

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-454/85030

Docket No. 50-454

License No.: NPF-37

Licensee: Commonwealth Edison Company
Post Office Box 767
Chicago, IL 60690

Facility Name: Byron Station, Unit 1

Inspection at: Byron Station, Byron, IL

Inspection Conducted: July 2 through August 1, 1985

Inspectors: J. M. Hinds, Jr.

P. G. Brochman

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Approved By: *RFWannick for*
W. L. Forney, Chief
Reactor Projects Section 1A

8/19/85
Date

Inspection Summary

Inspection on July 2 through August 1, 1985 (Report No. 50-454/85030(DRP))

Areas Inspected: Routine, unannounced safety inspection by the resident inspectors and a regional inspector of licensee action on previous inspection findings; LERs; surveillance; maintenance; operational safety; startup testing; onsite events; allegation investigation; management meetings and other activities. The inspection consisted of 154 inspector-hours onsite by four NRC inspectors including 39 inspector-hours during off-shifts.

Results: Of the seven areas inspected, no violations or deviations were identified in six areas; one violation was identified in the remaining area (failure to follow operating and administrative procedures - Paragraph 3.b). This violation concerns the improper operation of an Emergency Core Cooling System (ECCS) and a Reactivity Control Component. The failure to follow required operating and administrative procedures which causes the inoperability of an ECCS and a Reactivity Control Component is a more than minor safety concern which had the potential to affect the public's health and safety.

DETAILS

1. Persons Contacted

Commonwealth Edison Company

- ²C. Reed, Vice President Nuclear Operations
- ^{1,2}T. Maiman, Manager of Projects
- ²T. McIntire, Division Superintendent
- ^{1,2}V. Schlosser, Project Manager
- ^{1,2}R. Querio, Station Superintendent
- ²D. Farrar, Nuclear Licensing
- ^{2,3}R. Ward, Assistant Superintendent, Administrative and Support Services
- ¹R. Pleniewicz, Assistant Superintendent, Operating
- ¹L. Sues, Assistant Superintendent, Maintenance
- ³W. Burkamper, Quality Assurance Supervisor (Operations)
- ^{1,2}D. St. Clair, Technical Staff Supervisor
- ³R. Flahive, Assistant Technical Staff Supervisor
- ²J. VanLaere, Rad-Chem Supervisor
- ²R. Chrzanowski, Security Administrator
- ^{2,3}T. Joyce, Operating Engineer
- ²P. Johnson, Master Instrument Mechanic
- ^{2,3}A. Chernick, Compliance Supervisor
- ²B. Pirnat, Compliance Group
- ²M. Snow, Compliance Group
- ²K. Yates, Onsite Nuclear Safety Group
- ²G. Olson, Operating Quality Assurance
- ¹F. Hornbeak, U-2 Testing Supervisor
- ^{1,2,3}J. Langan, Compliance Group

The inspectors also contacted and interviewed other licensee and contractor personnel during the course of this inspection.

- ¹ Denotes those present during the management meeting on July 2, 1985.
- ² Denotes those present during the management meeting on July 30, 1985.
- ³ Denotes those present during the exit interview on August 1, 1985.

2. Action on Previous Inspection Findings (92701 and 92702)

- a. (Closed) Open Item (454/84040-06(DRS)): Lack of a system to ensure that audits of technical specification requirements are conducted. The inspector reviewed the matrix which was prepared by Quality Assurance to ensure audit coverage of Technical Specification requirements. The inspector compared this matrix randomly to specific Technical Specifications and found no inconsistencies.
- b. (Closed) Violation (454/85002-01(DRP)): Licensee had not conducted the analyses necessary to identify acceptable bus voltages for the expected full load and minimum load conditions at offsite power source voltages. The inspector reviewed the licensee's response

and determined that the licensee performed the required analyses and completed evaluations of the results on January 26, 1985. The licensee determined the results to be acceptable. The inspector reviewed the results and discussed them with licensee personnel to obtain clarification of the bases for assumptions used in the analyses. Based upon the results of the analyses and information provided by the licensee during these discussions, the inspector had no further concerns regarding the acceptability of the test results.

