

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-454/84-41(DRS)

Docket No. 50-454

License No. CPPR-130

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

Facility Name: Byron Station, Unit 1

Inspection At: Byron, Illinois

Inspection Conducted: June 11, June 13-15, June 19-22, June 26-29, July 2-3,
July 5-6 and July 13, 1984

Inspectors: *MC Choules*
N. C. Choules

8/10/84
Date

MC Choules for
M. M. Moser

8/10/84
Date

Approved By: *FCHawkins*
F. C. Hawkins, Chief
Quality Assurance Programs Section

8/10/84
Date

Inspection Summary

Inspection on June 11, 13-15, 19-22, 26-29; July 2, 3, 5, 6, and 13, 1984
(Report No. 50-454/84-41(DRS))

Areas Inspected: Routine, announced inspection by regional inspectors of the maintenance program; design change program, surveillance test and calibration control program; test and experiments program; and measuring and test equipment program. The inspection involved 200 inspector-hours onsite, four inspector-hours at Operations Analysis Department (OAD) in Maywood, Illinois, and ten inspector-hours at the corporate headquarters by two inspectors.

Results: No items of noncompliance were identified.

DETAILS

1. Persons Contacted

Commonwealth Edison Company (CECo)

- *R. E. Querio, Station Superintendent
- *R. C. Ward, Assistant Superintendent Administration and Support Services
- *L. A. Sues, Assistant Superintendent Maintenance
- *G. K. Schwartz, Operating Engineer
- *D. E. St. Clair, Technical Staff Supervisor
- *T. E. Didier, Master Instrument Mechanic
- *R. D. Branson, Master Electrician
- *H. R. Erickson, Master Mechanic
- ** *M. Mudge, Maintenance Staff
- *A. Chernick, Quality Control Supervisor
- *D. A. Sible, Quality Assurance Engineer
- *R. G. Gruber, Quality Assurance Engineer
- ** *R. Poche, Licensing Coordinator
- *D. Ruehlmann, General Instrumentation Supervisor, OAD
- *W. H. Koester, Station Nuclear Design Engineer
- *J. Bitel, Director Quality Assurance for Operations
- ** *R. Rhodes, Maintenance Staff

USNRC

- *J. M. Hinds, Senior Resident Inspector
- K. A. Connaughton, Resident Inspector

Other personnel were contacted as a matter of routine during the inspection.

*Denotes those attending the exit interview on July 6, 1984.

**Denotes those attending a followup meeting on July 13, 1984.

2. Program Areas Inspected

a. Design Change and Modification Program

The inspector reviewed the licensee's design change and modification program to ascertain whether the QA program relating to design change activities had been established in accordance with the licensee's Quality Assurance Program; 10 CFR 50, Appendix B; the Technical Specifications and ANSI N45.2.11-1974.

(1) Documents Reviewed

(a) Byron Administrative Procedures

- 1 BAP 1650-1, "Modification Processing Procedure,"
Revision 1 (Draft) and Revision 1

- 2 BAP 1600-1, "Initiating and Processing a Nuclear Work Request," Revision 3 (Draft)
- 3 BAP 1340-5, "Issuance of Documents that are Controlled," Revision 5
- 4 BAP 1340-3, "Station Drawing Change Control," Revisions 3 and 4
- 5 BAP 400-11, "Preparation of Maint/Mod Procedures," Revision 0, (Draft)
- 6 BAP 400-10, "Preparation of Station Traveler," Revision 0 (Draft)
- 7 BAP 400-9, "Maintenance Alternations," Revision 1
- 8 BAP 400-3, "Setpoint Changes," Revision 2
- 9 BAP 300-5, "Temporary Alteration," Revision 7

(b) Station Nuclear Engineering Department/Project Engineering (SNED/PE) Procedures

- 1 Q.1, "Safety Related ASME Code Design Specifications," Revision 2
- 2 Q.6, "Modifications Originated by Station Technical Staff," Revision 7
- 3 Q.7, "Modifications Initiated by SNED," Revision 1
- 4 Q.8, "Field Change Request," Revision 6
- 5 Q.9, "Design Change Notice," Revision 2
- 6 Q.12, "Classification and Listing of Safety-Related Items and ASME Section III Components," Revision 5
- 7 Q.16, "Drawing Change Request," Revision 3
- 8 Q.51, "Design Document Preparation and Review," Revision 0 (Draft)

