U. S. NUCLEAR REGULATORY COMMISSION DIRECTORATE OF REGULATORY OPERATIONS

REGION III

Report of Construction Inspection

IE Inspection Report No. 050-346/75-01

Licensee:

Toledo Edison Company Edison Plaza 300 Madison Avenue Toledo, Ohio 43652

> Davis-Besse, Unit 1 Oak Harbor, Ohio

License No. CPPR-80 Category: В

Type of Licensee:

PWR (B&W) - 872 MWe

Type of Inspection:

Dates of Inspection: January 22-24, 1975

Routine, Unannounced

Dates of Previous Inspection: November 20-22 1974 (Construction)

Principal Inspector: J. W. Sutton

Accompanying Inspectors:

. Jablonski
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. Naidu

Other Accompanying Personnel:

None

Reviewed By:

for D. W. Hayes Senior Reactor Inspector Construction and Engineering Support Branch

2/19/75

Stor sur to: 208 8001 270100



(Date)

(Date) (Date)

#### SUMMARY OF FINDINGS

#### Enforcement Action

#### A. Infractions

 10 CFR Part 50, Appendix B, Criterion VI, states, in part, that: "Measures shall be established to control the issuance of documents, such as instructions, procedures . . . which prescribe all activities affecting quality. These measures shall assure that documents, including changes, are reviewed for adequacy and approved for release by authorized personnel ....".

The Johnson Service Company Quality Assurance Manual, Section 4.1.2.3, states, in part, that: "The quality assurance representative approves, signs, and dates the installation/fabrication planner . . . . ".

Contrary to the above, an installation/fabrication planner relative to service water pump instrumentation had not been properly approved. (Report Details, Part II, Paragraph 2.a.(1))

- 2. 10 CFR Part 50, Appendix B, Criterion V, states, in part, that: "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings . . . and shall be accomplished in accordance with these instructions, procedures, or drawings . . . . ".
  - a. Contrary to the above, mounting structures for safety related instrumentation were being fabricated and installed without benefit of approved inspection procedures and instructions. (Report Details, Part II, Paragraphs 2.b.(1) and 2.b.(4))
  - b. Also, contrary to the above, procedures, instructions, and/or checklists were inadequate for the inspection of safety related piping and components stored ourdoors. (Report Details, Part III, Paragraph 1)
  - c. Bechtel Corporation Specification No. 7749 M-328, Section 5.6, states, in part, that: ".... the total weight of zinc coating must be reported to the nuclear engineer "...."

Contrary to the above and Criterion V, procedures were not

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in effect to meet this reporting requirement. (Report Details, Part II, Paragraph 2.b.(2))

Bechtel Corporation Field Inspection Manual, Procedure No. d. G-3, part 4.0.b, provides measures for the processing of a nonconformance item.

Contrary to the above and Criterion V, approved procedures were not followed relative to documentation and identification of equipment known to be incorrectly installed. (Report Details, Part III, Paragraph 3.e)

3. 10 CFR Part 50, Appendix B, Criterion VII, states, in part, that: "Measures shall be established to assure that . . . . . Documentary evidence that material and equipment conform to the procurement requirements shall be available at the nuclear power plant . . . . prior to installation or use of such material and equipment . . . . . ".

Contrary to the above, mounting structures for safety related instrumentation were being installed prior to the receipt of material certifications. (Report Details, Part II, Paragraph 2.b.(3))

4. 10 CFR Part 50, Appendix B, Criterion XIV, states, in part, that: "Measures shall be established to indicate by the use of markings, such as stamps . . . . the status of inspections . . . . ".

Contrary to the above, certain installation inspection documents relative to safety related instruments were stamped, indicating that the installation was correct and complete when, in fact, the installation had not been completed. (Report Details, Part II, Paragraph 2.a.(2))

10 CFR Part 50, Appendix B, Criterion XII, states, in part, that: 5. "Measures shall be established to assure that tools . . . . . used in activities affecting quality are properly controlled . . . ".

