

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION III799 ROOSEVELT ROAD  
GLEN ELLEN, ILLINOIS 60137

OCT 7 1976

Iowa Electric Light and Power  
Company

Docket No. 50-331

ATTN: Mr. Duane Arnold  
President  
Security Building  
Post Office Box 351  
Cedar Rapids, Iowa 52406

Gentlemen:

This refers to the inspection conducted by Mr. F. A. Maura of this office on August 18-20, 31 and September 1-3, 1976, of activities at Duane Arnold Nuclear Power Station authorized by NRC Operating License No. DPR-49 and to the discussion of our findings with Mr. Hunt and others of your staff at the conclusion of the inspection.

The enclosed copy of our inspection report identifies areas examined during the inspection. Within these areas, the inspection consisted of a selective examination of procedures and representative records, observations, and interviews with personnel.

During this inspection, certain of your activities appeared to be in noncompliance with NRC requirements, as described under Enforcement Items in the Summary of Findings section of the enclosed inspection report.

This notice is sent to you pursuant to the provisions of Section 2.201 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations. Section 2.201 requires you to submit to this office within twenty days of your receipt of this notice a written statement or explanation in reply, including for each item of noncompliance: (1) corrective action taken and the results achieved; (2) corrective action to be taken to avoid further noncompliance; and (3) the date when full compliance will be achieved.

Certain other activities, set forth under Other Significant Items in the Summary of Findings section of the enclosed inspection report, appear to be a deviation from commitments which you have made in previous correspondence with the



OCT 7 1976

Commission. Please advise us in writing within twenty days of the corrective action you have taken or plan to take, showing the estimated date of completion with regard to this deviation.

In addition to our concern for corrective action with respect to the specific items of noncompliance and the deviation noted, we are concerned about your system for management control of NRC licensed activities that has continued to permit so many of these items to occur. Based on our inspection findings in the areas of plant modification and maintenance, it appears that the lack of improvement since our last inspection of those activities, approximately 15 months ago, may be associated in part with the need for improvement in your control procedures, your training program for supervising and maintenance staff and in personnel attitude. Consequently, in your reply to this letter, you should describe, in particular, those actions planned to improve the effectiveness of your management control over these NRC licensed activities. Based on these inspection findings and the findings of the inspection performed by Mr. Kister on September 13-17, 1976, we intend to meet with you in the near future to discuss these matters with you and your staff.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this notice, the enclosed inspection report, and your response to this notice will be placed in the NRC's Public Document Room, except as follows. If this report contains information that you or your contractors believe to be proprietary, you must apply in writing to this office, within twenty days of your receipt of this notice, to withhold such information from public disclosure. The application must include a full statement of the reasons for which the information is considered proprietary, and should be prepared so that proprietary information identified in the application is contained in an enclosure to the application.

We will gladly discuss any questions you have concerning this inspection.

Sincerely yours,

James G. Keppler  
Regional Director

Enclosure:  
IE Inspection Rpt  
No. 050-331/76-21

cc w/encl:  
G. G. Hunt, Chief  
Engineer

bcc w/encl:  
Central Files  
Reproduction Unit NRC 20b  
PDR  
Local PDR  
NSIC  
TIC

UNITED STATES NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III.

Report of Operations Inspection

IE Inspection Report No. 050-331/76-21

Licensee: Iowa Electric Light and Power Company  
Security Building  
P. O. Box 351  
Cedar Rapids, Iowa 52406

Duane Arnold Energy Center  
Palo, Iowa

License No. DPR-49  
Category: C

Type of Licensee: BWR (GE) 538 MWe  
Type of Inspection: Routine, Unannounced  
Dates of Inspection: August 18-20, 31 and September 1-3, 1976

Principal Inspector: *F. A. Maura*  
F. A. Maura

10/1/76  
(Date)

Accompanying Inspectors: None

Other Accompanying Personnel: None

Reviewed By: *W. S. Little*  
W. S. Little, Chief  
Nuclear Support Section

10/4/76  
(Date)