(c) Quality Assurance Manual Quality Procedures (QP)

- 1 QP 3-1, "Design Control"
- 2 QP 3-2, "Design Change Control"
- 3 QP 3-51, "Design Control For Operations, Plant Modifications"

(2) Result of Inspection

- (a) QP 3-51 was the Quality Assurance Manual procedure which provided the generic instructions for all operating Commonwealth Edison plants regarding the control of design changes (modifications). The procedure which implemented the instruction for the Station was BAP 1650-1. When the inspector initiated the inspection, a draft BAP 1650-1 procedure had been prepared. Review of the draft procedure indicated that the procedure steps were very brief and provided less guidance in many instances than was provided in QP3-51. During discussions with licensee representatives, the inspector stated that BAP 1650-1 should contain both the details in QP3-51 and additional requirements unique to the Station so that personnel would only have to refer to one procedure. During this inspection, the licensee revised and approved the procedure to

include more details. The inspector reviewed the revised procedure and has no further questions regarding this matter.

- (b) Review of the Station's drawing control procedure BAP 1340-3, Revision 3 revealed the following concerns:

- 1 The procedure did not describe how drawing revisions were handled between initiation and completion of a modification. There was no assurance that if two engineers were independently developing modifications which affected the same drawing that they would be aware of other modifications affecting the drawing.
- 2 The procedure required the stamping of all existing drawing aperture cards and control room critical drawings as "Revision Pending." The cards and drawings were stamped upon receipt of construction drawings for a modification rather than at the time of the installation of the modification. There could be considerable time delay between receipt of drawings and initiation of a modification. Stamping the drawings too far ahead of installing the modification could be confusing to the drawing users.

During this inspection, the licensee revised and approved BAP 1340-3 to address the above concerns. The inspector reviewed the revised procedure and has no further questions.

- (c) The licensee had not specified appropriate guidelines for reporting modifications to the NRC as required by 10 CFR 50.59. Neither had the licensee established appropriate guidance to assure the review of modifications by the Offsite Review and Investigative Function in accordance with Technical Specification, Section 6.5. The licensee agreed to address these concerns. This is considered open pending further review during a subsequent inspection (454/84-41-01).
- (d) The inspectors reviewed the SNED/PE procedures related to modifications and spent one day at the corporate offices reviewing the modification program with SNED and QA personnel. All safety-related modifications are transmitted to SNED for development. SNED then sends the majority of the modifications to architect/engineering firms for development. The procedures have been constructed accordingly.

SNED has recognized that their procedures are not entirely adequate to assume responsibility for the development of the remaining modifications. Accordingly, they have prepared a new draft procedure (Q.51) to cover the preparation and review of design documents. Review of

this draft procedure indicated that the following ANSI N45.2.11 requirements were not completely addressed in the procedure:

- 1 No requirement existed to review the modifications for all of the design input listed in Section 3.2 of ANSI N45.2.11-1974. Provisions for review of some of the design input are provided for in other procedures, but a complete list in Section 3.2 had not been developed.
- 2 All of the items listed in Section 6.3.1 of ANSI N45.2.11 regarding design review were not included in the procedure.

During this inspection, the licensee revised the procedure to include the above. The inspector reviewed the revised procedure and has no further questions.

No items of noncompliance or deviations were identified.

b. Tests and Experiments Program

The licensee had not developed a QA program related to the control of tests and experiments as defined in the Technical Specification and 10 CFR 50.59. The licensee stated that a program would be developed. This is considered to be an open item pending further review during a subsequent inspection (454/84-41-02).

c. Surveillance Testing and Calibration Control

The inspector reviewed the program for the control and evaluation of surveillance testing, calibration, and inspection as required by Section 4 of the Technical Specifications and Inservice Inspection of Pumps and Valves as described in 10 CFR 50.55a(g). The calibration of safety-related instrumentation which is not specifically controlled by the Technical Specifications was also reviewed. The following items regarding the surveillance testing program and the calibration of safety-related instrumentation were considered during this review: master schedules for surveillance testing, calibration, and inservice testing had been established; responsibility had been assigned for the maintenance of the master surveillance schedule; formal requirements for the conduct of surveillance test, calibrations, and inspections in accordance with approved procedures had been established; responsibilities and definition of methods for the review and evaluation of surveillance test and calibration data had been established; responsibility to assure that required schedules were satisfied had been established; and calibration requirements for nontechnical specification safety-related instruments had been established.

