



PUBLIC SERVICE INDIANA

MARBLE HILL PROJECT QUALITY ASSURANCE MANUAL

Title:

ORGANIZATION

Section No. 1 Rev. 8

Page 1 of 23

Approval:

Quality Assurance Officer

Approval Date

Vice President Nuclear Services

Approval Date

Sr. V.P. - Nuclear Division

Approval Date

1.1 PURPOSE

1.1.1 This Section describes Public Service Company of Indiana's (PSI's) organizational responsibilities for implementing the Marble Hill Project Quality Assurance Program defined by Title 10, Part 50, Appendix B of the Code of Federal Regulations (10 CFR 50, Appendix B) for design, procurement, and construction.

1.1.1.1 NOTE: Whenever individual titles are used, the named individual has authority to designate another qualified individual within the department, section or group, in writing or in appropriate implementing procedures, but retains ultimate responsibility for implementing the requirement. If an individual or group is designated in writing, a copy of the written designation shall be distributed to the Records Management Manager for retention.

1.1.2 For title changes that occur within an organization and for which responsibilities and reporting lines do not change, the next subsequent revision to the Manual (or in a maximum of six months) shall incorporate the title changes. In the interim, the Quality Assurance Officer shall issue a letter to all Manual Holders indicating the title changes, effective date, and instructions to insert the letter in front of the Manual.

1.2 GENERAL REQUIREMENTS AND RESPONSIBILITIES

1.2.1 The Senior Vice President Nuclear Division has the overall responsibility for the Program through the organizational structure set forth in Attachment A. The Senior Vice President Nuclear Division is also responsible for assuring that Management Audits are performed to determine the effectiveness of the Quality Assurance Program.

1.2.2 The Quality Assurance Officer reports directly to the Senior Vice President Nuclear Division and is organizationally independent of the Vice President Nuclear Services to provide the necessary independence from cost and schedule considerations.

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1.2.3 The Quality Assurance Officer is assigned the authority and responsibility for the necessary controls to assure that the Program is fully implemented and to represent PSI on all matters associated with the implementation of the Program as they relate to Regulatory requirements, Contractors and Suppliers.

1.2.4 The Vice President Nuclear Services reports to the Senior Vice President Nuclear Division and is delegated responsibility for Marble Hill Station Design, Construction, Project Management and Licensing.

1.2.5 The Executive Director Nuclear Operations reports to the Senior Vice President Nuclear Division and is delegated responsibility for test and operations for the Marble Hill Station.

1.3 IMPLEMENTATION

1.3.1 Quality Assurance Officer

The Quality Assurance Officer is responsible for:

- a. Managing and directing the Quality Assurance Department as depicted by Attachment B.
- b. The approval of the Program, interpretation of Quality Assurance requirements and, implementation of applicable portions of the Quality Assurance program through implementing procedures.
- c. Apprising the Senior Vice President Nuclear Division, Vice President Nuclear Services, and Executive Director Nuclear Operations of the effectiveness of the Program by periodic reporting on quality activities, trends and problems.
- d. Appropriately exercising authority to stop nonconforming work.
- e. Coordinating applicable activities with regulatory agencies such as audits, inspections or investigations with the affected organization manager(s).
- f. Assuring conformance of activities affecting quality to the Program's requirements.
- g. Appropriately exercising the authority vested in the Quality Assurance Department to cause the acceptance or rejection of work, materials and equipment based on conformance to engineering requirements or failure to meet procurement requirements.

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- h. Certification of Quality Assurance Personnel.
- i. Coordinating follow-up on NRC inspection activities to assure correct resolution and prompt closeout of inspection findings.
- j. Assuring the adequacy, clarity and appropriateness of PSI Quality Assurance communications and commitments directed to regulatory agencies, Contractors and Suppliers.
- k. Contacting the NRC on Quality Assurance matters.
- l. Maintaining a staff of sufficient size and qualifications to support required audit, surveillance and program development activities.
- m. Determining documents which are to be generated, completed, and retained as Quality Assurance Records.

1.3.2 Quality Engineering Manager

The Quality Engineering Manager provides quality engineering direction, reports to the Quality Assurance Officer and is responsible for the following:

- a. Directing the activities of Discipline Quality Engineering Managers/Specialist and the Quality Records Verification Supervisor.
- b. Coordinating efforts to assure consistent application of PSI Quality Engineering requirements and commitments for Contractors and Suppliers.
- c. Maintaining communication and coordination between the Discipline Quality Engineering Managers/Specialist and other departments/sections/groups within PSI, Contractors and Suppliers.
- d. Managing the Site Construction Surveillance Program, the Civil Inspection and Testing Services Program, Material Control Surveillance Program and Receipt Inspection activity.
- e. Evaluating potential adverse quality trends ~~identified by the Quality Administration Supervisor~~ and recommending necessary corrective action to the Quality Assurance Officer.

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1.3.2.1 Discipline Quality Engineering Managers/Specialist

The Electrical, Mechanical, Civil, Materials (Discipline) Quality Engineering Managers and Welding/NDE Quality Engineering Specialist report to the Quality Engineering Manager and are responsible for:

- a. Evaluating and approving the Quality Assurance Programs of the Contractors and Suppliers and changes thereto.
- b. Approving PSI construction surveillance, receipt inspection, pre-award survey, source surveillance and Procurement and Construction Data Package Review checklists.
- ~~c. Reviewing and approving Contractor procedures.~~
- ~~d. Reviewing dispositions of Nonconformance Reports and responses to Corrective Action Requests.~~
- e. Assuring Quality Assurance Record requirements are identified in Procurement Documents.
- f. Assuring Mandatory Hold Points are determined for Contractors and Suppliers and provided to the Audit Manager and Quality Engineering Construction Surveillance Supervisors.
- g. Identifying the causes of nonconformances and determining the need for corrective action.
- h. Reviewing Safety-Related design criteria documents.
- i. Evaluating Procurement Specifications and changes thereto, and preparing Quality Assurance requirements to be included in Procurement Specifications.
- j. Performing the Civil Inspection and Testing Services and Quality Engineering Survey Services activities.
- k. Reviewing and concurring with Contractors and Suppliers corrective action responses to PSI audit findings.
- l. Approving checklists and reports of construction testing activities.
- m. Supervising the Discipline Quality Engineering Construction Surveillance, Storage and Maintenance Surveillance, Civil Inspection Testing Services and Receipt Inspection Supervisors.

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- n. Surveillance of construction activities, storage conditions of material and items, and of maintenance and handling of items performed by Contractors and PSI.
- o. Determining the completeness and acceptability of construction data packages (CDPs) prepared by Site Contractors.
- p. Review and approval of Procurement Documents.
- q. Review of structure, system, and component classification criteria documents.

1.3.2.1.1 Discipline Quality Engineering Surveillance Supervisors

The Discipline Quality Engineering Surveillance Supervisors report to the Discipline Quality Engineering Managers and are responsible for implementation of the construction surveillance program as follows:

- a. Surveillance of Contractor construction and storage and maintenance activities.
- b. Documenting construction surveillance activities and nonconforming conditions.
- c. Stopping further processing of unacceptable work.
- d. Assuring that construction surveillance activities are performed by trained and qualified personnel.
- e. Reviewing and concurring with completed construction surveillance reports.

1.3.2.1.2 Civil Inspection and Testing Services Supervisor

The Civil Inspection and Testing Services Supervisor, reports to the Civil Quality Engineering Manager, and is responsible for:

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- a. Preparation, approval, and control of implementing procedures and all necessary functions to assure compliance of the Civil Inspection and Testing Services group with PSI Quality Assurance Program requirements.
- b. Supervision of Senior Field and Laboratory Inspectors.

1.3.2.1.3 Receipt Inspection Supervisor

The Receipt Inspection Supervisor reports to the Materials Quality Engineering Manager and is responsible for:

- a. Performing receipt inspection of PSI-procured Safety-Related items received at the site.
- b. Maintenance and control of PSI Measuring and Test equipment used during receipt inspection.
- c. Status tagging of PSI procured material and items.
- d. Reviewing and approving completed receipt inspection checklists.

1.3.2.3 Quality Records Verification Supervisor

The Quality Records Verification Supervisor reports to the Quality Engineering Manager and is responsible for the review and acceptance of Procurement Data Packages using checklists approved by the Discipline Quality Engineering Manager.

1.3.3 Audit Manager

The Audit Manager reports to the Quality Assurance Officer and is responsible for:

- a. Directing the activities of the Site Audit Supervisor and Supplier Audit Supervisor.
- b. Coordination of efforts to assure consistent application of the PSI Audit Section requirements and commitments to Contractors and Suppliers.

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- c. Assuring communication and coordination between the Audit Supervisors and other departments/sections/groups within PSI, and Contractors and Suppliers.
- d. Managing the Audit and Source Surveillance Programs.
- e. Evaluating potential adverse quality trends identified by the Quality Administration Supervisor and recommending necessary corrective action to the Quality Assurance Officer.

