, Fuel Transfer System Blind Flange Installation

(4) CPS No. 8110.01, revision 1, Maintenance and Repair of Goulds 3196 Pumps

(5) CPS No. IMP 8117.01S, revision 1, Drywell Head Removal

(6) CPS No. IMP 8117.03, revision 1, Reactor Vessel Head Removal

(7) CPS No. IMP 8117.04S, revision 1, Reactor Vessel Stud Removal and Installation

(8) CPS No. 8160.01S, revision 0, Overhaul of Mechanical Snubbers

(9) CPS No. 8160.02, revision 0, Overhaul of Hydraulic Snubbers

(10) CPS No. 8203.01, revision 0, Inboard Feedwater Check Valve Maintenance

(11) CPS No. 8203.02, revision 0, Outboard Feedwater Check Valve Maintenance

(12) CPS No. 8106.01, revision 0, Handling Heavy Loads

d. Results

Review of the above procedures revealed generic deficiencies in the following categories:

(1) Adherence to CPS No. 1005.01, revision 12, Preparation, Review, and Approval of Station Procedures and Documents.

(a) CPS No. 1005.01, paragraph 8.1.2.9.5, Precautions, states that "general precautions to protect personnel and equipment shall be listed in this section". Contrary to this requirement, seven (7) procedures had precautions listed as "none" and had precautions stated within the procedure body. CPS No. 1005.01 was more restrictive than ANSI N18.7-1976, paragraph 5.3.2(5), Precautions, in that ANSI states, "It may be convenient to specify precautions separately".

This deficiency was resolved by the issuance of a Temporary Change Form. Paragraph 8.1.2.9.5(b) now states, "General precautions to protect personnel and equipment shall be listed in this section or on a work document which is required to be initiated prior to performance of the procedures such as a Maintenance Work Request, CPS No. 1029.01F001."

(b) CPS No. 1005.01, paragraph 8.1.2.9.6, Prerequisites, states that "This section shall contain those independent actions, or procedures which shall be completed prior to the use of the procedure". Contrary to this requirement, seven (7) procedures had prerequisites listed as "none" and prerequisites were stated within the procedure body. CPS No. 1005.01 was more restrictive than ANSI N18.7-1976, paragraph 5.3.2(4) in that ANSI states "Each procedure shall identify those independent actions" etc. and does not specify a specific section.

This deficiency was resolved by the issuance of a Temporary Change Form. Paragraph 8.1.2.9.6(b) now states "Those independent actions or procedures which shall be completed prior to the use of the procedure shall be listed in this section or on a work document, such as CPS No. 1029.01F001, Maintenance Work Request, required to be initiated prior to the performance of the procedure".

(c) CPS No. 1005.01, paragraph 8.1.2.9.7(b), Limitations and Actions, states these actions "shall be specified in this section". Contrary to this requirement, six (6) procedures had "limitations and actions" listed as "none" and were stated within the body of the procedure. CPS No. 1005.01 was more restrictive than ANSI N18.7-1976, paragraph 5.3.2.(6) in that ANSI states "It may be convenient to specify limitations and set points in a separate section" and does not specify a specific section.

This deficiency was resolved by the issuance of a Temporary Change Form. Paragraph 8.1.2.9.7(b) now states "Limitations on the parameters being controlled such as Technical Specifications and appropriate corrective actions to return the parameter to the control band shall be listed in this section or on a work document, such as CPS No. 1029.01F001, Maintenance Work Request, required to be initiated prior to the performance of the procedure."

(d) CPS No. 1005.01, paragraph 8.1.2.9.8(b), Materials and/or Test Equipment, states "Test inspection procedures shall list special tools and equipment, reagents, measuring and

test equipment, materials, etc. required to accomplish the work." Contrary to this requirement, four (4) procedures did not list materials and equipment needed to accomplish the work in this section, but were listed in the body of the procedure.