## SUMMARY OF FINDINGS

### Inspection Summary

An inspection was conducted on August 18-20, 31 and September 1-3, 1976 (76-21) regarding maintenance activities, design changes and modification, and the startup testing of the new main steam isolation valve leakage control system (MSIV-LCS) and rod sequence control system (RSCS) systems. Several items of noncompliance were identified concerning failure to adhere to procedures, failure to meet the minimum low pressure cooling and diesel generator availability surveillance requirements, failure to conduct post modification testing, failure to control the issuance of documents, failure to control nonconforming material, failure to prepare adequate procedures for modified systems, and failure to adhere to test procedures or properly change the test as required.

### Enforcement Items

The following items of noncompliance were found during the inspection.

### Infractions

1. Contrary to Technical Specifications 3.8.B.1 and 4.8.B.1, plant operation continued for approximately 6 hours on July 26, 1976 after diesel generator 1G-31 was made inoperable for maintenance without immediately demonstrating that the remaining diesel generator and low pressure core cooling and containment cooling subsystems were operable. (Paragraph 2.b, Report Details)
2. Contrary to 10 CFR 50, Appendix B, Criterion V, some activities affecting quality were not accomplished in accordance with documented instructions as follows:
  - a. Contrary to ACP 1404.4, Revision 3, the operator failed to enter in the Operating Log when the diesel generator 1G-31 was taken out of service and when it was returned to service on July 26, 1976. (Paragraph 2.b.(2), Report Details)
  - b. Contrary to ACP 1401.4, approximately 75% of the Maintenance Action Requests (MAR) reviewed lacked the reviews, approval or information required. (Paragraph 2.a, Report Details)
  - c. Contrary to ACP 1409.1, work on DCR's 507 and 500, Revision 1 was performed before all approvals were obtained. (Paragraph 3.b, Report Details)

- d. Contrary to ACP 1401.4 work was performed during the last refueling outage on five safety related snubbers in the main steam relief system without initiating the required Maintenance Action Requests (MAR's). (Paragraph 5.a, Report Details)
3. Contrary to 10 CFR 50, Appendix B, Criterion XI, post modification testing to ensure that the design change worked as expected and that safety of operations was not reduced was not performed for changes in the torus water level alarm system, the new CRD water supply, or the new meters which monitor recirculation pump speed. (Paragraph 3.a, Report Details)
4. Contrary to 10 CFR 50, Appendix B, Criterion VI, the licensee has failed to control the issuance of documents as indicated by:
  - a. Engineering's failure to ensure that as-built drawings are correct prior to their issuance. (Paragraph 3.c, Report Details)
  - b. Failure to ensure that the operating instruction for the MSIV-LCS was correct prior to use. (Paragraph 4.c, Report Details)
5. Contrary to 10 CFR 50, Appendix B, Criterion XV, the flanges used in the reactor head spray line modification (DCR No. 493) contained unacceptable indications of discontinuities, according to the NDT document supplied by the vendor. (Paragraph 3.d, Report Details)
6. Contrary to Technical Specifications 6.8.1.3, detailed written procedures covering actions to be taken to correct specific and foreseen potential malfunctions were not written for:
  - a. The new subsystem installed to supply water to the CRDs. (Paragraph 3.f, Report Details)
  - b. The new MSIV-LC system. (Paragraph 4.c.(3), Report Details)

#### Deficiency

Contrary to Technical Specifications 6.8.1.6, test procedure 83.3 used to pre-op the MSIV-LCS was incomplete in that a step was missing between steps 4 and 5, and the test was performed by departing from the procedure without the required reviews and approvals. (Paragraph 4.a, Report Details)

## Licensee Action on Previously Identified Enforcement Items

The corrective action to items A.3.b and A.3.c listed in the licensee's response to our letter of July 13, 1976 were reviewed. These items are considered resolved. (Paragraphs 5.b and c, Report Details)

### Other Significant items

#### A. Systems and Components

The licensee's explosive charges in the standby liquid control system were manufactured in October 1971. The licensee's replacement schedule does not include manufacturing shelf life recommendations. The licensee will establish a shelf life figure for this item and will document the bases for the selected period.