1.3.3.1 Site Audit Supervisor

The Site Audit Supervisor reports to the Audit Manager and is responsible for:

- a. Scheduling, coordinating, and assuring the performance of audits by audit personnel in order to verify the implementation and determine the effectiveness of Contractors', Design Contractors' and internal PSI Quality Assurance Programs.
- b. Stopping Further Processing of unacceptable work.
- c. Performing pre-award surveys of Design Contractors and Site Contractors.
- d. Assuring that audit and pre-award survey activities are performed by trained and qualified personnel.
- e. Reviewing and approving completed audit reports and pre-award surveys.

1.3.3.2 Supplier Audit Supervisor

The Supplier Audit Supervisor reports to the Audit Manager and is responsible for:

- a. Scheduling, coordinating and assuring the performance of audits and source surveillance activities by audit personnel in order to verify the implementation and determine the effectiveness of Suppliers' Quality Assurance Programs.
- b. Stopping Further Processing of unacceptable work.
- c. Performing pre-award surveys of Suppliers.
- d. Assuring that audit, source surveillance, and pre-award survey activities are performed by trained and qualified personnel.

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- e. Reviewing and approving completed audit reports, pre-award surveys, and source surveillance reports.
- f. Implementing Mandatory Hold Points established by the Quality Engineering Manager.
- g. Reviewing and accepting Quality Assurance Records at Suppliers' facilities when directed by the Quality Engineering Manager.

1.3.4 Operations Quality Assurance Supervisor

The Operations Quality Assurance Supervisor reports to the Quality Assurance Officer and is responsible for:

- a. Development and implementation of the Operations Quality Assurance Program by the Operations Quality Assurance Staff.
- b. Storage and Maintenance Surveillance of equipment released for installation, or installed equipment.

1.3.5 Quality Administration Supervisor

The Quality Administration Supervisor reports to the Quality Assurance Officer and is responsible for:

- a. Development, preparation and maintenance of this Manual and the ASME Quality Assurance Manual.
- b. Reviewing PSI site procedures that implement the requirements of this Manual and the AQAM Manual to assure compatibility.
- c. Reviewing and approving Quality Assurance Department training plans and lesson plans.
- d. Preparing Quarterly Trend Reports.
- e. Supervising Quality Administration Personnel.

1.3.6 Nuclear Regulations and Affairs Manager

The Nuclear Regulations and Affairs Manager reports to the Senior Vice President Nuclear Division and is responsible for:

- a. Assuring any new or revised regulatory requirements are routed to affected PSI organizations for review, comment and determination of applicability.
- b. Overall coordination and contact for NRC licensing activities above the NRC's Project Manager level.

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c. Review of NRC correspondence including responses to NRC bulletins and requests for information, and coordination of responses in non-Project PSI organizations.

d. Emergency planning.

1.3.7 Vice President Nuclear Services

The Vice President Nuclear Services reports to the Senior Vice President Nuclear Division and is delegated responsibility for Marble Hill Station Design, Construction, Project Management, and Licensing. Reporting to the Vice President Nuclear Services is the Assistant Project Director, the Construction Manager, and Project Purchasing Manager. The Vice President Nuclear Services directs and coordinates the work of the NSSS Supplier, the Architect-Engineer, and other functions as required to provide a safe, reliable facility. The Vice President Nuclear Services' responsibilities include the implementation and execution of effective design reviews both within the Project Engineering Section and in the Architect-Engineer's staff, the analysis of bids, purchase recommendations, budgetary analysis, schedule preparation, progress reports, nonconformance tracking activities, and licensing contacts with the NRC Project Manager.

1.3.8 Construction Manager

The Construction Manager reports to the Vice President Nuclear Services and is responsible for the following activities as shown in Attachment F:

- a. Coordination of all project construction activities to assure Contractor compliance with project commitments and establish project milestones.
- b. Coordination of PSI contractual acceptance of structures and systems from the Contractors.
- c. Supervision of the Civil, Mechanical, Electrical, Composite, Materials Project Contract Managers and Systems Construction Completion Manager.
- d. Supervision of the Safety and Fire Prevention Supervisor who monitors Contractors' compliance with their established safety programs.

1.3.9 Project Contract Managers

The Project Contract Managers report to the Construction Manager and are responsible for the following:

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- a. Ensuring that Contractor work is performed in conformance with drawing, specification, and contract requirements.
- b. Coordinating Marble Hill construction and fabrication.
- c. Receiving items and material.
- d. Maintaining records and accountability of items and material stored by PSI.
- e. Handling, storing, preserving, protecting and maintaining items and material stored by PSI until release to the Contractor.
- f. Providing construction status and performance reports and ensuring that construction-related communications and information flow properly.
- g. Scheduling of construction activities.
- h. Negotiating Change Orders, Extra Work Authorizations, and backcharges for Contractors.

1.3.9.1 Construction Engineering Supervisor

The Construction Engineering Supervisor reports to the Project Contract Manager or Assistant Contract Manager, as applicable, and is responsible for the following:

- a. Determining the schedule of construction activities.
- b. Monitoring Contractor work to ensure conformance with drawing, specification, and contract requirements.

1.3.9.2 Contract Administration Supervisor

The Contract Administration Supervisor reports to the Project Contract Manager and is responsible for preparing or reviewing Extra Work Authorizations, Change Orders, and backcharges for Contractors.

1.3.9.3 Senior Planning and Scheduling Engineer

The Senior Planning and Scheduling Engineer reports functionally to the Project Contract Manager and is responsible for the following:

- a. Reporting work progress and status of Contractors.

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- b. Providing scheduling information to the Project Controls Organization.
- c. Assisting Contract Managers with the planning of Contractors construction activities and providing analysis of Contractor progress relative to the Project schedule.

1.3.9.4 Assistant Contract Manager

The Assistant Contract Manager reports to the Project Contract Manager and is responsible for managing the field construction of the assigned contract and represents the Project Contract Manager for the specific contract.

1.3.10 System Construction Completion Manager

The System Construction Completion Manager reports to the Construction Manager, and when each system reaches approximately 95 percent completion is responsible for punch lists, establishing priorities for all activities to complete the system and/or determining which system is to be completed first. When construction and Phase I testing is complete, he will coordinate with the Test Administration manager to turnover the system and supporting documentation to Operations.

1.3.11 Project Purchasing Manager

The Project Purchasing Manager reports functionally to the Vice President Nuclear Services and interfaces with Project personnel relative to procurement activities and is responsible for the preparation and transmittal of Purchase Orders, approved Change Orders to Suppliers and Contractors, and maintenance of the Approved Supplier/Contractor List. These activities shall conform to the requirements identified within this Manual and ASME Quality Assurance Manual, Project Management Manual, and other approved related Project Procedures. The Project Purchasing Manager shall report in an administrative capacity to the Director of Purchasing. The Project Purchasing Manager is the prime contact with Suppliers for procurement related activities.

1.3.12 Assistant Project Director

The Assistant Project Director reports to the Vice President Nuclear Services and is responsible for directing the activities of the Project Engineering Manager and Project Controls Manager.

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1.3.12.1 Project Engineering Manager

The Project Engineering organization is depicted in Attachment C. The Project Engineering Manager reports to the Assistant Project Director and is assigned the following responsibilities:

- a. Coordination of design activities.
- b. Assuring technical reviews are accomplished by affected PSI organizations, including Quality Engineering reviews of Procurement Specifications.
- c. Assuring control of design changes and consistency with SAR commitments including resolution of Field Change Requests (FCRs) and Engineering Change Notices (ECNs) with the SAR.
- d. Assuring Safety-Related items are properly identified by the designer on Design Documents.
- e. Assuring the current approved design configuration can be readily determined.
- f. Coordinating and drafting responses to NRC regulatory bulletins and requests for information related to Project activities.
- g. Preliminary technical selection of those Suppliers and Contractors found acceptable by Quality Assurance.
- h. Preparation, coordination, review and approval of Project Management Procedures.
- i. Design activities required by PSI as Owner & "N" Certificate Holder.
- j. Preparation, review, and approval of Storage and Maintenance Instructions.

1.3.12.1.1 Chief Discipline Engineers

The Chief Discipline Engineers report to the Project Engineering Manager and are responsible for assuring the technical adequacy of the Project design. While design activities may be subcontracted, the Chief Discipline Engineers retain responsibility for the design and have the authority to effect

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design changes as necessary. The Resident Engineers report to the Chief Discipline Engineers. Specific responsibilities include:

- a. Assuming Owner and "N" Certificate Holder engineering responsibilities for ASME Code Piping Systems.
- b. Reviewing and approving the Engineering Design Documents and design changes thereto.
- c. Providing release authority for drawings, Procurement Specifications and Special Process Procedures (SPPs), and providing technical review of Construction Specifications.
- d. Dispositioning PSI-generated NCRs.
- e. Reviewing and approving Contractor NCRs dispositioned "Use-As-Is" or "Repair".
- f. Assuring proper approval of Supplier "Use-As-Is" and "Repair" nonconformance documents by the Architect-Engineer.
- g. Controlling replication changes on the basis of formalized replication guidelines.
- h. Reviewing and approving Design Specifications and Design Reports.
- i. Performing Design Reviews of the Architect-Engineer's engineering activities for the Project.