This deficiency was resolved by the issuance of a Temporary Change Form. Section 8.1.2.9.8(b) now states "Test inspection procedures shall list special tools and equipment, reagents, measuring and test equipment, materials, etc. required to accomplish the work, unless these items are listed on a work document, such as CPS No. 1029.01F001, Maintenance Work Request, required to be initiated prior to the performance of the procedure."

(e) CPS No. 1005.01, paragraph 8.1.2.9.11(b), Final Conditions, states "This section should describe, if applicable, the status that the system/component should be in after concluding the procedure."

This item did not meet the requirements of ANSI N18.7-1976. Paragraph 5.3.5(3), Post Maintenance Check Out and Return to Service. ANSI states "Instructions shall be included, or referenced, for returning the equipment to its normal operating status."

The ANSI requirement was discussed with the applicant and a Temporary Change Form was issued changing the word "should" to "shall" to meet the ANSI requirement.

(2) The inspector reviewed the above listed procedures for technical adequacy and, utilizing the checklist contained in NUREG/CR-1369, revision 1, viewed the procedures as indicators of the quality of the procedure development. The inspector suggested certain procedure characteristics (clarity, specificity, and quantitative acceptance criteria) which, if incorporated into procedures, could improve human performance.

The majority of the procedures reviewed had not been implemented since they contained "laters" and were subject to an independent review.

No items of noncompliance or deviation were noted.

7. Preoperational Test Program Implementation Verification

At periodic intervals during the report period, surveillance tours of selected 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, as follows:

a. The inspector witnessed a portion of the preoperational test of battery charger 1B (reference inspection report 50-461/85-11).

b. The inspector participated in witnessing the reactor vessel cold hydrostatic test (XTP-CH-01 - reference inspection report 50-461/85-10).

No items of noncompliance or deviation were identified.

8. Site Activities Of Interest

a. Reactor Pressure Vessel Cold Hydrostatic Test

The reactor vessel cold hydrostatic test is a 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 was 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 was then reduced to 1375 psig while system piping and components were visually checked for water leakage.

The inspector attended numerous daily briefings and maintained a close contact with IP Startup personnel in order to coordinate Region III inspection and witnessing of the reactor pressurization. In addition, the inspector participated in the Region III witnessing of the cold hydrostatic test on February 7-8, 1985. The results of that inspection are documented in inspection report 50-461/85-10.

b. IP Management Changes

As identified in inspection report 50-461/85-05, the IP Supervisor, Plant Protection position was vacant. The applicant has filled that position during this report period. The applicant is actively pursuing qualified applicants for the power plant manager position.

c. Baldwin Associates Cease Construction Order

The applicant's contractor, Baldwin Associates, ordered the Automatic Sprinkler Company, the site fire protection contractor,

to cease all Clinton site installation/revision activities on February 20, 1985. This action was taken as a result of IP audit findings documented in IP QA audit report No. QA 6-85-09. The order was rescinded on February 26, 1985, following implementation of certain corrective actions and IPQA review of the significance of other audit findings.

d. Gould Molded Case Circuit Breakers

The resident inspector provided the applicant with a copy of a construction deficiency report issued by Public Service of New Hampshire (PSNH) at the request of Region III. The deficiency report concerned Gould Molded Case Circuit Breakers used at the Seabrook Station. The applicant stated that they would review the matter contained in the PSNH report for applicability to the Clinton project. This matter is open pending followup inspection by Region III. Open item (461/85-12-04).

9. 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. Two unresolved items disclosed during this inspection are discussed in paragraphs 2.b and 5.c(2).

10. Open Items

Open 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. Two open items disclosed during this inspection are discussed in paragraphs 5.c(3) and 8.d.

11. Exit Meetings

The inspectors met with applicant representatives (denoted in paragraph 1) throughout the inspection and at the conclusion of the inspection on March 11, 1985. The inspectors summarized the scope and findings of the inspection activities. 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 applicant did not identify any such documents/processes as proprietary. The applicant acknowledged the inspection findings.

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

Inspector(s)	Date
Key	2-22-85
Love, Martin	3-1-85