Contrary to the above and the Johnson Service Company quality assurance program, a craftsman was in possession of a quality related tool which was not assigned to him. (Report Details, Fart II Paragraph 1.b)

10 CFR Part 50, Appendix B, Criterion XIII, states, in part, that: 6. "Measures shall be established to control the handling, storage . . . . . and preservation of material and equipment . . . . to prevent damage or deterioration . . . ".







The Johnson Service Company Quality Assurance Manual, Section 5, page 11 (B) states, in part, that: "Q-listed . . . equipment is stored on shelves or bins . . . . in the restricted access storage area . . . . to facilitate retrieval and inspection. Material tag . . . . and any other identification tagging shall remain affixed to equipment . . . ".

Contrary to the above, mounting structures for safety related instrumentation were not properly stored or identified. (Report Details, Part II, Paragraphs 1.c.(1), 1.c.(5), and 1.c.(6))

7. The Bechtel Corporation's Nuclear Quality Assurance Manual, Section 7.7.2, states, in part, that: "Stop work is a principle authority given to the quality assurance engineers at the job site. It permits immediate stoppage of work operations or construction activities determined to be improperly controlled ....".

Contrary to the above, a timely stop-work order was not issued by the Bechtel Corporation to the Johnson Service Company, even though numerous deficiencies had been identified during Bechtel Corporation quality assurance audits conducted during November and December 1974. (Report Details, Paragraph 3)

# B. Safety Items

None identified.

# Licensee Action on Previously Identified Enforcement Matters

- <u>Cable Tray Grounding Final Inspection Procedure (RO Inspection Reports</u> No. 050-346/74-07 and No. 050-346/74-10)
- Emergency Diesel Generator Storage Storage of Q-listed Item in Auxiliary Feedwater Pump Room Area (RO Inspection Reports No. 050-346/74-07 and No. 050-346/74-10)

The corrective action, for the above items outlined in the Toledo Edison Company (TECO) letters of January 6 and 23, 1975, in response to the RO:III letter and report dated December 3, 1974, was found to have been satisfactorily accomplished and documented. This matter is considered to have been resolved. (Report Details, Paragraph 1)

#### Design Changes

No new design changes were identified.

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#### Unusual Occurrences

No unusual occurrences were identified.

# Other Significant Findings

# A. Current Findings

The licensee indicated that, as of November 1974: (1) construction was 76% complete, and (2) engineering was 98.5% complete.

# B. Unresolved Matters

# 1. Incomplete Installed Equipment Reports

Clarification is required as to the circumstances under which an unapproved ITT Grinnell Corporation (Grinnell) "Installed Equipment Report" procedure was being used for the past two years to verify the correctness of the initial setting of equipment. (Report Details, Part III, Paragraph 2)

2. List of Safety Related Items

Verification is required whether the list of safety related items, complied by Bechtel, titled "D-B Nuclear Power Station Q-List", Revision 10, dated May 16, 1974, is complete. (Report Details, Part III, Paragraph 4)

 Johnson Service Company - Installation/Fabrication (1/F) Planner System

During the review of various correspondence regarding I/F planners, it appeared that the planner system has not been finalized. This item will be reviewed during a subsequent inspection. (Report Details, Part II, Paragraph 2.a.(4))

4. Johnson Service Company - Positioning of Seismic Class 1 Mounting Supports

During the observation of installations and review of installation drawings, the positioning of certain tubing supports was questioned. Documentation provided for the inspector's review did not provide sufficient information to justify method of installation support. This item will be reviewed during a subsequent inspection. (Report Details, Part II, Paragraph 2.a.(5))



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- C. Status of Previously Reported Unresolved Matters
  - <u>Cooling Water Piping to Emergency Diesel Engine 2 (RO Inspection</u> <u>Report No. 050-346/74-07)</u>

The inspector was informed that the relevant drawings are being revised to provide redundancy requirements for cooling water to diesel engine No. 2. This item remains open pending physical inspection of the piping modification.

# 2. Hydraulic Snubbers (RO Inspection Report No. 050-346/74-07)

The licensee informed the inspector that Bechtel Corporation (Bechtel) had written two letters (dated January 8 and 15, 1975) to Grinnell requesting them to use oil, GE Type 1154, in the snubbers. The inspector will review this matter further during subsequent inspections.