- c. (Closed) Violation (454/85002-02(DRP)): Both ECCS subsystems were rendered inoperable as a result of a procedural violation involving valve alignment. Following restoration of the system valve alignment to restore the 1B SI train to operable status on January 11, 1985, the licensee immediately initiated a temporary procedure change to BOP SI-9, "Raising Accumulator Level With SI Pumps at All RCS Pressures" to incorporate Technical Specification Limiting Conditions for Operation (LCO) violation awareness. This procedure was subsequently permanently revised to specify the use of either Safety Injection (SI) pump subject to plant conditions to prevent a LCO violation. The licensee issued Daily Order Memorandums to remind shift personnel of the importance of procedural adherence and that changes to an operating procedure must be documented by a Temporary Change Request or a permanent procedure revision and re-emphasized the subjects of these Daily Orders to all department heads during station meetings held on January 17 and 18, 1985. In addition, Senior Reactor Operators have reviewed all operating procedures involving ECCS systems, including support systems, to determine which procedures could impact LCOs. The affected procedures have been revised.
- d. (Closed) Violation (454/85002-03(DRP)): A Justification for Interim Operation (JIO) fails to address the quantity of unmodified relays or the extended periods of time needed to support required startup testing. Following the replacement of the unmodified cards with modified cards on February 5, 1985, the licensee submitted a revision to the JIO on March 5, 1985. This revision identified the number of Resistance Temperature Detectors (RTD) channels affected by the use of unmodified cards, the startup test requirements and power level plateaus, and the number of hours the unmodified cards would be installed in the RTD channels in order to record the required sets of temperature data. The revision also stated that in the event that any other additional use of the unmodified cards was required prior to receipt of the redesigned NTC cards, appropriate notification and approval would be obtained from the NRC. This revised JIO was approved in an NCR letter dated March 8, 1985. Additional measures taken by the licensee included familiarizing station personnel (ones who review and approve 10 CFR 50.59 evaluations) with the process of JIO review and approval and providing a listing, including a word description of the contents, of the current JIOs. Further, a checklist was incorporated into the Post Test Review Board process to review JIOs against Test Change Requests (TCRs) to determine potential impact or conflict. An additional

checklist was incorporated in the 10 CFR 50.59 review administrative procedure to ensure reviewers of the safety evaluation consider JIOs when evaluating proposed changes. Finally, a station procedure and a station letter were issued to all personnel involved in the 10 CFR 50.59 review process providing guidance on how to perform a safety evaluation and specific requirements for a 10 CFR 50.59 review. The above additional measures were completed as of May 1, 1985.

- e. (Closed) Violation (454/85002-04(DRP)): Changes made to the facility which involved an unreviewed safety question without prior commission approval. This item deals with the violation of Technical Specification (TS) 3.3.1 which requires the Over Temperature Delta T (OTDT) and Over Power Delta T (OPDT) channels be operable in Mode 2. With the installation of the unmodified NTC cards during Mode 2 between February 2 and 5, 1985, the OTDT and OPDT channels were not operable as required by TS 3.3.1. Based on the licensee's interpretation of the original JIO, the temporary exemption of GDC-2 included in the Operating License allowed for compliance with TS 3.3.1. On February 5, 1985, the licensee assumed a more conservative position and replaced the unmodified NTC cards with the modified version. In addition, the revised JIO submitted on March 5, 1985, more clearly defined the temporary use of the unmodified NTC cards for startup testing. The provisions of the revised JIO, approved by the NRC on March 8, 1985, superseded the TS operability requirements during the short periods when the unmodified NTC cards are allowed to be in use during the startup test program. Furthermore, the NRC JIO approval letter included a requirement that the operators be given special precaution to alert them to the possibility that the NTC channels might not function as expected in a seismic event when the unmodified NTC cards were installed for the purpose of completing the startup test program.
- f. (Closed) Unresolved Item (454/85025-04(DRP)): Pending inspector's receipt and review of interview team report on alleged drug/alcohol use. The inspector reviewed the report, issued by the CECO Nuclear Director June 26, 1985, on the investigation of anonymous allegations concerning actions of contractor personnel at the Byron Station. The report describes the action plan and implementation schedule developed to investigate these allegations together with the results of the interviews and narcotics detection dog team searches. Based on the responses obtained from the individuals during the interviews and the failure to find any illegal drugs, substances, or paraphernalia during the searches, the licensee was unable to substantiate these allegations. Therefore, based on the licensee's findings and observations made by the inspector this allegation is considered closed.