1.3.12.1.2 Resident Engineers

Resident Engineers are members of Project Engineering matrixed by the Chief Discipline Engineers to Project Contract Managers to provide close technical support of the construction effort. The matrixed Resident Engineers report directly to the Chief Discipline Engineer for technical and administrative matters. They report to the Project Contract Manager functionally providing technical support, as required. The Resident Engineers are responsible for the following:

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- a. Initiating Field Change Requests.
- b. Approving dispositions of Contractor "Use-As-Is" and "Repair" NCRs.
- c. Reviewing Contractor procedures for compliance to technical requirements.
- d. Providing technical support for construction activities.

1.3.12.1.3 Nuclear Safety and Licensing Manager

The Nuclear Safety and Licensing Manager reports to the Project Engineering Manager and is responsible for:

- a. Coordinating licensing efforts including preparation and coordination of Safety Analysis Reports (PSAR and FSAR) and Amendments.
- b. Acting as the primary contact with the Nuclear Regulatory Commission (Office of Nuclear Reactor Regulation) for Project-related licensing matters.
- c. Assuring all licensing commitments relating to 10CFR50 Appendix B, are coordinated with the Quality Assurance Organization.
- d. Chairing Safety Review Committee activities.

1.3.12.1.4 Engineering Administrative Services Supervisor

The Engineering Administrative Services Supervisor reports to the Project Engineering Manager and is responsible for:

- a. Administering the Nonconformance Report program.
- b. Supervising the activities of the Procedure Review Board Chairman.

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1.3.12.1.4.1 Procedure Review Board Chairman

The Procedure Review Board Chairman reports to the Engineering Administrative Services Supervisor and is responsible for coordinating the review and approval of Contractor procedures; and for the preparation and coordination of the review and approval of Project Management Procedures and Special Project Procedures.

1.3.13 Nuclear Division Administration Manager

The Nuclear Division Administration Manager, as shown in Attachment D, reports to the Senior Vice President Nuclear Division and is responsible for:

- a. Directing the activities of the Administrative Services Manager, and Records Management Manager.
- b. Assuring the adequacy of the document control system and Records Management system.
- c. Assuring the adequacy of the storage and retrieval of Quality Assurance Records.

1.3.13.1 Administrative Services Manager

The Administrative Services Manager reports to the Nuclear Division Administration Manager and is responsible for:

- a. Maintaining a Site Document Control Center to control and distribute safety-related documents.
- b. Supervising the Document Control Manager.

1.3.13.1.1 Document Control Manager

The Document Control Manager reports to the Administrative Services Manager and is responsible for:

- a. Control and distribution of safety-related documents.

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- b. Supervision of document control personnel.

1.3.13.2 Records Management Manager

The Records Management Manager reports to the Nuclear Division Administration Manager and is responsible for:

- a. Maintaining the Quality Assurance Records File Room to assure proper storage of Quality Assurance Records.
- b. Preparing and approving the Quality Assurance Records File Index and assuring the retrievability of Quality Assurance Records.

1.3.14 Executive Director Nuclear Operations

The Executive Director Nuclear Operations reports to the Senior Vice President Nuclear Division and is responsible for:

- a. Test and Startup of the Marble Hill Station.
- b. Operations of the Marble Hill Station.
- c. Control and distribution of Supplier Technical Manuals.
- d. Directing the activities of the Station staff.

1.3.14.1 Test Director

The Test Organization for the Marble Hill Project is set forth in Attachment E. The Test Director reports to the Executive Director Nuclear Operations and is assigned the following functional responsibilities:

- a. Directing the Construction Test Program.
- b. Compiling a PSI Turnover package and providing it to the Station Production Manager for review and acceptance.
- c. Coordinating with the Station to obtain Operations support for the test program.
- d. Coordinating with Project Contract Management personnel to ensure that construction completion is integrated into testing.
- e. Providing overall scheduling and personnel support for the test program.

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f. Certification of the Construction Test Manager and Test Administration Manager.

1.3.14.1.1 Construction Test Manager

The Construction Test Manager reports to the Test Director and is responsible for supervision and control of PSI construction verification testing, certification of test personnel reporting to him, approving PSI construction test procedures, and coordinating overall PSI construction test activities.

1.3.14.1.2 Test Administration Manager

The Test Administration Manager reports to the Test Director and is responsible for supervision and control of the Marble Hill Test and Startup Section administrative duties. This includes administrative procedure preparation, collecting and collating turnover documentation, control of the Master Completion List, and planning and scheduling. The Test Administration Manager is also responsible for certification of test personnel who report to him.

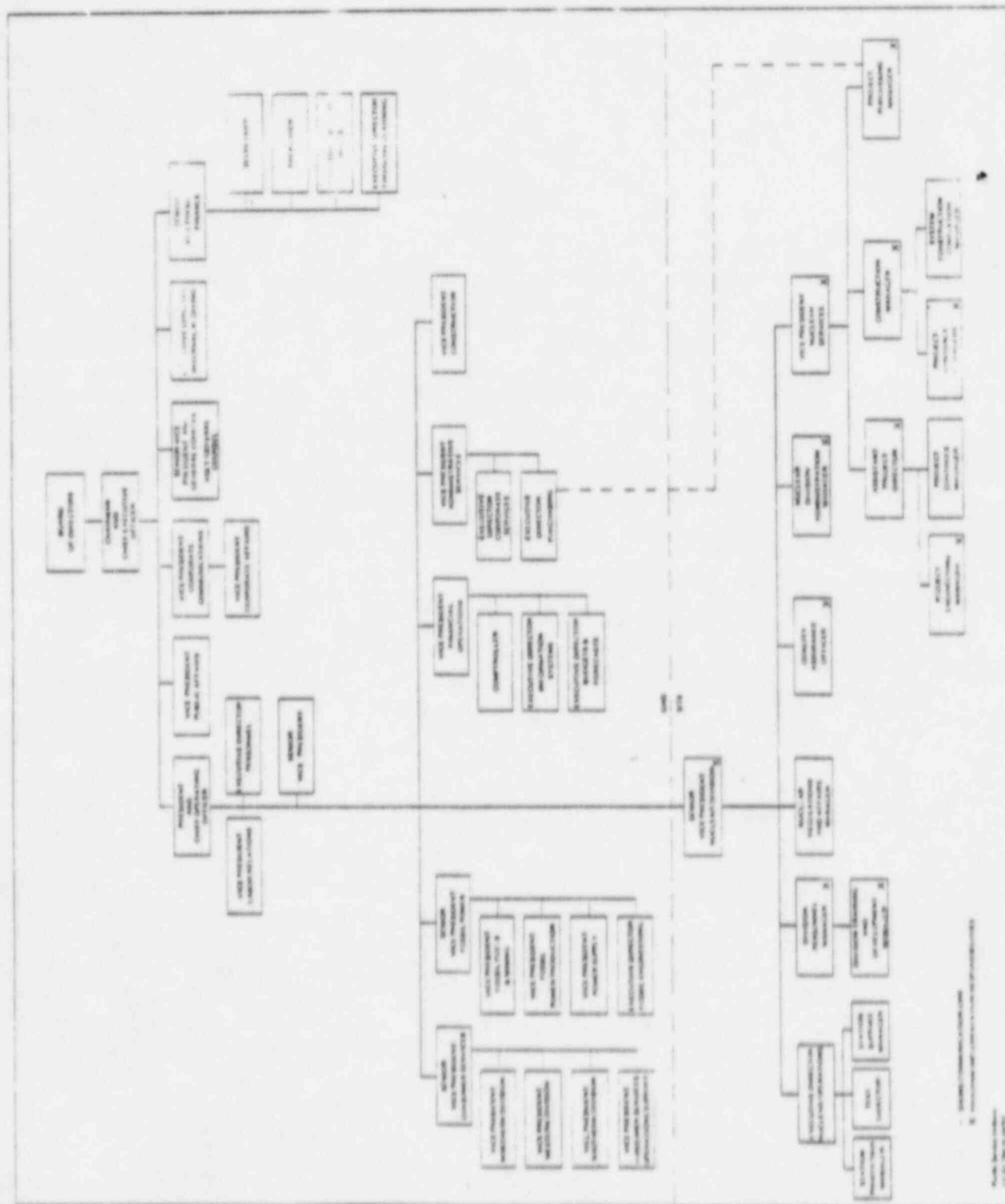
1.3.15 Division Personnel Manager

The Division Personnel Manager reports to the Senior Vice President Nuclear Division and is responsible for providing the Division Training and Development Manager with the responsibility and authority to properly execute assigned duties.