 Design Drawing Change Verification (RO Inspection Report No. 050-346/74-07)

The licensee informed the inspector that, as part of corrective action taken relative to design change verification, a reproducible of a drawing revised in the field will be sent to Grinnell for verification, along with sufficient information to verify the correctness of the changes made. The inspector will verify the implementation of the corrective action during subsequent in pections.

 <u>Cable Tray Installation Procedure (RO Inspection Report No.</u> 050-346/74-07)

This matter remains open pending the inspector's review of the licensee's procedure that would verify that these items are included as part of the inspection program.

5. Cable Tray Storage (RO Inspection Report No. 050-346/74-07)

This item remains open pending the inspector's review of procedures and observation of the storage area.

 <u>Calibraticn Records - Stress Relieving Instrumentation and</u> <u>Equipment (RO Inspection Report No. 050-346/74-07)</u>

The inspector was informed that, as a result of corrective action taken by Babcock & Wilcox Company (E&W) a revised calibration procedure, No. 9T 101, Revision 4, was prepared

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and submitted for formal approval. Implementation of this procedure will be verified during a subsequent inspection.

7. Diesel Generator - Relays (RO Inspection Report No. 050-346/74-07)

This item remains open pending the inspector's review of these documents.

 Reactor Coolant Pumps Suction Weldment Linear Indications (RO Inspection Reports No. 050-346/74-04, No. 050-346/74-07, and No. 050-346/74-10)

This item remains open pending receipt of a final 10 CFR Part 50.55(e) report from the licensee.

9. <u>Class IE Electrical Cable Trays (RO Inspection Reports No. 050-346/74-02</u> No. 050-346/74-04, No. 050-346/74-07, and No. 050-346/74-10)

The inspector reviewed documentation issued to Bechtel, dated November 27, 1974, indicating that Class 1E cable trays would be added to the Davis-Besse Q-list, after Section 4.3150, titled "Installation of Cable Trays". This change would include inspection of all activities, including "Receipt Inspection, Storage, and Installation of Cable Trays". This matter remains open pending implementation of the instruction and will be reviewed during a subsequent inspection.

10. Westinghouse Electric Corporation (W) High Pressure Injection Pump Motors (RO Inspection Reports No. 050-346/74-01, No. 050-346/74-02, No. 050-346/74-04, No. 050-346/74-07, and No. 050-346/74-10)

This item remains open pending receipt of a final 10 CFR Tort 50.55(e) report from the licensee.

 Review of Bagwell Coatings, Incorporated (Bagwell) Quality Assurance Manual (RO Inspection Report No. 050-346/74-07 and No. 050-346/74-10)

This item remains open pending the licensee's final review and acceptance of the Bagwell's QA manual.

12. <u>Review of Bagwell's Closeout of Outstanding Items as Listed in the</u> <u>Toledo Edison Company (TECO) Audit of May 21, 1974 (RO Inspection</u> <u>Reports No. 050-346/74-07 and No. 050-346/74-10)</u>

This matter remains open pending the inspector's review of Bagwell's corrective action pertaining to these items.

 Instruction for Handling Piping, Components, Etc. Purchased by Grinnell (RO Inspection Report No. 050-346/74-10)

The inspector reviewed Grinnell's revised procedure, No. S51201.







Revision D, dated December 16, 1974, and states, in part, that: "... rigging equipment will be used as approved by the construction manager". The inspector pointed out that, in the past, Grinnell completed planners were neither approved nor reviewed by the construction manager. The Grinnell representative could not provide the inspector with a method to verify whether the construction manager had approved the rigging equipment procedures. This item will be reviewed during a subsequent inspection.

#### Management Interview

A formal management interview was not held at the conclusion of the inspection. The licensee was informed that a management interview would be held subsequent to the inspection at TECO's corporate headquarters Management personnel of NRC Region III would attend the meeting.