#### B. Facility Items (Plans and Procedures)

The licensee will review and revise the operating instructions to ensure they agree with the design changes performed on CRD, MSIV and Reactor Coolant systems.

#### C. Managerial Items

The licensee appears to lack administrative control over maintenance operations as noted by the large number of infractions of Administrative Control Procedures (ACPs) noted. In many cases the infractions may have been caused by personnel misinterpretation of the ACP's which indicates a serious weakness in the licensee's training program.

#### D. Noncompliance Identified and Corrected by Licensee

None.

#### E. Deviation

Contrary to Amendment 13 to the FSAR, submitted on March 1973 the licensee failed to determine that with one blower in operation a minimum of 30-inches W.C. negative pressure would be maintained in the low pressure manifold of the MSIV-LCS, and to ensure that the dilution damper was then locked in position. (Paragraph 4.b, Report Details)

#### F. Status of Previously Reported Unresolved Items

The snubber seal repair kits purchased under a non-safety related order were used to repair safety related snubbers, but documentation

included with the kits certified that the seals were manufactured of ethylene propylene. (Paragraph 5.a, Report Details)

#### Management Interview

A management interview was conducted with Messrs. Hunt, Rehrauer, Walling, Gebert, York, Rinderman, Rockhill, Sweiger, and Van Sickel at the conclusion of the inspection on September 3, 1976.

- A. The items of noncompliance identified under Enforcement Items and the Deviation identified under Other Significant Items were discussed. Within these areas the inspector noted that he is concerned that the large number of infractions of Administrative Control Procedures are an indication that either the procedures are too complicated for the personnel who has to use them, or that station personnel do not recognize that they must follow procedures. It also appears the licensee has failed to adequately train their personnel in the adherence and understanding of the ACP's.
- B. The inspector stated that it was his understanding, and the licensee concurred, that:
  - 1. The test on the MSIV-LCS low pressure manifold, with one blower in operation, and the verification that the dilution damper is locked in position will be performed at the next convenient outage in 1976. (Paragraph 4.b, Report Details)
  - 2. Documentation from Southwestern Laboratory, which identifies the flanges used on the reactor head spray lines by heat number, will be obtained to back up the claim that no unacceptable indications exists. (Paragraph 3.d, Report Details)
- C. The inspector stated that the review and closeout of DCR's by Engineering personnel is still taking too long. The licensee noted they have a concentrated effort in progress to close all DCR's numbered from 1 to 200, but lack of manpower prevents any further improvement. (Paragraph 3.e, Report Details)
- D. The inspector asked if the licensee had obtained any information, from the manufacturer of the explosive charges in the standby liquid control system, regarding shelf life. The licensee stated they had not initiated an inquiry as yet. The inspector asked what plans if any existed regarding the installed charges which have a manufacturing date of October 1971.

Licensee engineering personnel will review their files to see if a study on shelf life has been performed, and if not will perform one. Bases will be established to justify whatever time period is selected for the explosive charges. (Paragraph 5.d, Report Details)

REPORT DETAILS

1. Persons Contacted

a. Site

G. Hunt, Chief Engineer  
E. Hammond, Assistant Chief Engineer  
R. Rinderman, Quality Supervisor  
R. York, Operations Supervisor  
C. Vondra, Shift Supervising Engineer  
M. Hammer, Nuclear Station Operating Engineer  
R. Potts, Nuclear Station Operating engineer  
R. Rockhill, Mechanical Maintenance Supervisor  
J. Sweiger, Electrical Maintenance Supervisor Assistant  
L. Nelson, Engineer  
P. Carbough, Maintenance Department Secretary  
G. Phillips, Administrative Supervisor  
D. Vanderbeck, Storekeeper

b. Corporate Office

L. Root, Manager, Mechanical/Nuclear Engineering  
H. Rehrauer, Supervisor Project Engineering  
H. Shearer, Project Engineer, DAEC  
P. Ward, Mechanical and Nuclear Design Engineer  
G. Walling, Mechanical and Nuclear Design Engineer  
G. Ellis, Acting Group Leader, Electrical Engineering  
T. Gucciardo, Electrical Engineer  
D. Gemblar, Supervising QA Engineer