3. Licensee Event Report (LER) Followup (90712 and 92700)

- a. (Closed) LERs (454/84001-LL; 454/84002-LL; 454/84007-LL; 454/84015-LL; 454/85027-LL; 454/85061-LL; 454/85064-LL): An in-office review was conducted for the following LERs to determine that the reporting requirements were fulfilled, immediate corrective

action was accomplished, and corrective action to prevent recurrence had been accomplished in accordance with Technical Specifications.

<u>LER No.</u>	<u>Title</u>
454/84001-01	Failure of Security to Patrol Fire Watch for Penetration Seals
454/84002-01	Failure to Complete the Entry of Data on a Shift Surveillance of the Residual Heat Removal System
454/84007-01	Samples Required by Limiting Condition for Operation for Vent Stacks Not Obtained
454/84015-01	Failure to Take Sample Required by Technical Specifications
454/85027-02	Failure of MSIV to Close on MS Isolation Signal
454/85061	Reactor Trip Due to Feed Pump Trip
454/85064	Unit 1 Containment Ventilation Isolation

The event described in LER 454/85061 is discussed in Inspection Report (454/85025(DRP)).

No violations or deviations were identified.

- b. (Closed) LERs (454/85062-LL): Through direct observation, discussions with licensee personnel, and review of records the following LERs were reviewed to determine that the reporting requirements were fulfilled, immediate corrective action was accomplished, and corrective action to prevent recurrence had been accomplished in accordance with Technical Specifications.

<u>LER No.</u>	<u>Title</u>
454/85062	Over Temperature Delta T Reactor Trip/Loss Two Circ Water Pumps

LER 454/85062 is discussed in Paragraph 8.b.

No violations or deviations were identified.

- c. (Closed) LER (454/85060-LL): This LER described an event on June 16, 1985 while in Mode 1. The Refueling Water Storage Tank (RWST) temperature was discovered by licensee personnel at 0439 to be greater than 100°F. Technical Specifications 3.1.2.6.b(4) and 3.5.4.d requires that RWST temperature be maintained at less

than 100°F. The licensee initiated actions to reduce RWST temperature. At 0539 with temperature still greater than 100°F, an Unusual Event was declared and a plant shutdown initiated. By 0822 the RWST temperature had been reduced to less than 100°F, the Unusual Event was terminated, and the unit returned to its previous power level.

The licensee's investigation determined that the RWST Heating Pump was being operated in the manual mode and there is no pump trip on high temperature when in manual. The LER describes the cause of the problem as failure of the operators to closely monitor RWST temperature with the Heating Pump in manual. The inspector reviewed the procedures for operating the Heating Pump, Byron Operating Procedure BOP SI-17, "Placing the Refueling Water Storage Tank Heating Pump and Heater in Service" and BOP SI-18, "Removing the Refueling Water Storage Tank Heating Pump and Heater from Service", and identified that BOP SI-18, Paragraph F.1 requires that the RWST heating pump be stopped when RWST temperature is greater than 52°F. Failure to follow written procedures by operating the RWST Heating Pump with RWST temperature greater than 52°F is an example of a violation (454/85030-01a(DRP)).

BOP SI-17, Paragraph F.1 requires that the control switch for the RWST Heating Pump be verified or placed in AUTO to start the system. Byron Administrative Procedure BAP 300-22, "Conduct of Operations," Paragraph C.2.4.b requires that interlocking and other safety equipment shall be kept in service at all times. Paragraph C.4.3.c requires that equipment shall not be operated in a manner to intentionally avoid the proper functioning of its protective equipment. Failure to follow written procedures by operating the RWST Heating Pump in manual with protective devices defeated is an example of a violation (454/85030-01b(DRP)).

During discussions with the licensee's staff, the inspector raised several concerns regarding the LER; whether the personnel error was cognitive; assessment of the safety consequences for the reactivity control system; corrective actions taken to reduce similar events; what was the temperature of the RWST when the condition was discovered; and whether the error was contrary to an approved procedure or the activity was not covered by an approved procedure. Followup of these concerns will be tracked as an unresolved item (454/85030-02(DRP)).