#### REPORT DETAILS

#### Results of Inspection

1. <u>Cable Tray Grounding Final Inspection Procedure (RO Inspection</u> Reports No. 050-346/74-07 and No. 050-346/74-10)

The licensee's supplemental letter of January 23, 1975, amending item A-1 of the January 6, 1975 letter, indicates that a completion inspection program for grounding of Class IE cable trays would be conducted using approved inspection procedures. Inspection of the trays would be documented. Areas of inspection would include verification of proper ground cable, cable continuity, projer use and installation of cable tray connections, and proper connection of ground cable to building steel and/or station ground system. Verification of the use of these procedures will be made by the NRC inspector during a subsequent inspection.

- Emergency Diesel Generator Storage Storage of Q-listed Item in Auxiliary Feedwater Pump Room Area (RO Inspection Reports No. 050-346/74-07 and No. 050-346/74-10)
  - a. The licensee's corrective action, as stated in the January 6, 1975 letter to Region III, was reviewed. Inspection documentation was available and reviewed. Bechtel and Fischbach & Moore, Incorporated (F&M)/Colgan Electric (CE) management have taken steps to provide storage, preservation, logging, component condition inspection, meggering, and audits of the storage of the diesel generators. Reviews of TECO and Bechtel QA audits will be conducted during subsequent inspections.
  - b. The Bechtel management has taken steps to control the cleanliness of the auxiliary feedwater pump room. Instructions were reviewed by the inspector. Cleanup areas have been designated for all site contractors. Weld rod stub buckets have been provided to all Grinnell welding personnel and were observed to be in use. Subsequent audits by TECO and Bechtel will be reviewed by the NRC inspector during subsequent inspections.

# 3. Bechtel Stop-Work Authority

The inspector was informed by Bechtel's project quality assurance engineer that, prior to the current NRC inspection, meetings had been held with Bechtel and Johnson Service Company (Johnson) management regarding the unacce table QA/QC condition found during QA audits. No positive action was taken during this time, which spanned a three-four week period. During the initial part of the





current NRC inspection, it became apparent by NRC inspection and observations that the ongoing construction activities, related to safety areas, were not being properly controlled, even though numerous deficiencies had been identified by Bechtel QA personnel. This matter was thoroughly discussed with TECO's QA management. Prior to the completion of the current inspection, the NRC inspector was notified by the Bechtel project QA manager that a stop-work order had been issued to Johnson to stop all safety related and ASME/Code work.

# REPORT DETAILS

#### Part II

# Prepared By: F. J. Jablonski

#### Persons Contacted

The following persons were contacted during the inspection.

# Bechtel Corporation (Bechtel)

R. M. Bush, Instrument Engineer L. D. Jensen, Instrument Engineer W. C. Lowery, Electrical Quality Assurance Engineer

# Fischbach & Moore, Incorporated (F&M)

H. J. Harris, Quality Control Coordinator D. M. Moeller, Quality Control Manager

#### Johnson Services Company (Johnson)

- J. A. Bushnell, Project Manager
- H. W. Fosholdt, Quality Assurance Representative
- W. S. Morrow, Project Engineer
- F. T. Murphy, Project Superintendent
- J. W. Pasch, In-Process Welding Inspector
- T. Sambaer, Electrician
- R. Schroeder, Director of Quality Assurance

# Results of Inspection

# 1. Observations of Work - Instrument/Electrical

- a. The inspector observed the instrument installation performed by Johnson upon "Q-listed" item No. 32280 for the number one service water pump. The installation did not appear to be complete. The tubing was not adequately protected from the surrounding construction activities or other activities, and a loose instrument valve packing nut was observed.
- b. The inspector observed a Johnson employee to be in possession of a quality controlled crimping tool, No. Q-111, which had been assigned to another workman. The Bechtel QA representative indicated that Johnson's tool control procedure would be reviewed.