2. Maintenance

The following Maintenance Action Requests (MAR) were randomly selected for review from the many hundreds of MAR's completed so far in 1976:

<u>Date</u>	<u>MAR</u>	<u>Item</u>
(3/7)	14651	Determine why 24V battery undervoltage relay tripped low.
(2/17)	14658	Replacement of CRD in position 18-27.
(3/11)	14682	Installation of primary containment load mitigating equipment.
(3/8)	14735	Replacement of contacts on breaker 1B2403.

(3/10)	14740	Replacement of contacts on breaker 152-203.
(3/23)	14749	Investigation of why recirc. for 5A did not respond during STP 42D005.
(3/14)	14767	Investigate why power was lost to torus level recorder.
(3/18)	14849	STP42B031 found dropout voltage to be 19.4 volts. Should have been $24 \pm 4$ volts.
(3/25)	14938	Correct intermittent alarm on uninterruptible A/C annunciator.
(3/27)	14961	Clean emergency service water strainer.
(3/30)	15013	Replace power supply of RPIS.
(3/30)	15029	Recalibrate level transmitter SBLC system.
(4/5)	15072	Increase concentration of SBLC system solution.
(4/16)	15211	Correct packing leaks on MOV 2404.
(4/16)	15212	Correct packing leaks on MOV 2511.
(4/17)	15217	Investigate why APRM flow unit D comparator trip is out of spec. (STP41A018).
(4/17)	15218	Investigate why RSCS does not "see" rod 34-11
(4/18)	15226	Clean emergency service water strainer.
(4/18)	15249	Investigate why RCIC turbine did not respond to speed charges in test mode.
(5/6)	15281	Fix lube oil filter leak in HPCI turbine.
(4/29)	15447	Fix seat thru leak on MOV 2202-HPCI steam supply.
(1/29)	15500	Fix position indication on MOV 2322.
(2/11)	15611	Investigate why PDIS 4644 contacts failed during STP42B017.

(2/20)	15702	Calibrate containment PI 4368B.
(2/20)	15703	Repair broken N <sub>2</sub> supply to MSIV.
(3/1)	15722	Correct problem with CV-4309, SGTS, which failed LLRT.
(2/21)	15772	Investigate why spent fuel filter demin. hold pump trips.
(3/1)	15848	Repair DC amplifier in neutron monitoring system.
(6/17)	15867	Repaired body to bonnet leak on feedwater system valve.
(6/23)	15891	Calibrate square root converter which did not meet specs. during STP41A018.
(7/16)	16132	Replace battery for diesel air compressor.
(7/17)	16140	Repair leak on flange in 1A2 switchgear room.
(7/20)	16241	Repair leaking fittings on both ends of line on governor of diesel generator 1G-31.

Among the problems found during the review were:

a. Very few of the MAR's reviewed were completed in accordance with the licensee's ACP No. 1401.4, Control of Plant Work, Revisions 2 or 3 (depending on the date of the MAR). For example:

- (1) Section 3 of MAR 15500 was left blank in noncompliance with step 6.9 which requires the responsible maintenance supervisor to approve or disapprove the MAR; determine if a nonconformance review is required; determine if the maintenance action constitutes a design change; make a work assignment; specify the maintenance procedure to be applicable; determine if the containment boundary is affected; and sign and date the MAR.
- (2) In no case was a Maintenance Procedure specified although the maintenance department has generated a significant number of such procedures. Therefore

the purpose of a "Maintenance Procedure Number" block in Section 3 of the MAR is not clear. It should be noted that paragraph 6.8.1.5 of the Technical Specifications requires that corrective maintenance which could have an effect on the nuclear safety of the facility shall be performed in accordance with prepared and approved procedures.