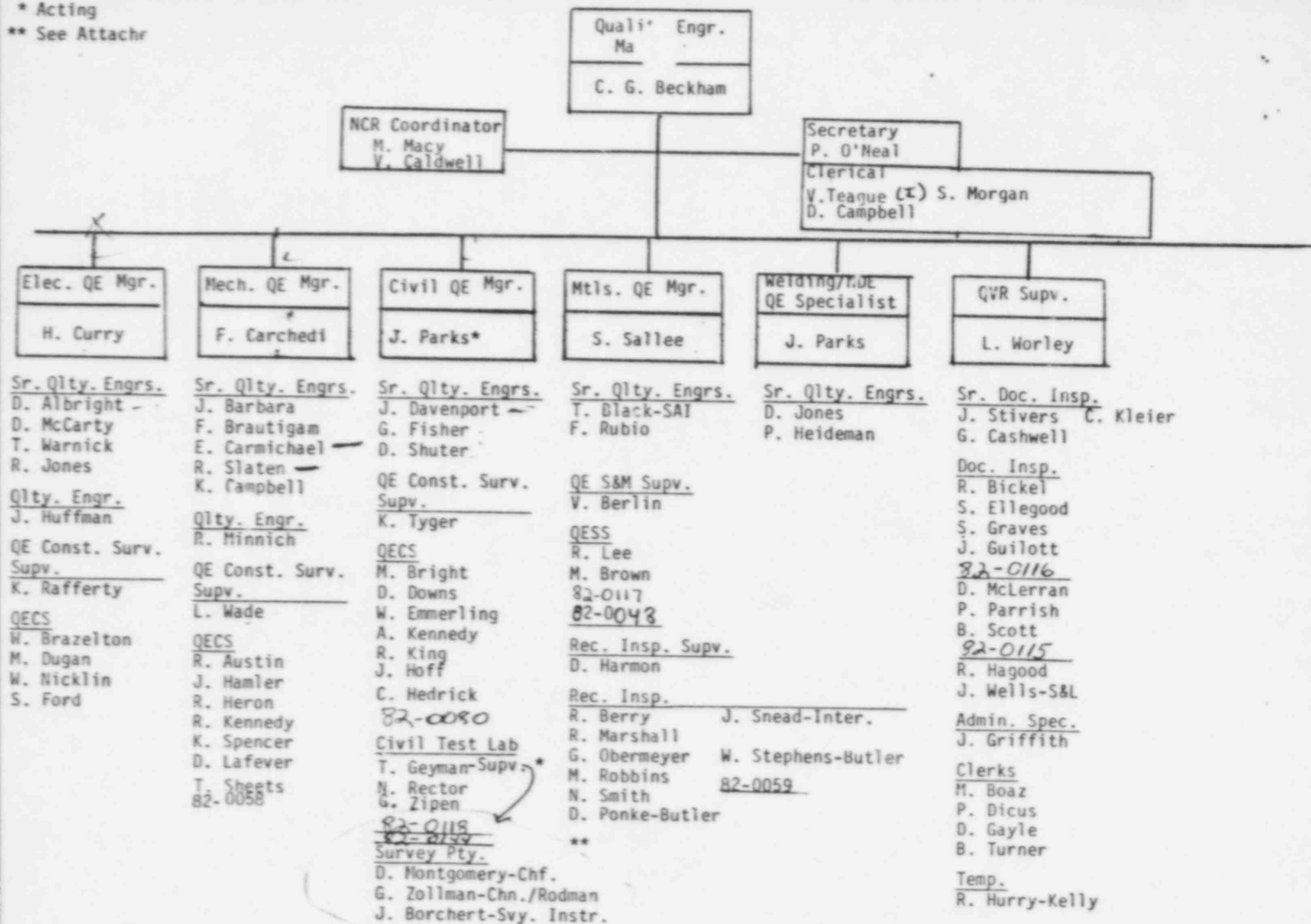
1.3.15.1 Division Training and Development Manager

The Division Training and Development Manager reports to the Division Personnel Manager and is responsible for establishing and administering the training of Division personnel and for coordinating the certification of PSI inspection, test, and audit personnel. Reporting to the Division Training and Development Manager are the designated department training coordinators.

OVERALL MARBLE HILL PROJECT ORGANIZATION



* Acting
 ** See Attachr



Contract Personnel

G. Davis	CDI
M. Riley	CDI
J. Rossitor	SAI
J. May	SAI

11/15/82

Dave Herkoff

Doc Control Dept

MARBLE HILL
DOCUMENT CONTROL

3A

• Document Control Organization (attachment 1)

The three functional elements of Document Control are:

- A. Reproduction/Distribution - This group is responsible for distribution of Design Documents to Contractors, Suppliers, Control Stations and individuals.
- B. Design Documents - This group is responsible for verification of Design Documents to assure that they meet the requirements for release; proper revision sequences, proper approvals, and change incorporation.
- C. Control Section - This group is responsible for controlling design documents at various locations at Marble Hill.

Implementing Procedures for Document Control are:

- A. PMP 5.02 - Document Control
- B. MH-12-DI-00-012 - Handling of Vendor Technical/Instruction Manuals

• Design Document Flow (attachment 2)

All Design Documents flow through the Site Document Control Center prior to distribution and use. The flow is as follows:

- A. Receipt - Documents are received; logged and reviewed by PSI Engineering.
- B. Verification - Documents are verified as to revision notations, proper approvals, and to ensure that the transmittal agrees with the documents.
- C. Index - All documents are then posted in the Design Document Information System.
- D. Release - The transmittal is approved for distribution.

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- E. Distribution - Required copies are made and status stamps applied. Transmittals are tracked to assure receipt acknowledgement.
- F. Controlled Files - Control Stations receive documents, destroy superceded copies, and acknowledge transmittals.

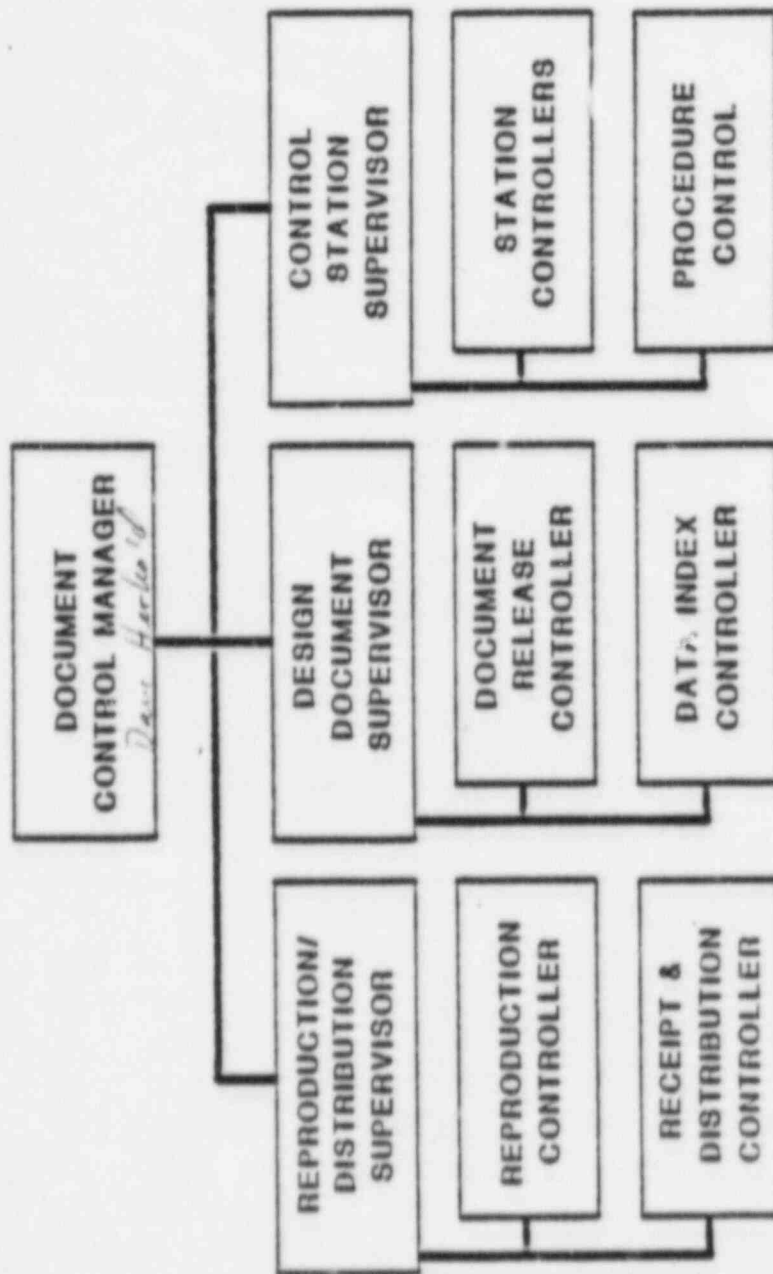
• Design Document Information System

The heart of the Document Control program at Marble Hill is the Design Document Information System (DDIS). DDIS has been in operation at Marble Hill since resumption of safety related work and is presently being used to display information about design documents. DDIS is an on-line interactive data system which, when queried, will display information about design documents. Typical of the information displayed are:

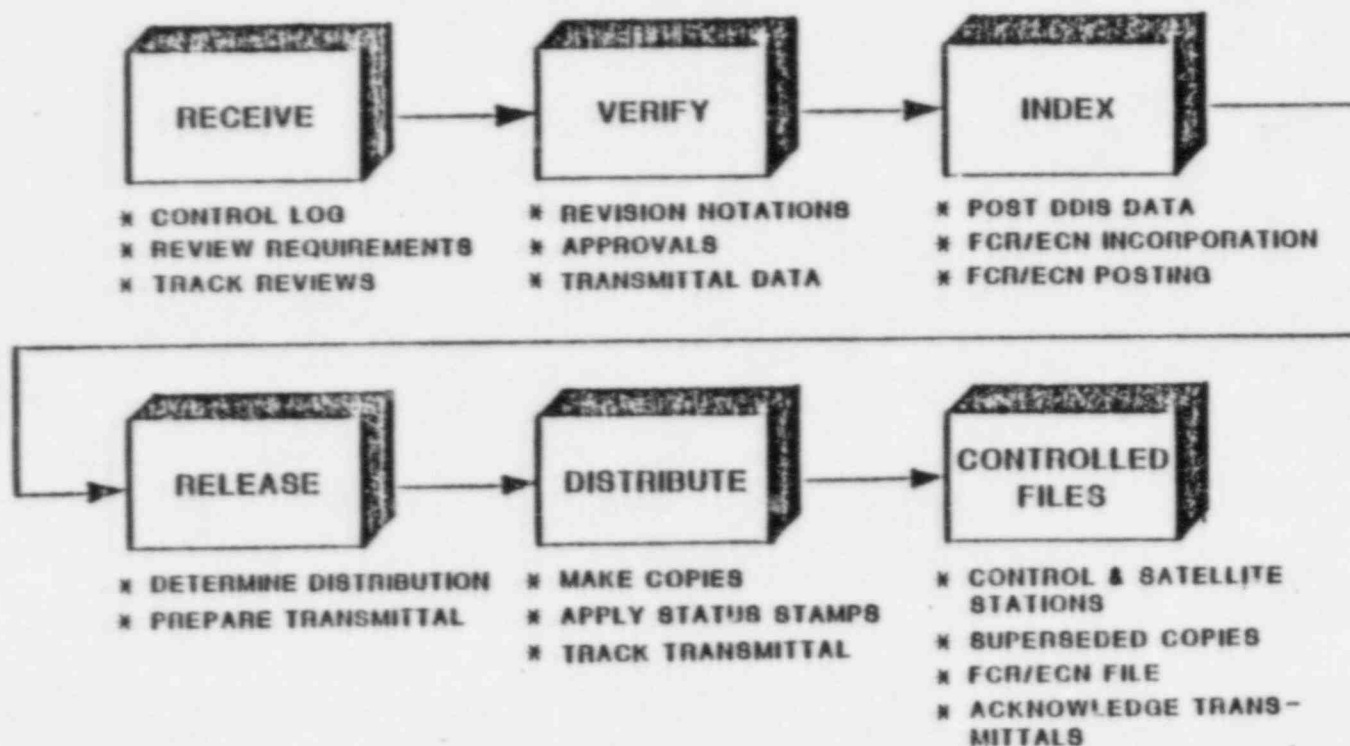
- A. Document Number and Sheet Number
- B. Document Type
- C. Transmittal Number
- D. Applicable Specifications
- E. Title
- F. Revision and Revision Date
- G. Status
- H. Applicable Plant Unit
- I. Design Changes
- J. Design Change Status

DDIS will be loaded by the AE as new or revised documents are approved, thus providing the AE with internal document status information. When the documents are approved for use at Marble Hill, the DDIS record is updated and the documents are transmitted. When the documents are received at Marble Hill, they are verified to the transmittal and to DDIS. DDIS is updated to show distribution at the site. When design changes are approved, they are input to DDIS by the Site Document Control Center.

SITE DOCUMENT CONTROL ORGANIZATION



DESIGN DOCUMENT FLOW



Training

DATE OF ISSUE: 10/25/82

INDIVIDUAL REQUIRED READING NOTIFICATION

(Instructions for completion of this form are listed on the reverse side)

ATTENTION: 5. Martin #34 SECTION: Training & Development
DEPARTMENT: Personnel

You are invited to read the following document(s) and return this form completed to Division Training by 11/10/82

DOCUMENT	REV. READ
POAM Sect. 1 (Rev. 8)	8
Sect. 2 (Rev. 9)	9
Sect. 6 (Rev. 9)	9
Sect. 7 (Rev. 8)	8

DOCUMENT	REV. READ
POAM Sect. 10 (Rev. 9)	9
Sect. 17 (Rev. 8)	8

ACKNOWLEDGEMENT

My signature below indicates I have read the document(s) on the date(s) indicated above and I am aware of the contents of the material contained in the document(s).

*SIGNATURE: Jim O'Hara *DATE: 11/10/82

*EMPLOYEE NO.: 13800 *COMPANY NAME: PSI

*SOCIAL SECURITY NO.: 421 42 1078

*Information to be filled in by individual performing required reading.

DATE OF ISSUE: 11/1/82

INDIVIDUAL REQUIRED READING NOTIFICATION

(Instructions for completion of this form are listed on the reverse side)

ATTENTION: S. Morris SECTION: Trng. & Develop
DEPARTMENT: Personnel

You are invited to read the following document(s) and return this form completed to Division Training by 11/15/82

DOCUMENT	REV. READ
PMP 2-2 (Rev. 0)	<input type="radio"/>
PMP 2-3 (Rev. 0)	<input type="radio"/>
PMP 5-1 (Rev. 0)	<input type="radio"/>
PMP 10-1 (Rev. 0)	<input type="radio"/>

DOCUMENT	REV. READ
PMP 16-3 (Rev. 0)	<input type="radio"/>
PMP 17-1 (Rev. 0)	<input type="radio"/>

ACKNOWLEDGEMENT

My signature below indicates I have read the document(s) on the date(s) indicated above and I am aware of the contents of the material contained in the document(s).

*SIGNATURE: Jim O'Hare *DATE: 11/15/82
*EMPLOYEE NO.: 13800 *COMPANY NAME: PSI
*SOCIAL SECURITY NO.: 421 42 1078

*Information to be filled in by individual performing required reading.

DATE OF ISSUE: 10/28/82

INDIVIDUAL REQUIRED READING NOTIFICATION

(Instructions for completion of this form are listed on the reverse side)

ATTENTION: S. Harris SECTION: Trng. & Development
DEPARTMENT: PersonnelYou are invited to read the following document(s) and return this form completed to Division Training by 11/15/82

DOCUMENT	REV. READ
ADAM Sect. 1 (Rev. 10)	10
Sect. 2 (Rev. 9)	9
Sect. 6 (Rev. 10)	10
Sect. 7 (Rev. 11)	11

DOCUMENT	REV. READ
ADAM Sect. 10 (Rev. 6)	6
Sect. 17 (Rev. 10)	10

ACKNOWLEDGEMENT

My signature below indicates I have read the document(s) on the date(s) indicated above and I am aware of the contents of the material contained in the document(s).

*SIGNATURE: Sam O. Harris *DATE: 11/15/82
*EMPLOYEE NO.: 13800 *COMPANY NAME: PSI
*SOCIAL SECURITY NO.: 421 42-1078

*Information to be filled in by individual performing required reading.