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- The inspector observed Johnson's outdoor storage areas and determined the following:
  - (1)An instrument mounting stand, with "Q-listed" instrument No. 2918 attached, was stored in the welding fabrication area without a plug over the electrical installation port.
  - (2) Unistrut used for the support of seismic Class 1 tubing was stored, in some cases, directly on the ground.
  - (3) Unistrut welds were not properly coated subsequent to factory welding. Rust was forming at these points.
  - (4) Unistrut factory welds appeared to have cracks and blowholes.
  - (5) Completed instrument mountings, which support "Q-listed" instruments, were stored in various positions, directly on the ground. Rust was showing through the painted surfaces.
  - (6) None of the stored material was identified to be accepted or rejected according to provisions of the Johnson QA manual.
- The inspector physically traced instrument cable 2CV235BD, ind. stalled by F&M, from control panel C5717 to penetration P2C56X and verified the following:
  - (1) The cable tray had been inspected prior to the cable installation.
  - The tray was clean. (2)
  - (3)Cable crossovers did not exist.
  - The cable was neatly clamped at the required points. (4)
  - The routing was verified per the routing card. (5)
  - The cable was sealed at the nonterminated end. (6)
  - The tray spacing of redundant systems was not exceeded. (7)
  - The cable was properly determined to be free of grounds. (8)
  - (9) The cable was properly tagged and terminated by Johnson.



c.



# 2. Record Review

- a. The inspector reviewed the installation/fabrication (I/F) planner No. PI-1373 and noted the following:
  - (1) The quality assurance representative (QAR) had not approved the I/F planner, nor verified that the proper hold points had been checked per the Johnson QA manual. These QAR functions had been performed by the quality engineer (QE). The QAR could not provide documentation which would indicate that the QE could officially approve the I/F planner.
  - (2) The QA documents for PI-1373 indicated, by a QA stamp and date, that the installation was complete with the exception of pressure tests and final inspection. The IE inspector reviewed Johnson Drawing No. I/F 1373-0. Discussion with the Bechtel instrument engineer indicated that a required tubing support location had not been finalized.

Bechtel's Audit Finding Report (AFR) dated January 22, 1975, also identified the above problem and other findings which remain unresolved.

- (3) Bechtel's Specification No. 7749M-328, Section 3.3, requires that the instrument installation contractor submit isometrics for all seismic Class 1 tubing systems to the construction manager for review and documentation. There was no stamp or other identifying mark on this drawing which verified that these requirements had been met. This problem was also identified by Bechtel's AFR No. 123-E, dated January 9, 1975.
- (4) A review of letter No. FL23-818, dated January 13, 1975, and Bechtel Conference Notes, dated January 16, 1975, indicated that the I/F planner system had not been finalized. While these reviews and conferences were in session, Qlisted installations were progress.
- (5) Drawings used for the design of seismic Class 1 mounting supports are referenced on the main I/F drawing (No. 1/F 1373 - 0). The IE inspector reviewed Drawing Nos. J-G16-4, Revision 0, and J-G16, item 4. The drawings did not agree with the actual installation. The Johnson engineer stated that the seismic support would perform equally well if installed in any position, i.e., horizontal or vertical. The Johnson engineer used Bechtel Conference Notes dated January 16, 1975, as the basis for his evaluation. Upon

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review of these notes by the inspector, it was determined that the notes in themselves do not provide adequate information which would allow the indiscriminate positioning of seismic Class 1 tubing supports.

- b. The inspector requested that fabrication and installation records for the floor mounted instrument structure of PI-1373 be produced for inspection. The following were observed:
  - (1) Bechtel Drawing M-552-G108, SHT. 2, Revision 5, titled "Seismic Class 1 Instrument Mounting Details" and stamped "Q" indicates, in detail 2, that the "Maximum instrument and accessory weight equal 60 pounds". The Johnson Quality Assurance Representative (QAR) could not provide a procedure which would satisfy this requirement.
  - (2) Bechtel Specification No. 7749 M-328, Paragraph 5.6, states: "Most of the standard raceway or supporting materials are galvanized. When used inside the Containment Buildings, the total weight of zinc coating must be reported to the nuclear engineer on the project to allow his computation of the maximum potential H<sub>2</sub> evolution for accident analysis". The QAR could not provide a procedure which would satisfy this requirement.
  - (3) The material to be used for the fabrication of the "Q-listed" stands is identified on Bechtel drawing M-552-6108. Fabrication and installation of the stands was in progress without verification of material certifications.
  - (4) The Johnson representative indicated that there was no provision for documenting the fabrication or inspection of seismic Class 1 instrument stands which support "Q-listed" instruments. The Johnson representative further stated that these installations were not considered to come under the provisions of the ASME Code, Section III. The QAR also indicated that a formal welding rod stub control procedure had not been prepared.
- c. The inspector reviewed F&M installation records for instrument cable No. 2CV235BD. All records appeared to be completed and included the following:
  - (1) Nondestructive examination.
  - (2) Cable pull.
  - (3) Cable inspection.