- (3) Section 4 of MAR's 14682, 14961, 15226 and 15500 was left blank in noncompliance with step 6.10 and 6.11 which requires the Shift Supervising Engineer to determine whether vent and drain, isolation, or radiation protection are needed and if needed complete all the required information; review to ensure an unauthorized design change is not being made; and sign and date authorizing the work to start.
- (4) In addition, the following subsections of Section 4 were not completed:
  - (a) failure to complete the vent-drain subsection for MAR's 15722 and 15772,
  - (b) failure to complete the radiation protection subsection for MAR's 14735, 14740, 15218, 15249, 15722, 15772, 15867 and 15891.
- (5) Section 7 of MAR 15217 was left blank in noncompliance with step 6.17 which requires the Shift Supervising Engineer to direct the return and operability testing of the system, component or structure that was removed from service for maintenance.
- (6) In addition, the following subsections of Section 7 were not completed:
  - (a) failure to date, time and initial when Hold-Off tags were removed for MAR's 15500 and 16241,
  - (b) failure to require retesting of a system, component or structure that had maintenance performed for MAR's 14658, 14735, 14740, 15281, 15447, 15848, 15772, 16132,
  - (c) failure to indicate whether testing was required or performed on the following MAR's, although further review appears to indicate the component was tested 14651, 14749, 14849, 15013, 15029, 15249, 15722 and 15891.

b. On July 26, 1976, the licensee disabled diesel generator 1G-31 at 0922 in order to repair leaking oil fittings in a line on the governor. Review of the records and conversations with members of the licensee's staff verified that contrary to the requirements of Technical Specifications paragraphs 3.8.b.1 and 4.8.B.1, the licensee continued to operate the plant without ensuring that the remaining diesel generator and low pressure core cooling and containment cooling subsystems were operable. The length of time the diesel was out of service could not be verified because:

- (1) When the isolation was removed the operator failed to complete Section 7 of the MAR.
- (2) The operator failed to enter in the Operating Log when the equipment was taken out of service and when it was placed back in service, in noncompliance with ACP 1404.4, Revision 3, Operating Logs.
- (3) The Shift Supervisor did not enter on the Shift Supervisor Engineer's Log information concerning this outage.
- (4) The maintenance Tagging Record does not require the time Hold-Off tags are issued or removed.

The only indication of the length of time the diesel was inoperable is the time entered by the maintenance personnel as that required to complete the job. According to that entry the job required 4 hours to complete. Interviews with licensee personnel indicated that such a number is exclusive of time required to clear or return the equipment to service, and of breaks such as for lunch, etc. In addition, operations personnel stated that they remembered removing the tags after shift change, between 1530 and 1600 hrs. Therefore it appears the diesel generator was inoperable for at least 6 hours.

### 3. Design Changes

Seven design changes were selected for review. The selection was influenced by the desirability to review completed packages, therefore only changes that had been closed at the site and sent to Engineering for closeout were selected. The seven design changes were:

- No. 487 Installation of panel meters to monitor recir. pump speed.
- No. 493 Installation of flanges in head spray line.
- No. 500 Redesign torus high level alarm and install torus low level alarm.
- No. 502 Improve water quality for CRD's per SIL-148.
- No. 506 Revise snubber hanger to prevent twisting on RCIC line in torus area.
- No. 507 Change drain line to move with thermal movement of feedwater line.
- No. 516 Bypass circuit breaker on panel IC-115.