4. Monthly Surveillance Observation (5177)

The inspector observed technical specifications required surveillance testing on the Nuclear Instruments and a Centrifugal Charging Pump and verified that testing was performed in accordance with adequate procedures, that test instrumentation was calibrated, that limiting conditions for operation were met, that removal and restoration of the affected components were accomplished, that test results conformed with technical specifications and procedure requirements and were reviewed by personnel other than the individual directing the test, and that any deficiencies identified during the testing were properly reviewed and resolved by appropriate management personnel.

No violations or deviations were identified.

5. Monthly Maintenance Observation (62703)

Station maintenance activities of safety related systems and components listed below were observed/reviewed to ascertain that they were conducted in accordance with approved procedures, regulatory guides and industry codes or standards and in conformance with Technical Specifications.

The following items were considered during this review: the Limiting Conditions for Operation were met while components or systems were removed from service; approvals were obtained prior to initiating the work; activities were accomplished using approved procedures and were inspected as applicable; functional testing and/or calibrations were performed prior to returning components or systems to service; quality control records were maintained; activities were accomplished by qualified personnel; parts and materials used were properly certified; radiological controls were implemented; and, fire prevention controls were implemented. Work requests were reviewed to determine status of outstanding jobs and to assure that priority is assigned to safety related equipment maintenance which may affect system performance.

The following maintenance activities were observed/reviewed:

Troubleshooting of Control Rod P-8

Following completion of maintenance on the Control Rod P-8, the inspector verified that these systems had been returned to service properly.

No violations or deviations were identified.

6. Operational Safety Verification and Engineered Safety Features System Walkdown (71707 and 71710)

The inspectors observed control room operation, reviewed applicable logs and conducted discussions with control room operators during the month of July 1985. During these discussions and observations, the inspectors ascertained that the operators were alert, cognizant of plant conditions, attentive to changes in those conditions, and took prompt action when appropriate. The inspectors verified the operability of selected emergency systems, reviewed tagout records and verified proper return to service of affected components. Tours of the auxiliary, turbine and rad-waste buildings were conducted to observe plant equipment conditions, including potential fire hazards, fluid leaks and excessive vibration and to verify that maintenance requests had been initiated for equipment in need of maintenance.

The inspectors verified by observation and direct interviews that the physical security plan was being implemented in accordance with the station security plan.

The inspector observed plant housekeeping/cleanliness conditions and verified implementation of radiation protection controls. During the month of July, the inspector walked down the accessible portions of the Component Cooling and Chemical and Volume Control systems to verify operability. These reviews and observations were conducted to verify that facility operations were in accordance with the requirements established under technical specifications, 10 CFR and administrative procedures.

No violations or deviations were identified.

7. Startup Test Witnessing and Observation (72302)

The inspectors witnessed performance of portions of the following startup test procedures in order to verify that testing was conducted in accordance with the operating license and procedural requirements, test data was properly recorded and performance by licensee personnel conducting the tests demonstrated an understanding of assigned duties and responsibilities.

2.52.38 Full Power Plant Trip

2.64.39 Large Load Reduction

A reactor trip which occurred during the performance of test 2.64.39 is discussed in Paragraph 8.d.

No violations or deviations were identified.

8. Onsite Followup of Events at Operating Reactors (93702)

a. General

The inspector performed onsite followup activities for events which occurred during June and July 1985. This followup included reviews of operating logs, procedures, Deviation Reports, Licensee Event Reports (where available) and interviews with licensee personnel. For each event, the inspector developed a chronology, reviewed the functioning of safety systems required by plant conditions, reviewed licensee actions to verify consistency with procedures, license conditions and the nature of the event. Additionally the inspector verified that licensee investigation had identified root causes of equipment malfunctions and/or personnel error and had taken appropriate corrective actions prior to plant restart. Details of the events and licensee corrective actions developed through inspector followup are provided in Paragraphs b through e below.

b. Reactor Trip on Overtemperature Delta-T (OTDT) on June 27, 1985 (LER 85062)