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Also reviewed were F&M's periodic equipment log and other electrical surveillance records. All records were found to be complete and appeared to meet inspection requirements. The incpector arbitrarily chose motor control center No. El2C and verified that the required space heater and humistat controls were energized.





#### REPORT DETAILS

Part III

Prepared By: K. R. Naidu

#### Persons Contacted

The following persons were contacted during the inspection.

Toledo Edison Company (TECO)

E. A. Wilcox, Field Quality Assurance Specialist C. T. Daft, Quality Assurance Engineer

ITT Grinnell Corporation (Grinnell)

D. Giguere, Quality Control Manager C. Keller, Incoming Receipt Inspection

Babcock & Wilcox Company (B&W)

W. R. Klingler, Project Manager J. W. Marshall, Quality Control Supervisor

A. Bentley & Sons (Bentley)

R. Sauders, Quality Control Engineer D. Ponke, Quality Control Supervisor

D. Loe, Millwright Supervisor

# Results of Inspection

# 1. Outdoor Storage of Safety Related Components

During the inspection of the outdoor storage area, the inspector noted that inspection checklists were not being prepared for use by Quality Control personnel to inspect stored safety related components outdoors. As a result, in the absence of specific, acceptable criteria, the inspector found that the QC inspectors were unable to identify nonconformances. The inspector reviewed the Grinnell specification for outdoor storage of safety related components. The storage procedure had been developed from Bechtel's Specifications No. M453 and No. N458, which contain general terms.

The inspector observed four pieces of safety related piping components, with ends inadequately protected from possible deterioration by corrosion or contamination. A seismic restraint was found lying in mud.





Examination of the nonconformance reports, prepared by TECO'S QA agent, Bechtel, revealed that corrective action recommended was merely to "conform to Bechtel's Specifications No. M453 (five pages) and No. M458 (twenty pages)" without specific details.

# 2. Incomplete Installed Equipment Reports

During review of Grinnell quality assurance records, the inspector noted that, in several "Installed Equipment Reports", (IER's) there was no evidence that any of Bechtel's representatives had verified the correctness of the activity. Upon inquiry, it was determined that, in a letter to Bechtel, dated March 13, 1973, Grinnell had requested formal approval to use the Installed Equipment Report Form which was to have been prepared to meet the intent of Bechtel's Specification No. 7749-M-454, Paragraph 5.4. This form was intended to indicate that the activity involving the removal of the specified component from its storage area and correct placement was verified and found to be correct if signed. Three signatures are required to complete this report: (1) Grinnell's receiving inspector, (2) the equipment installer, and (3) Bechtel's representative. The signatures would indicate that the activity had been correctly accomplished.

The inspector reviewed IER's No. 79 and No. 84, which were properly signed by Grinnell's inspectors. There was no indication that Bechtel's representative had verified these activities.

The licensee's QA representative informed the inspector that this matter would be investigated. Results of the findings and corrective action taken will be verified during subsequent inspections.

# 3. Approvals Without Adequate Verification

During the inspection, it was observed that, although service water pumps No. P3-3 and No. P3-2 were not installed as specified in Drawing No. M135, Revision 10, the pumps were not tagged as nonconforming items.

The inspector expressed concern over a possible breakdown in the licensee's QA program, as a result of the following findings involving approvals without adequate verifications.

# a. Incomplete Deviation Report Cleared

Deviation Report (DR) No. F98 was prepared on June 10, 1974, by Grinnell requesting that the Bechtel construction manager approve the placing of the service water pumps' position without Orac use



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of planner FF105A (which is required per procedure SS1201C). Bechtel's construction manager approved the above deviation on June 28, 1974. As a result, the pumps were left installed in the incorrect location.