The problems found during the review were:

- a. The licensee seldom required post modification component or system testing to ensure that the modification worked as expected and that safety of operations was not reduced. No acceptance criteria could be found in the design package either. Modifications included in this group are Nos. 487, 500 and 502. This is considered to be an infraction of 10 CFR 50, Appendix B, Criteria V and XI, and a deviation from ANSI N18.7-1972.
- b. The work is sometimes completed before the approvals are obtained. Specifically, work on DCR 507 was completed on December 19, 1975, but the MAR which allowed the work to proceed was not signed until March 25, 1976, an infraction of ACP's 1401.4 and 1409.1. Work on DCR No. 500 was completed on March 15, 1976, but Revision 1 to the DCR was not approved until March 29, 1976, an infraction of ACP 1409.1.
- c. Engineering review of the completed DCR's appears to be weak, an infraction of 10 CFR 50, Appendix B, Criterion VI. For example:
  - (1) DCR No. 500 package contains a list of all wiring changes to be made. According to this Field Wiring Change instruction sheet wiring changes No. 5 and 6 were not completed. Since no post modification testing was conducted it can not be determined whether the changes were missed or not documented.

- (2) Completed DCR No. 487 as-build drawing 807E304, Sheet 16.6 and 807E235, Sheet 16.2 were reviewed. Drawing 807E304 Sheet 6 failed to reflect the change in that a jumper on strip KK from terminal 92 to 99 was not shown.
- (3) A similar review was performed on drawings DBA-5-1, M-119 and DBA-5-1-H for DCR No. 493; and drawing GBD-13-2 for DCR No. 502. While these DCR's have not been closed yet by Engineering it should be noted that the drawing revisions have been completed and are ready for distribution as soon as the DCR review is completed. It was found that drawing DBA-5-1-H revision failed to show the new flanges in the head spray line and isometric drawing GBD-13-2 shows valve CV1497 to be welded while the site maintenance personnel informed the inspector a flanged valve was used.
- d. During the review of DCR 493 the inspector noted that the Southwestern Laboratories NDT report on the two flanges purchased from National Flange and Fitting Company through Iowa Pipe and Supply Company stated that the magnetic particle examination performed in accordance with ASME Section III, paragraph NB-2541 revealed unacceptable indications of discontinuities. When asked about the statement the licensee indicated unawareness about the report. The inspector informed the licensee that a determination of the condition of the two installed flanges should proceed immediately and if the Southwestern Laboratories report proved correct the plant was to shutdown immediately and the flanges replaced. Approximately six hours later the licensee reported that a paper mixup at National Flange had resulted in them receiving the NDT report for two other flanges, and that the two flanges installed were satisfactory. The licensee also stated the correct NDT report, referencing the installed flanges by their heat number would be obtained from National Flange within a few days.

The above is considered an infraction of 10 CFR 50, Appendix B, Criterion XV and of ACP 1403.2, Revision 0.

- e. As noted approximately 15 months ago<sup>1/</sup> DCR's must still wait long periods of time after completion before closeout and as-built drawings are released. For example DCR No. 493 was completed on March 17, 1976 and DCR No. 502 was completed on March 20, 1976, but as of September 3, 1976, almost 6 months later, Engineering has not completed their review and released the as-built drawings.

<sup>1/</sup> IE Inspection Report No. 050-331/75-11.

- f. Procedures are not always modified to reflect the design change. For example no operating procedure takes advantage of the fact that new, more accurate, digital meters exist to monitor recirculation pump speed (DCR No. 487); although the condensate system valve check list includes the new valves installed as a result of DCR No. 502, no other mention is made of the new sub-system installed to supply water to the CRD's. No procedure states what to do if both condensate pumps trip; what if the isolation valve CV-1497 closed, etc. This is considered an infraction of Technical Specification 6.8.1.3.

4. Startup Testing of Modified Systems

Startup Testing of the following, NRC approved, modifications was reviewed to ensure it was conducted in accordance with approved procedures; that results had been reviewed and evaluated by the licensee; and that plant procedures had been updated to reflect the changes:

- a. Main steam isolation valve leakage control system (MSIV-LCS).
- b. Rod sequence control system (RSCS).