(1) Documents Reviewed

(a) Byron Administrative Procedures

- 1 BAP 400-7, "Preventative Maintenance Program,"
Revision 0 and 1
- 2 BAP 400-9, "Maintenance Alterations," Revision 0 and 1
- 3 BAP 1400-1, "Byron Station Surveillance Program,"
Revision 2
- 4 BAP 1400-2, "Surveillance Request Form Completion,"
Revision 2
- 5 BAP 1400-3, "Surveillance Status Tracking By the SYFA
Computer," Revision 1
- 6 BAP 1400-4, "Technical Specification Surveillance By
Frequency," Revision 1
- 7 BAP 1400-5, "Technical Specification Surveillance By
Operating Mode," Revision 1
- 8 BAP 1400-6, "Technical Specification Limiting
Condition for Operation Action Requirement (LOCAR),"
Revision 0
- 9 BAP 1400-7, "Technical Specification Surveillance
Procedure Format," Revisions 1 and 2
- 10 BAP 1400-8, "Procedural Changes Upon Receipt of a
Technical Specification Change," Revision 0
- 11 BAP 1400-9, "Tech Spec Data Package Cover Sheet
Completion and Use," Revision 0
- 12 BAP 1400-T2, "Technical Specifications Surveillance
Procedure Master Listing," Revision 1
- 13 BAP 1400-T5, "Tech Spec Data Cover Sheet," Revision 0

(b) Byron Surveillance Procedures

- 1 BIP 2000-004, "Frequency of In Plant Instrument
Calibration," Revision 1
- 2 BIP 2000-006, "Control of Master Test Report Forms
for the Instrument Maintenance Department,"
Revision 1
- 3 BIS 3.2.1-002, "Surveillance Functional Test for the
Steam Generator Loop 1A Pressure Compensation
1P-0515 Channel (Prot.II)," Revision 0
- 4 BIS 3.2.1-201, "Calibration of the Steam Generator
Feedwater Mismatch Protection Set II," Revision 1
- 5 BOS 0.1.1, "Shiftly and Daily Operating Surveillance,"
Revisions 0 and 1
- 6 BVS 0.5.2 AF3, "Auxiliary Feedwater Valve Indication
Test," Revisions 0 and 1
- 7 BVS 0.5.3 AB.1, "Boric Acid Transfer Pumps and
Associated Discharge Check Valve," Revision 0
- 8 BVS 0.5.3 AF.1, "ASME Surveillance Requirements for
Auxiliary Feedwater Pumps, Revision
- 9 BVS 5.2.f.2-1, "ASME Surveillance Requirements for
Safety Injection Pumps," Revision 0

- 10 BVS 5.2.f.3-1, "ASME Surveillance Requirements for Residual Heat Removal Pumps," Revision 0
- 11 BVS 6.2.1.b-1, "ASME Surveillance Requirements for Containment Spray Pump," Revision 0
- 12 BVS 6.2.1.c-1, "Containment Spray Automatic Valve Actuation," Revision 0
- 13 BVS 7.1.2.1.a-1, "Motor Driven Auxiliary Feedwater Pump Monthly Surveillance," Revision 0
- 14 BVS 8.2.1.2.d-1, "125 Volt Battery Bank and Charger Operability and Battery Capacity," Revision 0
- 15 Selected calibration records and procedures for safety-related equipment not required to be calibrated by the Technical Specifications.

(2) Results of Inspection

- (a) The licensee had established a master list and schedule of surveillance tests required by the Technical Specifications. The inspector selected 20 surveillance tests required by the Technical Specifications and verified that they had been included in the master schedule and that the planned schedule was in accordance with the Technical Specifications.