Further, it was noted that the above DR was incomplete because, instead of inserting the relevant drawing (M135) used for selecting the location of the pumps, "NA" was inserted in the intended column.

#### b. Pumps Released for Grouting Without Adequate Verification

Without proper verification, speed letter No. 8-428, dated December 27, 1974, was issued by Bechtel to Bentley releasing the incorrectly placed pumps for grouting.

#### c. Alignment Documented as Correct

Without verifying that the correct pump was hooked to the correct pipe, the "alignment prior to hookup" was signed off by Bentley (November 25, 1974), Bechtel (November 27, 1974), and TECO (November 25, 1974).

#### d. Concrete Placement Verified

Without verifying that the correct pump had been set on the foundation, the Bechtel field engineer signed off the "Concrete Placement Checklist" (Form 10) on December 30, 1974.

e. Inadequate Communication of Nonconformances

A Field Inspection Report (FIR) dated January 21, 1975, identified the inadvertant placement of service water pumps, No. P3-2 and No. P3-3, and informed the Bechtel "Area Coordinator" by a copy of the FIR. The pumps were not "Red Tagged" to denote a nonconformance at the completion of the current inspection.

The above inspection reports indicated that QC personnel did not participate in the inspection of activities concerning safety related items.

#### 4. Safety Related Items List (Q-list)

During the inspection, the inspector noted that, "the component cooling water return from decay heat pump bearing housing seals . . . water return header" on page 33, Revision 4, of M602, was identified to be seismic Class 1. but was not listed as a safety related item. The





licensee's representative showed the inspector, for verification, a Q-list compiled by Bechtel, titled "Davis-Besse Nuclear Power Station Q-List". The inspector noted that this list was last revised on May 16, 1974. The inspector inquired if the list had been reviewed after issuance of Revision 10 of the FSAR in December 1974. In Volume 5 of the FSAR, the inspector found Figure 9-4 (M-036) Revision 9, dated September 1974, which appears to show the above line in the component cooling system as a "Q" item.

# 5. QA Engineer's Report Review

The inspector reviewed the following QA engineer's reports:

- a. QA Engineer's Report 91, covering November 18 29, 1974.
- b. QA Engineer's Report 92, covering December 2 13, 1974.
- c. QA Engineer's Report 93, covering December 16 27, 1974.
- d. QA Engineer's Report 94, covering December 30 January 10, 1974.

The above documents indicated the number of DR's have been reduced and that corrective action was being taken effectively.

### 6. Reactor Vessel Closure Head (RVCH)

The inspector reviewed the inspection records of the RVCH maintained by B&W. Inspections appeared satisfactory and were in accordance with B&W Procedure No. FS-111-1b-14, titled "Receipt Inspection, Handling, Storage, and Installation of the RVCH" dated July 10, 1973. Inspections continued after the RVCH was removed from its original shipping condition and set in the containment building. During the current inspection, the inspector observed that preparations were being made to assemble the control rod driving mechanisms. Procedure No. 57, Revision 3, dated January 17, 1975, was available at the place of work and inspections, indicated by signoffs, had been performed at various stages.

# 7. QA Documentation on NSSS Components (B&W)

The following mechanical components were selected from within the reactor coolant pressure boundary system for QA documentation review.

 High pressure injections pump; identification P-1A; serial No. 68980.

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- b. Seal return coolers (heat exchangers); identification MUGX2a and MUHX2b, Serial Nos. 1768 and 1769.
- c. Seal injection flow isolation valve; identification MU-HV-66A; Serial No. W7-374-13MS.

The B&W QA records for the above mechanical components appeared to be acceptable by selective review of:

- (1) Storage inspection reports
- (2) Material and fabrication reports, which included:
  - (a) Material identification
  - (b) Material certifications
  - (c) Conformance to manufacturing requirements
- (3) Material and shop NDE reports
- (4) Deviation reports
- (5) Surveillance and test reports