MARBLE HILL PROJECT
TRAINING ASSIGNMENT WORKSHEET

NAME Sim O. Harris DATE 10-13-82 EMPLOYEE NO. 13800

SOCIAL SECURITY NO. 421-42-1078

PROJECT SECTION Training & Development

POSITION/JOB CLASSIFICATION Division Training & Development Manager

TRAINING ASSIGNMENT APPROVED BY *[Signature]* 10-18-82
SECTION MANAGER DATE

TRAINING ASSIGNED

COMPLETION SIGNATURE*

DATE _____

1. Initial Required Reading
(Record Attached)

2. QA Indoctrination Training Level B Training

3. Procedure Training (List PMP Number and/or Lesson Plan Number)

Level A Training

L. H. H. H.

9/29/82

4. Functional Training (List Course and/or Lesson Plan Number, or attach OJT Training Form)

TRAINING ASSIGNED

COMPLETION SIGNATURE*

DATE _____

INITIAL REQUIRED READING RECORD

NAME Sim O. Harris

POSITION/JOB CLASSIFICATION Division Training & Development Manager

PROJECT SECTION Training & Development

DOCUMENT READ	REVISION READ	DOCUMENT READ	REVISION READ
<u>PQAM Section 1</u>	<u>7</u>	<u>PMP 3.10</u>	<u>4</u>
<u>PQAM Section 2</u>	<u>8</u>	<u>PMP 3.32</u>	<u>1</u>
<u>PQAM Section 6</u>	<u>8</u>	<u>PMP 4.00</u>	<u>1</u>
<u>PQAM Section 7</u>	<u>7</u>	<u>PMP 5.00</u>	<u>3</u>
<u>PQAM Section 10</u>	<u>8</u>	<u>PMP 6.00</u>	<u>2</u>
<u>PQAM Section 17</u>	<u>7</u>	<u>PMP 8.00</u>	<u>2</u>
<u>AQAM Section 1</u>	<u>9</u>	<u>TPAP 1.01</u>	<u>0</u>
<u>AQAM Section 2</u>	<u>8</u>		
<u>AQAM Section 6</u>	<u>9</u>		
<u>AQAM Section 7</u>	<u>10</u>		
<u>AQAM Section 10</u>	<u>5</u>		
<u>AQAM Section 17</u>	<u>9</u>		
<u>PMP 1.00</u>	<u>3</u>		
<u>PMP 1.01</u>	<u>5</u>		
<u>PMP 1.04</u>	<u>8</u>		
<u>PMP 2.00</u>	<u>3</u>		
<u>PMP 3.00</u>	<u>4</u>		
<u>PMP 3.01</u>	<u>9</u>		

I have read the documents listed above and am aware of the contents.

Sim O. Harris

TRAINEE SIGNATURE

10/21/82

DATE

CAREER opportunities

october 20, 1982
cut-off date october 27, 1982
volume 1 number 16

This program covers vacant positions in administrative/technical and management/professional position classifications. It is the practice of Public Service Indiana to promote from within the organization—hiring from the outside only when necessary qualifications are not available internally. Public Service Indiana will be consistent with equal opportunity, affirmative action and other developmental programs. Current job status will not be affected by your participation in the Career Opportunity Program.

Instructions:

1 If you are interested and qualified for a position listed here you should submit a "Career Opportunity Application" SF

96-5068 to the Career Opportunity Administrator, Personnel Department, GHQ, within seven days of this newsletter.

2 Complete the applicant's section by matching your relevant experiences and background to the qualifications listed. An applicant must meet the minimum requirements for the position sought, and if you've been in your current position for less than 9 months, receive your supervisor's approval.

3 Upon completion the applicant should send Part 4 of the application to the Career Opportunity Administrator, Personnel Department, GHQ. Then forward Parts 1, 2 and 3 to your immediate supervisor for completion of the immediate supervisor's section. In order to have as much pertinent information as possible, the immediate supervisor should route parts 1, 2 and 3 of the application through proper supervision for comments.

4 After completion of the supervisor's section, the immediate supervisor should retain Part 3 and send Parts 1 and 2 to the Career Opportunity Administrator, Personnel Department, GHQ.

5 Applicants will receive Part 4 of the application by return mail verifying receipt of the completed application when both applicant and supervisory sections are received.

A Position Description may be obtained for more detail about each position listed here. Contact Mary Huffman, extension 1686 at GHQ for a Position Description.

Applications will be accepted from full-time Company employees only.

APPLICANTS, PLEASE INCLUDE YOUR EMPLOYEE NUMBER ON APPLICATION IN THE SPACE JUST ABOVE YOUR LAST NAME AND SPELL OUT YOUR LOCATION AS COMPLETELY AS POSSIBLE. IT WOULD ALSO BE HELPFUL IF EACH IMMEDIATE SUPERVISOR WOULD ADD THEIR LOCATION JUST BELOW THEIR SIGNATURE. THANK YOU FOR YOUR COOPERATION.

VACANT POSITION Executive Secretary
LOCATION Executive-GHQ REQUEST NO. 0196 A/T 08
MIN./MAX. \$17,056/\$23,920
REPORTS TO H. A. Barker
TITLE Chairman & Chief Executive Officer
DIV./DEPT. Executive

POSITION RESPONSIBILITIES AND DUTIES

Organize and prioritize incoming mail; Schedule meetings and appointments, including weekly itinerary; Prepare special reports; Schedule travel arrangements, including use of Company helicopter and IEA planes; Perform secretarial duties, including dictation (shorthand/speed-writing), typing, filing; Handles activities related to Company procedures, practices and policies applicable to departmental activities and Company organization.

MINIMUM QUALIFICATIONS

Demonstrated organization ability and retention of confidentiality; Demonstrated independent judgment and discretion; Demonstrated initiative and tact in working with others; Demonstrated ability to communicate effectively both verbally and written; Associate Degree plus 2-4 years related experience of which at least 1-3 years must be as a Secretary; OR High School or equivalent plus 6-8 years related experience of which at least 1-3 years must be as a Secretary; General Company background including budgets, manuals and organizational structure; Shorthand or speedwriting; Demonstrated accuracy and speed in typing and letter composition.

DATE NEEDED November 1, 1982

WORKING HOURS 8:00 a.m. — 5:00 p.m.

REPLACING POSITION OF Gladys McQueeney

FOR FURTHER INFORMATION CONTACT Jerry W. Liggett,
Personnel-GHQ, extension 1472

NOT APPROVED TO PAY RELOCATION EXPENSES

VACANT POSITION Claim Specialist
LOCATION GHQ REQUEST NO. 0194 A/T 08
MIN./MAX. \$14,768/\$20,592
REPORTS TO J. R. Harlan
DIV./DEPT. Acct./Payroll-Benefits

POSITION RESPONSIBILITIES AND DUTIES

Responsible for adjudicating claims on a daily basis and paying benefits in accordance with Comprehensive Health Plan provisions; Reviews and calculates Comprehensive Health Plan and Short Term Disability benefits in accordance with Plan provisions; Prepares Benefit Payment Schedules, summarizes benefits for data storage, contacts providers and claimants for clarification of information, and prepares count for daily work flow; Follow-up on pending claims seeking additional information when necessary from providers, insurance companies and local benefits administrators; Determines (without daily monitoring) which claims should be researched with superiors.

MINIMUM QUALIFICATIONS

High School or equivalent plus 2-4 years Major Medical claims processing experience; Demonstrated working knowledge of Medical & Dental Terminology, Coordination of Benefits procedures & Medicare Program Benefits; Demonstrated understanding of California Relative Values Studies & International Classification of Diseases; Demonstrated understanding of Provider billing & policies; Demonstrated communication skills needed in a production, goal oriented environment for prompt, efficient claims adjudication.

DESIRABLE QUALIFICATIONS

Two years health claims experience with Public Service Indiana Comprehensive Health Plan claims; Experience in computer input/output in maintaining check controls, check reconciliations, account reconciliations and computer processing of checks; High production oriented, self-starting individual able to function under difficult situations.

DATE NEEDED Immediately

WORKING HOURS 8:00 a.m. — 5:00 p.m.

NEW POSITION

FOR FURTHER INFORMATION CONTACT Jim Harlan, GHQ, extension 2051

NOT APPROVED TO PAY RELOCATION EXPENSES

an equal opportunity employer
physically/mentally/handicapped/veteran

K/95 FOIA-84-293

VACANT POSITION Construction Project Engineer
LOCATION Marble Hill REQUEST NO. 1261 M/P 05
MIN./MAX. \$25,992/\$37,416

REPORTS TO Robert Schmidt TITLE Construction Supervisor
DIV./DEPT. Nuclear Division/Marble Hill
POSITION RESPONSIBILITIES AND DUTIES

The individual is responsible for the coordinating of work activities and timely resolution of interference and sequencing problems in their area of responsibility on second and/or third shift for the Mechanical Contract Group; This individual will be required to work without direct supervision, to assure that applicable contract specifications, codes and standards are met and to enforce all applicable safety and quality standards while promoting an orderly progression of scheduled work activities.

MINIMUM QUALIFICATIONS

B.S. Degree in Mechanical Engineering plus 2-5 years construction experience; OR High School diploma or equivalent plus 5-7 years directly related construction experience.

DESIRABLE QUALIFICATIONS

2-3 years of the construction experience be nuclear related; Knowledge and experience in both pipe and hanger installation; Individual must have good communication skills; Must be able to make decisions on his/her own.

DATE NEEDED November 1, 1982

WORKING HOURS 4:30 p.m. - 12:30 a.m.