The following problems were identified during the review:

- a. Numerous changes to test procedure 83.3, Revision 0 for the MSIV-LCS were documented and approved by Document Change Form (DCF) No. 910. The change on page 6-12 of the pre-op was incomplete in that it is impossible to go from step 4 to step 5 with the system pressure  $\geq$  50 psia. After a conversation between the licensee and the Bechtel Engineer who performed the test it turned out that the test engineer bled the pressure to  $<$  50 psia in order to perform step 5. This is considered to be an infraction of Technical Specifications 6.8.1.6, and also raises a question about the quality of the review the change received.
- b. On March 1973 the licensee submitted Amendment 13 to the FSAR describing the proposed MSIV-LC system and in response to question 020.3 it committed to establish dilution air flow through the damper during pre-op testing so that with one blower in operation at least 30 in. w.c. negative pressure would be maintained in the low pressure

manifold. After the adjustment the damper would be locked in position. A review of the test results showed that the licensee failed to measure and/or record the pressure in the low pressure manifold and document whether the damper was locked in position or not. The licensee's position is that the above requirements were missed in the pre-op because they were not thought of as a commitment. The licensee agreed to perform the measurement and verify the damper is locked during the next convenient outage in 1976. This is considered to be a deviation from a commitment.

c. During a review of the new Operating Instruction No. 83.3, Revision 0, dated April 15, 1976, covering the new MSIV-LCS it appeared that site personnel are not as familiar with the system as they should be. For example:

- (1) Some of the values given in the procedure as normal parameters such as heater temperature, system flow, etc., have no bases and are incorrect. The values measured during the pre-op should be used, where applicable.
- (2) The high flow trip point given as 11.5 scf/hr. is incorrect. Based on information obtained from Engineering personnel the value is 90 scf/hr.
- (3) The procedure failed to state how the maximum allowable flow would be maintained  $< 360$  scf/hr. in case one subsystem high flow interlock was bypassed (trip point is 90 scf/hr,) and the operator was unable to determine the flow thru that subsystem (flow meter pegs at 100 scf/hr).

These items are considered to be an infraction of 10 CFR 50, Appendix B, Criterion VI and for item (3) of Technical Specification 6.8.1.3.

## 5. Procurement

### a. Snubber Seals

During a previous inspection<sup>2/</sup> it was noted that seals for Bergen-Patterson snubbers had been ordered to be used in non-safety related systems, but that traceability of where they had been used did not exist.

<sup>2/</sup> IE Inspection Report No. 050-331/76-13

Further review of the item with maintenance personnel revealed that the seals were used on six snubbers in the main steam relief valve discharge to torus piping. Only one snubber, SS-B9, could be identified because it was the only one for which a MAR had been prepared. The other five were repaired without MAR, an infraction of ACP 1401.4.

Although the seals were purchased as non-safety related requiring no documentation, the licensee received inside each kit a statement from the vendor certifying the seals were made of ethylene propylene.

b. Valve Packing

The required documentation for PO No. 16691, to show that the valve packing was suitable for use in a radiation environment, was found to be missing during the previous inspection. The licensee contacted the vendor and has since received the documentation. This item is resolved.

c. Issuance of Material from Warehouse

The licensee has revised ACP 1403.6 (Revision 4) to more clearly define what is "exempt material." Warehouse personnel have been reinstructed about the new definition and the need for traceability of non exempt material.

d. Shelf Life of Explosive Valve Charges

The question of shelf life of explosive charges for the valves in the standby liquid control system was brought to the attention of the licensee during the June inspection. During this inspection it was verified that the installed charges have a manufacturing date of October 1971, and that so far the licensee had made no effort to contact the manufacturer and obtain the recommended shelf life for the charges. Based on previous information obtained at another site the recommended shelf life for similar charges is 5 years.