The licensee had established a master schedule and list for calibration of safety-related instruments which were not specifically required to be calibrated by the Technical Specifications. Seven instruments in this category were selected at random and it was verified that they were included in the master calibration program, that calibration procedures had been established and that the instruments had been calibrated.

- (b) The procedures which controlled surveillances and calibrations required by the Technical Specification were designated BAP 1400-1 through 1400-9. One concern was identified during the review of BAP 1400-7, Revision 1. The procedure specified that Shift Engineer permission "should" be obtained prior to performing a surveillance, and that surveillance procedures "should" include a "Tech Spec Data Package Cover Sheet." These requirements are mandatory for all Technical Specification surveillance tests and the "shoulds" needed to be replaced with "shall". During this inspection, the licensee revised and approved BAP 1400-7 to address the concern. The inspector reviewed the revised procedure and has no further questions.
- (c) Review of the licensee's program for the control of calibration and surveillance of safety-related instruments that are not required by the Technical Specification revealed that there was no program procedure describing (1) how instrument calibrations and surveillances are initiated,

(2) closed out, (3) actions to be taken for deviation, and (4) actions to be taken when surveillance and calibrations are not completed on time. Discussion with the licensee's representatives revealed that these instrument and components were to be controlled through the preventative maintenance program. Review of the program procedure for the control of preventative maintenance (BAP 400-7, Revision 0) indicated that it was inadequate to accomplish the above. During this inspection, the licensee revised and approved BAP 400-7 to address the concerns. The inspector reviewed the revised procedures and has no further questions.

- (d) The licensee's procedure for the control of shift and daily operating surveillance was BOS 0.1-1, Revision 1. Review of this procedure indicated that there were several surveillance data sheets which were to be completed each shift, but there was no requirement to assure that all the surveillance data sheets had been completed and submitted to Shift Control Room Engineer (SCRE) at the end of each shift. The licensee revised the procedure to require that surveillance data sheets be submitted to the SCRE and that the SCRE review the data package to assure all surveillance data sheets are attached prior to signing the cover sheet for the data package. The inspector has no further question regarding this concern.
- (e) The inspector reviewed several surveillance and calibration procedures to determine if independent verification, as required by Section 1.C.6 of NUREG-0737 had been addressed. The following concerns were identified:

1 Review of instrument surveillance and calibration procedures indicated that the provisions for independent verification for equipment returned to the normal lineup was inadequate. The procedures had the following statement related to independent verification:

"1. The functional test shall be considered complete and acceptable if:

b. The loop reflects current plant condition after it is returned to service."

There was no required signoff that step b. had been accomplished and there were no directions to have independent verification of valve and/or switch positions if the plant status was such that the loop was not indicating.

To correct these problems on a temporary basis, procedure BAP 400-9 was revised to require independent verification requirements to be determined and attached to each applicable instrument calibration or surveillance procedure. This is to be done until the procedures are revised to include the proper independent verification. The licensee committed to revise the monthly functional test procedures first and then the 18 month calibration procedures. All procedures are planned to be revised by the first refueling outage. Approximately 300 procedures will require revision. This item is considered to be open pending further review during a subsequent inspection (454/84-41-03).

- 2 Review of several CVS surveillance procedures revealed that only some of the procedures required independent verification of valve and breaker lineups after testing. Examples of tests which did not require independent verification were BVS 5.2.f.3-1, Revision 0; BVS 5.2.f.2-1, Revision 0; BVS 6.2.1.b-1, Revision 0; and BVS 8.2.1.2.d-1, Revision 0. Examples of tests that did require independent verification were BVS 0.5.3.AF-1, Revision 0; BVS 0.5.3.AB-1, Revision 0; and BVS 7.1.2.1.a-1, Revision 1.

Based on the sampling of procedures, it was apparent that a complete review of all surveillance procedures needed to be performed to identify all independent verification problems. The licensee stated they would perform this review and revise procedures to include independent verification where applicable prior to using the procedures. This is considered to be an open item pending further review during a subsequent inspection (454/84-41-04).

- 3 Review of procedures BVS 0.5.3AF.1, Revision 0 and BVS 0.5.3.AB.1, Revision 0 indicated that valve lineup was being independently verified. The verification was documented by two independent signoffs which stated "System returned to 'As Found' Status." The two signoffs represented verification of the positions for approximately 20 valves. Independent signoffs for each valve did not exist on the data sheet. The inspector is concerned that the present system for verification increases the probability for errors relative to valve position. Licensee personnel stated that they would review the concern. Pending further review, this matter is considered open (454/84-41-05).