While in Mode 1, with reactor power at 99%, the reactor tripped on OTDT. At 1545 the 1A Circulating Water (CW) pump tripped and licensee personnel manually ran back the turbine to 60% due to

falling condenser vacuum. Three minutes later the 1B CW pump tripped and the turbine was run back to 50%. The falling condenser vacuum activated the the condenser low vacuum interlock (C-9), which prevented steam dump operation. Following the loss of the steam dumps Reactor Coolant System Average Temperature (T_{ave}) and Pressurizer Pressure (P_{DZR}) rose rapidly until P_{DZR} reached the pressurizer Power Operated Relief Valve (PORV) setpoint. With pressure being held constant by the open PORV and T_{ave} still rising, the OTDT setpoint reduced until a reactor trip occurred.

The licensee's investigation determined that the 1A CW pump trip was caused by a failed auto-transformer in the motor excitation circuit. The heat produced by the failed transformer damaged the excitation circuit for the 1B CW pump, which then tripped. The excitation circuits for all 3 CW pumps were located in the same control cabinet.

The licensee's corrective action included replacing the damaged components, relocating each pumps' excitation circuit to separate control cabinets and cleaning the condenser water boxes to improve the flow through the condenser.

c. Reactor Trip on Turbine Trip on July 8, 1985

While in Mode 1, with reactor power at 8%, the reactor tripped due to a turbine trip. Following turbine synchronization to grid, control rods were being withdrawn to maintain T_{ave} when Control Bank "C" rod "P-8" began to move abnormally (ratcheting in). This was the second occurrence at this behavior. With T_{ave} falling due to rod P-8 being inserted, the licensee decided to take the turbine off-line. With reactor power less than 10% and the turbine at 54 MW, licensee personnel believed that the Low Power Reactor Trips Block "P-7" would be met and the turbine could be tripped without tripping the reactor. However, when the turbine was manually tripped impulse pressure rose above the P-13 setpoint of 10% power and reset the P-7 block resulting in a reactor trip.

The licensee investigation determined that the impulse pressure channels were scaled too high making it extremely difficult to shut down the unit without tripping the reactor. The licensee also troubleshooted Rod P-8 but a subsequent reactor trip on July 13 indicated that the problem with Rod P-8 had not been resolved.

The licensee's corrective action included recalibrating the impulse channels. A discussion of the licensee's corrective action for rod P-8 is contained in Inspection Report (454/85033(DRS)). This event will be reviewed in a subsequent report after the LER is issued.

d. Reactor Trip on OTDT on July 12, 1985

While in Mode 1, with reactor power at 98%, the reactor tripped on OTDT during performance of a 50% load rejection startup test. During this test turbine load is reduced by 588 MW at a rate of 2350 MW per

minute. Approximately 1 minute into the transient the plant tripped on OTDT. The licensee had previously completed this test satisfactorily from 75% to 25% power.

The licensee's investigation determined that the actual plant parameters had reached the OTDT setpoint and the setpoint was set to the correct value. The licensee verified with the NSSS supplier that the setpoint value was correct and determined that the steam dumps may not have opened as fast as they should have.

The licensee's corrective action included replacing the control air lines to the steam dump valves with larger size tubing, installing air accumulators near the steam dump valves, and evaluating whether the plant can actually handle this transient, at this rate, without tripping. This action will be reviewed in a subsequent report after the LER is issued.

e. Reactor Trip on Power Range Negative Rate High on July 13, 1985

While in Mode 1, with reactor power at 11%, the reactor tripped on Power Range Nuclear Instrument Negative Rate High. The unit was at 30% power when control rod P-8 began moving abnormally (ratcheting in). This was the third occurrence of this behavior. Licensee personnel began reducing power in preparation to taking the unit off-line. At 11% power, several structures on the site were hit by lightning. This lightning strike caused a loss of power to three control rods in shutdown Bank "A" and they dropped into the core. This resulted in a reactor trip on Power Range Negative Rate High. The licensee's investigation determined that the lightning strike appeared to have struck the containment building, the meteorological tower and the switchyard. Forty-three separate instrumentation channels were damaged, including reactor protection system, engineered safeguards feature system, accident monitoring, security and meteorological. The licensee determined that a large number of these instrument channels passed through common containment penetrations. The lightning protection for the containment consisted of lightning rods on the exterior top of the containment which were tied, with reinforcing steel, to the steel containment steel liner. This liner was then tied to the station ground grid at the base of containment. The licensee believed that the current path taken by lightning was from the lightning rod to the ground grid, passing through several containment electrical penetrations, thereby inducing high voltages in the low voltage instrumentation. The damage to the security and meteorological channels was caused by a change in the potential level of their grounds verses the rest of the ground grid. The abnormal behavior of control rod "P-8" is discussed further in a special inspection report (454/85033(DRS)).