NEW POSITION

FOR FURTHER INFORMATION CONTACT W. A. Muensterman,
Marble Hill, extension 1913

APPROVED TO PAY RELOCATION EXPENSES

APPLICANTS, PLEASE INCLUDE YOUR EMPLOYEE NUMBER ON APPLICATION IN THE SPACE JUST ABOVE YOUR LAST NAME AND SPELL OUT YOUR LOCATION AS COMPLETELY AS POSSIBLE. IT WOULD ALSO BE HELPFUL IF EACH IMMEDIATE SUPERVISOR WOULD ADD THEIR LOCATION JUST BELOW THEIR SIGNATURE. THANK YOU FOR YOUR COOPERATION.

POSITIONS FILLED THROUGH COP

Senior Consumer Services Representative, No. 0393, New Castle; PATRICIA ROBERSON, 3 applicants, direct offer.

Operational Auditor, No. 0135, Internal Auditing-GHQ; MICHAEL McRELL, 7 applicants, 2 interviewed.

Production Engineer, No. 1193, Fossil Power Production; JOHN CAGE, 8 applicants, direct offer.

Shareholder Records Supervisor, No. 1124, Secretarial-GHQ; STEVE PIZAREK, 11 applicants, direct offer.

Senior Internal Auditor, No. 1185, Internal Auditing-GHQ; GREGORY PATCHETT, 4 applicants, 3 interviewed.

Audit Manager, No. 0985, Marble Hill; BRIAN MORRISON, 16 applicants, 1 interviewed.

Project Engineer-Materials, No. 0268, Marble Hill; HARRY LUKINS, 2 applicants, 1 interviewed.

Nuclear Safety Supervisor, No. 0266, Marble Hill; TIMOTHY GEIB, 6 applicants, 3 interviewed.

QE Surveillance Specialist-Mechanical, No. 0916, Marble Hill; TERRY SHEETS, 2 applicants, 1 interviewed.

Electrical Supervisor, No. 0981, Marble Hill; ED SCHRICHEN, 7 applicants, direct offer.

Operations Instrument & Control QA Engineer, No. 0986, Marble Hill; TOM ROBERTSON, 2 applicants, direct offer.

Operations QA Engineer-Mechanical, No. 0987, Marble Hill; DOYLE SCHWARTZ, 2 applicants, direct offer.

QE Surveillance Specialist-Civil, No. 0240 Marble Hill; NO NAMES SUBMITTED.

Resident Engineer-Materials, No. 0271, Marble Hill; NO QUALIFIED IN-HOUSE CANDIDATES, 6 applicants.

Senior Project Engineer, No. 0272, Marble Hill; NO QUALIFIED IN-HOUSE CANDIDATES, 1 applicant.

Receipt Inspector, No. 0914, Marble Hill; NO QUALIFIED IN-HOUSE CANDIDATES, 6 applicants.

VACANT POSITION Information Systems Specialist
LOCATION Marble Hill REQUEST NO. 0302 M/P 06
MIN./MAX. \$27,624/\$40,056

REPORTS TO G. L. Walker TITLE Information Systems Manager
DIV./DEPT. Information Systems
POSITION RESPONSIBILITIES AND DUTIES

The person in this position will be responsible for working with the Nuclear Division users in the development and support of computerized and manual information systems; The Information Systems Specialist must provide the expertise in modern computer technology; This person will perform feasibility studies, general and detailed design functions for computer applications to support the Nuclear Division.

MINIMUM QUALIFICATIONS

B.A. or B.S. in related discipline; 3-5 years of progressive data processing experience in business application programming and systems design and analysis; This person must have demonstrated excellent communication skills, ability to effectively use problem analysis techniques, organization and planning skills, creativity and innovativeness in the utilization of system design concepts, and systems implementation and coordination skills.

DESIRABLE QUALIFICATIONS

A good general knowledge of the Public Service Indiana organization; Functions and objectives will be beneficial in developing and supporting the systems for constructing and operating a nuclear generating station; Requires the ability to develop an excellent working rapport with users supporting a major construction effort in a dynamic environment.

DATE NEEDED October 16, 1982

WORKING HOURS 7:30 a.m. - 4:00 p.m.

NEW POSITION

FOR FURTHER INFORMATION CONTACT Gary Walker, Marble Hill, extension 1410

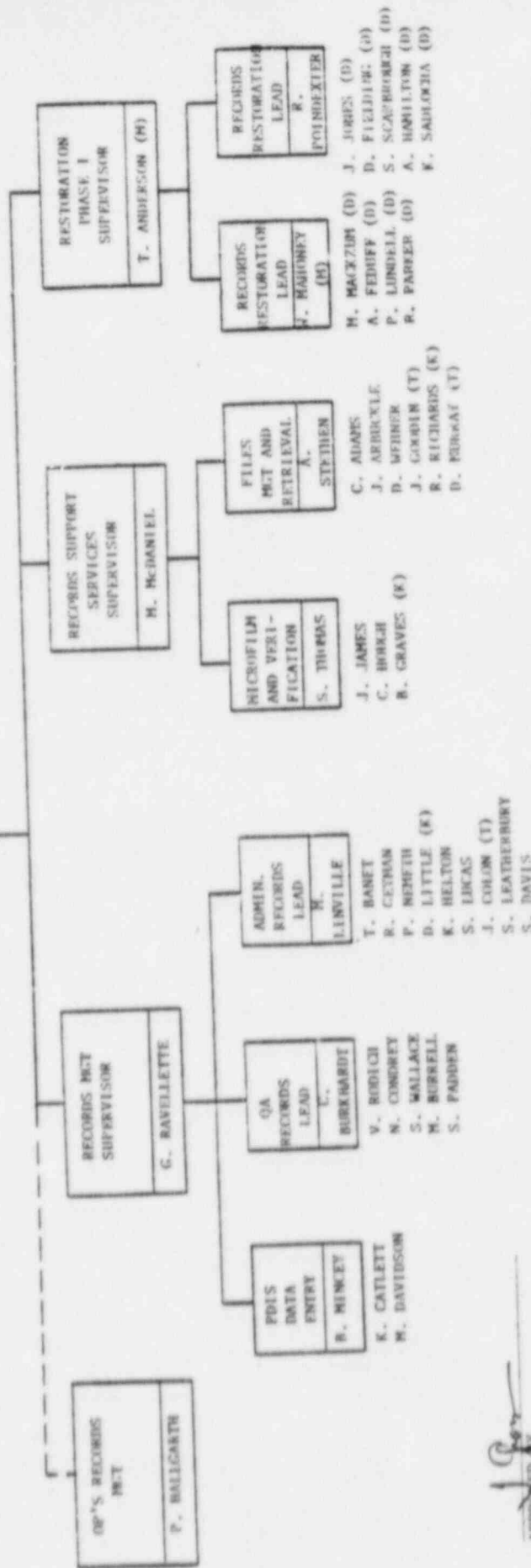
APPROVED TO PAY RELOCATION EXPENSES

RECORDS MANAGEMENT

FOIA-84-293 K/96

RECORDS MGT
MANAGER
T. CROSS (H)