No items of noncompliance or deviations were identified.

d. Test and Measuring Equipment Program

The inspector reviewed the licensee's test and measuring equipment program to ascertain whether the QA program relating to test and measuring equipment had been established in accordance with the Quality Assurance Program and 10 CFR 50, Appendix B requirements. The following items were considered during this review: equipment inventory lists, calibration frequencies, and calibration procedures had been established; requirements for calibration status marking recall system for calibration and out of calibration controls had been established; and control for adding new equipment to inventory lists had been established. The implementation of the program was also reviewed.

(1) Documents Reviewed

(a) Byron Plant Procedures

- 1 BAP 400-4, "Control of Station Measurement and Test Equipment," Revisions 2 and 3
- 2 BAP 599-47, "Byron Station Chemistry Quality Control Program," Revision 0
- 3 BCP 510-1, "Laboratory Instrumentation Quality Control Calibration Schedule," Revision 1
- 4 BCP 510-2, "Laboratory Instrumentation Quality Control Calibration Log and Data Sheet," Revision 2
- 5 BCP 520-3, "Proper Handling and Storage of Equipment," Revision 0
- 6 BCP 540-1, "Corrective Action-Calibration," Revision 2
- 7 BIP 2000-5, "Control of Instrument Test and Measuring Equipment," Revision 5
- 8 BIP 2400-24, "Certification of Wallace and Tierney Compound Pressure Gauge," Revision 0
- 9 BIP 2400-29, "Certification of Ashcroft Compound Gauge," Revision 9
- 10 BHP 4200-3, "AMP Wire Crimp Tool Calibration," Revision 3
- 11 BNP 3400-1, "Certification of Mechanical Maintenance Measurement Equipment," Revisions 1 and 2
- 12 BRP 1170-1, "Administrative Controls For Health Physics Instrumentation," Revisions 0 and 1

(b) Quality Assurance Manual Quality Procedures (QP)

- 1 QP 12-1, "Calibration of Commonwealth Edison Company Test and Measuring Equipment"
- 2 QP 12-51, "Control of Test and Measuring Equipment for Operations-Portable Test and Measuring Equipment"

(c) Calibration Records for Measuring and Test Equipment

<u>1</u>	<u>QA Number</u>	<u>Instrument or Equipment</u>
	020810RY	Mansfield and Green Pressure Tester
	019803BY	Hydraulic Pressure Tester
	127920BY	Digital Multimeter
	1538238Y	Doric Trendicator
	045805A4	Vernier Caliber
	041830BY	Micrometer Standards
	021807BY	Torque Wrench
	054817BY	Clamp on Ammeter
	249810BY	Go-No-Go Gage
	249808BY	Crimper
	052807BY	Insulation Tester
	J51064T	AC Ammeter
	0197071T	John Fluke Voltmeter
	052807T	Megohn Tester
	094051T	Standard Resister
<u>2</u>	<u>Serial Number</u>	<u>Instrument or Equipment</u>
	130	Cutie Pie Radiation Detector
	3207	Air Sampler
	8142	Flow Meter
	----	Model 1015 X-Ray Monitor
	----	Conductivity Cell
	----	HRSS DH Meter
	----	AAIS CPP-3002 Proportions Counter

(2) Result of Inspection

(a) The licensee's procedure for the control of test and measuring equipment, except for the Radiation Chemistry Department, was BAP 400-4, Revision 2. Review of this procedure revealed the following:

- 1 There was no requirement that new equipment would not be used until it was calibrated and tagged.
- 2 The procedure required QA stickers to be attached to calibrated equipment. It did not describe the type of QA stickers and what they should contain (e.g., date calibrated and date due for calibration).
- 3 Section 3.c.(2)(a) indicated that a work request was to be used to initiate certification of equipment. Interviews revealed that, in actual practice, either a blanket work request or a computer report was used.

- 4 Section 3.c.(3)(f) required the identification and assessment of plant equipment/systems that were measured or tested with equipment later found to be out of calibration. However, the procedure did not specify the method to accomplish this.