The licensee's corrective action included repair or replacement of all damaged equipment, modification of the lightning protection system for the containment and testing of undamaged equipment that

ran through the same containment penetration or adjacent penetrations. As a result of this testing the licensee did not identify any additional equipment as being damaged. The licensee is evaluating the lightning protection system for other station structures. The problem with rod P-8 was determined to be an improperly made electrical connection on the reactor vessel head.

No violations or deviations were identified.

9. Allegations Concerning Control of Rebar Cutting and Control of Quality Records by Hatfield Electric Company (HECo) (RIII-85-A-0060) (99014)

- a. Allegation 1: Quality control inspection documentation cannot be found for many items. When these exceptions are identified to CECO at the time of equipment turnover, the items are accepted and the quality control inspection documentation is not reestablished.

Findings: When this allegation was received by the inspector on June 3, 1985, the inspector asked the alleger for specific instances where the alleged practice had occurred including affected equipment identification, dates of occurrence and any other details which would substantiate the allegation. The alleger stated that he could not recall any such information.

Due to the non-specific nature of this allegation, the inspector requested and received a historical overview of HECo's system of quality records. This overview included: a listing of all required record types by HECo form number; a breakdown as to which records required supporting inspections to be performed prior to record closeout along with identification of supporting inspections and; a chronology, broken down by HECo procedure, defining the scope of various inspection types and the manner in which they were documented.

Based upon this overview the inspector determined that inspection and documentation requirements had evolved considerably over time since HECo began work on the Byron project in 1976. Therefore one would not expect that current documentation requirements would be met for all items. For example, conduit and conduit support documentation had changed both in form and scope. Originally, inspection was done on a sampling basis by drawing area and was documented on different inspection report forms than those which are currently in use and required for 100% of current conduit and conduit support installations. Both methods were part of a qualified quality assurance program.

These variations, over time, were acknowledged when defining those quality records required to be retained and turned over to CECO upon

completion of construction. The primary source for determining which records had to be accounted for at the time of turnover were the HEC0 inspection report logs which contained unique, sequentially issued numbers for each inspection type.

The inspector examined the document turnover process to ascertain how required documents were accounted for by the licensee, how missing records were dispositioned and, the current status of document turnover. Specifically, the inspector interviewed licensee personnel and was informed that the CEC0 QA organization performed a review of specification, codes and standards to determine what documentation was required. This information was then reconciled with HEC0's system of quality records to identify record types and quantity of each to be turned over. Criteria for record completeness were also developed by the licensee and provided to HEC0.

HEC0 submitted records to the licensee in a number of transmittals. Each transmittal coversheet provided an index of sequentially listed inspection report numbers included in the transmittal. The licensee reviewed each transmittal to verify that all records identified on the index were included. The licensee also reviewed a 10% sample of the records included in the transmittal to verify document completeness in accordance with the previously established criteria.

Records which were not immediately retrievable for inclusion in a particular transmittal were identified by HEC0 as "exceptions." The exceptions were being tracked by HEC0 until either the document was subsequently found or until completion of record turnover. Those exceptions which remained upon completion of document turnover were to be converted to Nonconformance Reports (NCRs), evaluated and dispositioned in accordance with HEC0 and licensee procedures.

In response to inspector questions concerning the handling of identified exceptions, the licensee revised Site Quality Instruction (SQI)-22, "Review and Turnover of On-Site Documentation" on June 27, 1985. This revision expanded the scope of the licensee's documentation review to include independent tracking and followup of exceptions. This expanded review provided additional assurance that upon completion of turnover, all records unaccounted for will be identified and subject to appropriate disposition.