During this inspection, the licensee revised and approved BAP 400-4 to address the comments. The inspector reviewed the revised procedure and has no further questions.

(b) Review of department procedures revealed the following:

- 1 BMP 3400-1, Revision 1, was the Mechanical Maintenance Department's procedure for the control of measuring and test equipment. There was no guidance in the procedure regarding the attachment of calibration stickers to equipment.
- 2 BRP 1170-1, Revision 0, was the Health Physics Department's procedure for the control of measuring and test equipment. The procedure did not specify controls for calibration standards used in the calibration of health physics instruments.
- 3 There was no procedure addressing the issuance and control of measuring and test equipment assigned to the Instrument Maintenance Shop.

The licensee revised and approved procedures BAP 3400-1 and BRP 1170-1 to address the comments. A new procedure, BIP 2000-5, was prepared and approved to control instrument maintenance test and measuring equipment. The inspector reviewed the revised BMP 3400-1, BRP 1170-1, and the new BIP 2000-5, and has no further questions.

(c) The inspector reviewed the implementation of the test and measuring equipment programs. Calibration records of selected equipment listed in Section 2.d.(1)(c) were reviewed at the Byron station and at OAD to verify instruments were being calibrated at the required frequencies and that they were being properly tagged to indicate calibration status. Traceability to the National Bureau of Standards was also verified.

No items of noncompliance or deviations were identified.

e. Maintenance Program

The inspector reviewed the licensee's maintenance program to ascertain whether the QA program relating to maintenance activities had been established in accordance with the Quality Assurance Program and 10 CFR 50, Appendix B requirements. The following items were considered during this review: written procedures had been

established for initiating requests for routine and emergency maintenance; criteria and responsibilities had been designated for performing work inspection of maintenance activities; provisions and responsibilities had been established for the identification of appropriate inspection hold points; methods and responsibilities had been designated for performing testing following maintenance work; methods and responsibilities for equipment control had been clearly defined; documentation requirements have been established to identify the persons who performed the maintenance, the replacement parts uses, the corrective action taken, and the root cause of the equipment failure; and administrative controls had been established for controlling special processes.

The inspector also reviewed the licensee's preventative maintenance program to verify that a written program had been established which included responsibility for the program, a master schedule for preventative maintenance, and documentation requirements. Implementation of the licensee maintenance and preventive maintenance program was also reviewed.

(1) Documents Reviewed

(a) Quality Assurance Manual Quality Procedures (QP)

QP 3-52 "Design Control for Operations Plant Maintenance"

(b) Byron Station Procedures

- 1 BAP 300-7 "Equipment Lubrication," Revision 2
- 2 BAP 300-18 "Removing and Returning Equipment Out-of-Service," Revision 5
- 3 BAP 300-36 "Locked Equipment Program," Revision 2
- 4 BAP 400-7 "Preventative Maintenance Program," Revisions 0 and 1
- 5 BAP 400-8 "Work Request Coordinating Procedure," Revision 1 (Draft)
- 6 BAP 1100-15 "Station Housekeeping/Equipment Preservation," Revision 4
- 7 BAP 1400-1 "Byron Station General Surveillance Program," Revision 2
- 8 BAP 1600-1, "Initiating and Processing a Nuclear Work Request," Revision 3 (Draft)
- 9 BHP 4200-37 "Setting Geared Limit Switches on Limitorque Valve Operators," Revision 1
- 10 BHP 4200-39 "Setting Torque Switches on Limitorque Valve Operators," Revision 1
- 11 BHP 4200-40 "Remove and Reinstall Torque Switches on Limitorque Valves," Revision 1
- 12 BHP 4200-41 "Limitorque Operator Electrical Checkout," Revision 0
- 13 BHP 4299-A4 "Torque Switch Settings of Motor Operated Valves," Revision 0