At the time of this inspection, no HEC0 quality records had undergone final acceptance by the licensee. Acceptance by the licensee is not required for acceptance of the work or operability. HEC0 review and transmittal of records had occurred and exceptions had been identified. Some exceptions had been dispositioned by subsequent retrieval of the records. Remaining exceptions had not yet been dispositioned using the procedures. Licensee procedures have been reviewed and are considered adequate for the handling of HEC0 quality records.

This allegation is considered closed.

- b. Allegation: Conduit installation reports (CIRs) do not exist for certain installations. HEC Co QC had requested that production establish this documentation but that production refused to do so.

Findings: CIRs are a production document, not a quality control record, which were not required by procedure until March 15, 1984, when HEC Co Procedure No. 20, "Class 1 Exposed Conduit Installation," Revision 14 was issued. Conduit installation reports (HEC Co Form No. HP 204) were generated by HEC Co production upon completion of construction and after preliminary inspections of the installations. CIRs were a prerequisite for cable installation in conduit runs and served as a means of informing the QC organization that the conduit runs were ready for formal QC inspection. QC inspections could thus take place before or after cable installation. For conduit installations completed prior to March 15, 1984, and for which cables had yet to be installed, the current procedure was invoked requiring generation of CIRs as a prerequisite to cable installation.

Prior to March 15, 1984, formal QC inspections of conduit runs were required to be complete and acceptable as a prerequisite to cable installation. The absence of CIRs for conduit installed prior to this date did not therefore adversely impact the scheduling and performance of QC inspections.

The portion of the allegation concerning production's refusal to establish CIRs did not detail the circumstances surrounding this refusal. The inspector interviewed HEC Co QA/QC management and supervisory inspection personnel to determine if they were aware of any of the alleged instances. They replied that they were not but offered that perhaps there were instances where QC inspectors in the field had asked craft personnel to perform certain tasks and were told that they could not comply unless so instructed by production supervision. The normal path for resolving any such conflicts would be to bring the matters to the attention of QA/QC supervisory and management personnel.

This allegation is considered closed.

- c. Allegation: HEC Co procedure No. 21, "Core Hole Requests and Inspection" requires that where drawings indicate that rebar cutting is not allowed, and where rebar is cut, a nonconformance report (NCR) be generated. QC inspectors are restrained from writing NCRs in many such instances.

Findings: Based upon discussions with the alleged following receipt of this allegation the inspector learned that the allegation was based upon second hand information. The alleged could not provide

details as to specific instances where the alleged practice had occurred. The alleged also would or could not identify the individuals directly involved in the alleged practice.

The control of rebar cutting during core hole drilling concrete expansion anchor installations was previously reviewed and documented in NRC inspection report (455/85006(DRP)). This review included HECO and other contractors. The controls were found to be adequate, however, implementation was subject to only a limited review.

Based upon the lack of specific information provided in support of this allegation, the inspector reviewed approximately 175 Facility Change Requests specifying core holes to be drilled and corresponding Cored Hole Reports (CHRs) which documented in-process QC inspections of cored holes by HECO for all cored holes drilled since January 1, 1985. At the time of inspection the QC inspectors annotated the CHRs to indicate whether or not rebar cutting was allowed. All CHRs reviewed were correctly annotated in this regard. The QC inspectors also indicated whether or not rebar cutting had occurred. In all instances where rebar cutting had occurred and was not allowed, an NCR was issued and the NCR number specified on the CHR.

This allegation is considered closed.

No violations or deviations were identified.

10. Management Meetings (30702)

On July 2 and July 30, 1985, Mr. W. L. Forney, Chief, Reactor Projects Section 1A, and the NRC resident inspector staff met with licensee management and supervisory personnel denoted in Paragraph 1 of this report. These meetings were held to assess overall facility status, plant operations and to discuss agenda items which had developed since issuance of the operating license.

11. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, violations, or deviations. An unresolved item disclosed during the inspection is discussed in Paragraph 3.c.

12. Exit interview (30703)

The inspectors met with licensee representatives denoted in Paragraph 1 at the conclusion of the inspection on August 1, 1985. The inspectors summarized the purpose and scope of the inspection and the findings. The inspectors also discussed the likely informational content of the inspection report with regard to documents or processes reviewed by the inspectors during the inspection. The licensee did not identify any such documents/processes as proprietary.