- 14 BMP 3000-3 "Control of Personnel Qualification Records for Special Processes," Revision 1
- 15 BMP 3100-3 "Internal Inspection and/or Minor Repair of Valves," Revision 2
- 16 BMP 3100-T4 "Internal Inspection and/or Minor Repair of Valves Checklist," Revision 0
- 17 BMP 3100-008 "Mechanical Closure Procedure," Revision 1
- 18 BMP 3100-T8 "Mechanical Closure Data Sheet," Revision 2
- 19 BMP 3118-5 "Installation of the Upper Internals of the Reactor Vessel," Revision 2
- 20 BMP 3118-6 "Instrumentation Port Column Assembly," Revision 0
- 21 BMP 3118-7 "Reactor Vessel Closure Head Installation," Revision 1
- 22 BMP 3118-T7 "Reactor Vessel Closure Head Installation Checklist," Revision 1
- 23 BMP 3119-1 "Disassembly, Inspection, Parts Replacement and Reassembly of the Residual Heat Removal Pumps," Revision 0
- 24 BMP 3119-T1 "Disassembly, Inspection, Parts Replacement and Reassembly of the Residual Heat Removal Pumps Checklist," Revision 0
- 25 BMP 3300-3 "Cleaning of Parts and Materials," Revision 2
- 26 BMP 3300-T2 "Cleaning of Parts and Materials Checklist," Revision 1

(c) Work Requests

	<u>Number</u>	<u>Description</u>
<u>1</u>	B 07561	1A Diesel Generator
<u>2</u>	B 07593	SX Makeup Pump
<u>3</u>	B 07802	Bus III Battery Charger
<u>4</u>	B 07852	1D Diesel Oil Storage Tank Drain Valve

(d) Work Request Form (New Version) CECO 86-2228(s) 12-83

(e) Selected Preventative Maintenance Tasks

(2) Results of Inspection

(a) The licensee's procedure for the control of corrective maintenance activities was BAP 400-8, Revision 1 (Draft) ("Work Request Coordinating Procedure") and BAP 1600-1, Revision 3 (Draft) ("Initiating and Processing a Nuclear Work Request"). The inspector's review of BAP 400-8 and BAP 1600-1 and the associated Work Request (WR) form revealed that BAP 1600-1 and BAP 400-8 together describe

the initiation and processing of a Nuclear Work Request (WR). The inspector reviewed the draft revisions of the two procedures and noted certain advantages to the licensee that could be derived by combining them as one procedure. The licensee subsequently incorporated the BAP 400-8 procedure into the BAP 1600-1 and included some of the inspector comments. The new draft was reviewed by the inspector and additional concerns were identified. The licensee agreed to provide additional instructions in the revised draft procedure concerning the following issues:

- 1 Indicate what actions the office supervisor is to take when a completed work package is received from computer entry personnel.
- 2 Instructions which specify when a Discrepancy Report (DR) is to be initiated.
- 3 Provide a description of what activities are involved in obtaining shift authorization to perform work for a work request. This should include referencing the out of service procedure BAP 300-18.
- 4 There was no requirement to record the equipment tagout number on the WR form to provide traceability from the WR to the tagout.
- 5 There was no requirement for the cognizant maintenance work analyst to evaluate if the WR was a design change and document this decision on the WR form.

Pending review of the revised draft procedure, these items are considered open (454/84-41-06).

- (b) Several of the maintenance procedures (BMP) did not have instructions for maintaining internal cleanliness during maintenance work. The licensee agreed to review all BMP procedures for adequate cleanliness controls and revise the procedures as required. Pending review of the revised procedures, this item is considered open (454/84-41-07).
- (c) Hold points were not normally specified in the maintenance procedures. QC and QA inspectors identified hold points on a case-by-case basis during their review of the WRs. There was no written guidance on the establishment of hold points; hence, there was no assurance that adequate hold points were being consistently established. Pending further review, this item is considered open (454/84-41-08).

3. Open Items

Open items are matters which have been discussed with the licensee, which will be reviewed further by the inspector, and which involve some action on part of the NRC or licensee or both. Open items disclosed during the inspection are discussed in Section 2, Paragraphs a.(2)(c), b., c.(2)(e)1, c.(2)(e)2, c.(2)(e)3, e.(2)(a), e.(2)(b), and e.(2).(c).

4. Exit Interview

The inspectors met with licensee representatives (denoted in Paragraph 1) on July 6 and July 13, 1984, and summarized the purpose, scope, and findings of the inspection.