CLERK
J. DILLBERG



CONTRACT EMPLOYEES

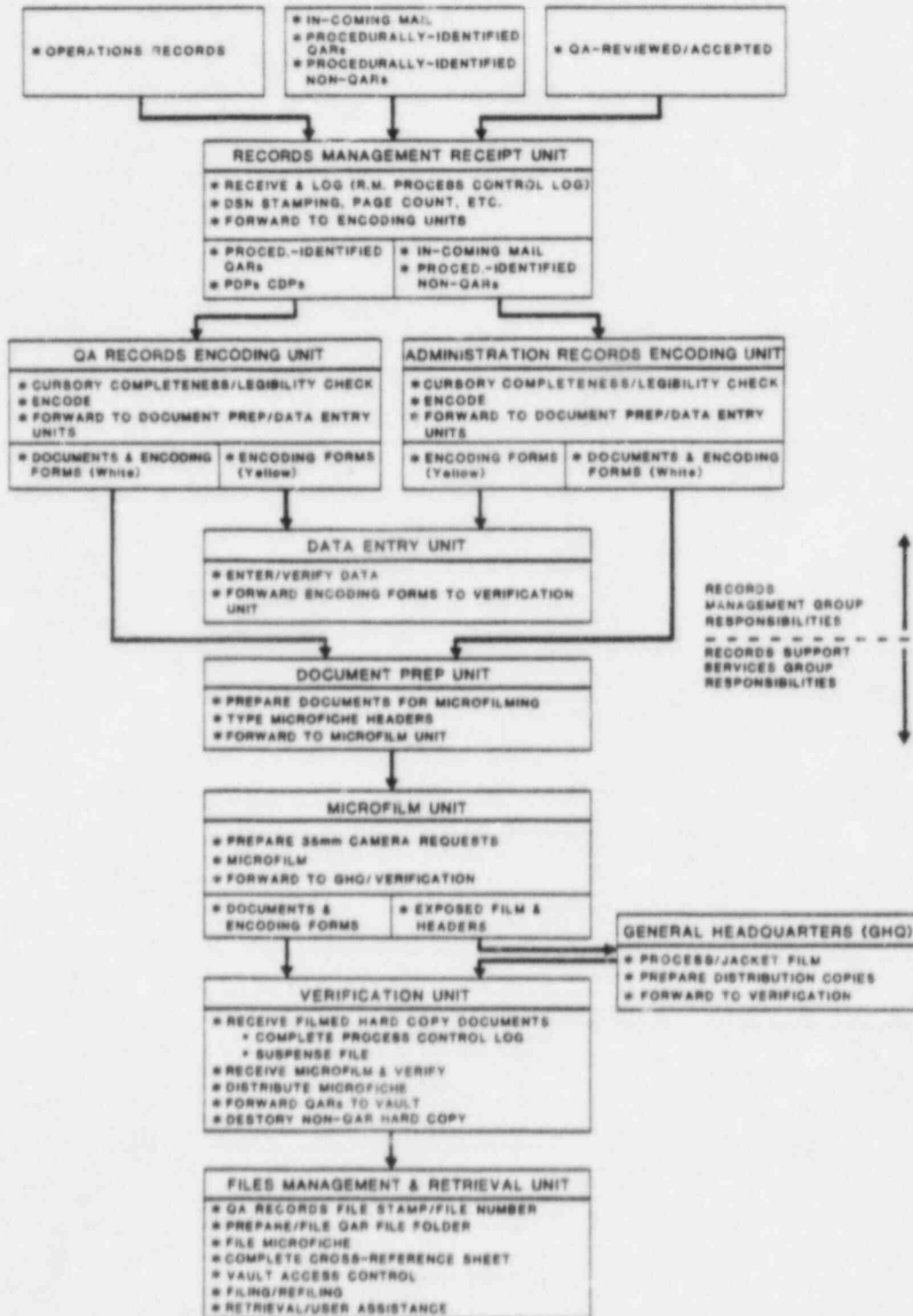
(H) = MAC
(D) = IMA
(K) = KELLY
(Y) = METRO

APPROVED BY
[Signature]

DATE

RECORDS MANAGEMENT

Document Flow Chart



NUCLEAR DIVISION RECORDS MANAGEMENT MANUAL	PROCEDURE NO.	REV. NO.
TITLE	RMP 3.01	1
PREPARATION OF THE NUCLEAR DIVISION PLANT DOCUMENT INDEX SYSTEM ENCODING FORM	DATE 8-27-82	PAGE 7 OF 25

ATTACHMENT 1
PLANT DOCUMENT INDEX SYSTEM
LIST OF FIELDS

NUCLEAR DIVISION PLANT DOCUMENT INDEX SYSTEM LIST OF FIELDS					
FIELD NO./LTR	FIELD NAME	MAX. LENGTH	FIELD NO./LTR	FIELD NAME	MAX. LENGTH
A	ENCODER	3	10*	EQUIPMENT NUMBER	12
B	DOCUMENT TYPE	8	11*	OPERATIONS EQUIPMENT NUMBER	12
C	UNIT	4	12*	SYSTEM CODE	2
D	PROPRIETARY	1	12*	STARTUP SYSTEM	8
E	DOCUMENT DATE	8	14*	NPRDS CODE	4
F	REVISION	3	15*	MODEL NUMBER	20
G	DOCUMENT NUMBER	20	16*	MANUFACTURER'S SERIAL NUMBER	40
H	QAF	1	17*	SPIN NUMBER	12
I	MEDIA	1	18*	LOT/BATCH NUMBER	12
J	FILE CODE	10	19*	MATERIAL/SPECIFICATION NUMBER	10
01*	DESCRIPTION/SUBJECT	40	20*	ASME CLASS	2
02*	REFERENCE SPECIFICATION	1	21*	SHOP ORDER NUMBER	10
03*	REFERENCE PURCHASE ORDER	11	22*	SHIPPING MANIFEST NUMBER	10
04*	COMPANY/ORGANIZATION FROM	8	23*	REFERENCE DRAWING NUMBER	12
05*	COMPANY/ORGANIZATION TO	8	24*	BASE METAL HEAT NUMBER	10
06*	INDIVIDUAL FROM	20	25*	FILLER METAL HEAT NUMBER	10
07*	INDIVIDUAL TO	20	26*	PERFORMER	20
08*	SUBJECT CODE	10	27*	REFERENCE	40
09*	MATERIAL INDICATOR	1			
*MULTIPLE ENTRY FIELDS					

NUCLEAR DIVISION RECORDS MANAGEMENT MANUAL	PROCEDURE NO.	REV. NO.
TITLE	RMP 3.01	1
PREPARATION OF THE NUCLEAR DIVISION PLANT DOCUMENT INDEX SYSTEM ENCODING FORM	DATE 8-27-82	PAGE 10 OF 25

ATTACHMENT 1 (Cont'd)
INSTRUCTIONS FOR COMPLETING THE
PLANT DOCUMENT INDEX SYSTEM
ENCODING FORM

1. DOCUMENT SEQUENCE NUMBER No action (form previously stamped by Receipt Clerk).
2. ENCODER Print initials.
3. DOCUMENT TYPE Record the appropriate document type code from Table XI, "Nuclear Document Type Codes."
4. UNIT(S) Record the unit number(s) to which the document applies.
5. PROPRIETARY Record an "S" if the document has been designated a Security or Safeguards Information document. Record a "C" if the document is a Security Clearance. Record a "Y" if the document meets the definition of Proprietary as discussed in Figure 1. Record an "L" if the document has been designated a Legal document.
6. DOCUMENT DATE Record the date (year, month, day) the document was originated, received (if origination date unavailable), or as designated in the Encoding Guideline.
7. REV. Record the document revision identifier, as applicable (right justify).
8. DOCUMENT NO. Record the document identification number. Examples: Alpha-numeric letter numbers, purchase order numbers, specification numbers, NCR numbers, CAR numbers, etc. (left justify).
9. QAR Record a "Q" if the document is designated a Quality Assurance Record. Record a "C" if the document is a non-Quality Assurance Record.
10. MEDIA Record the retention media as listed in Figure 2.
11. FILE CODE Record the file code number in which the hard copy resides. For Quality Assurance Records, record the QAR File Index number.

NUCLEAR DIVISION RECORDS MANAGEMENT MANUAL		PROCEDURE NO.	REV. NO.
TITLE		RMP 3.01	1
PREPARATION OF THE NUCLEAR DIVISION PLANT DOCUMENT INDEX SYSTEM ENCODING FORM		DATE 8-27-82	PAGE 11 OF 25

ATTACHMENT 1 (Cont'd)
INSTRUCTIONS FOR COMPLETING THE
PLANT DOCUMENT INDEX SYSTEM
ENCODING FORM

12. DESCRIPTION/SUBJECT Record information that describes the subject matter of the document. For correspondence, record the exact Subject if available in addition to key words, phrases, or sentences from the body of the letter. No abbreviations shall be used.
13. SPECIFICATION Record the referenced specification number if applicable as listed in Table V, "Specification Authority Code Table."
14. PURCHASE ORDER Record the referenced purchase order number as applicable.
15. COMPANY/ORGANIZATION FROM Record the originating company or organization code from Table IV, "Company - Originator Abbreviations Table."
16. COMPANY/ORGANIZATION TO Record the receiving company or organization code from Table IV, "Company - Originator Abbreviations Table."
17. INDIVIDUAL FROM Record originating individual as applicable in the format of last name first, space, first initial (Example: SMITH J). Do not use commas.
18. INDIVIDUAL TO Record receiving individual as applicable in the format of last name first, space, first initial. Do not use commas.
19. SUBJECT CODE Record the abbreviation code for the subject(s) of the document as listed in Table III, "Nuclear Subject Abbreviations Table," as applicable.
20. MATERIAL IND.
 - a) Station Encoding Clerk Leave blank (to be completed by designated reviewers).
 - b) Records Management Encoding Clerk If applicable record the material indicator code in accordance with Figure 3.

NUCLEAR DIVISION RECORDS MANAGEMENT MANUAL	PROCEDURE NO. RMP 3.01	REV. NO. 1
TITLE PREPARATION OF THE NUCLEAR DIVISION PLANT DOCUMENT INDEX SYSTEM ENCODING FORM	DATE 8-27-82	PAGE 12 OF 25

ATTACHMENT 1 (Cont'd)
INSTRUCTIONS FOR COMPLETING THE
PLANT DOCUMENT INDEX SYSTEM
ENCODING FORM

21. EQUIPMENT NO.

- a) Station Encoding Clerk Leave blank (to be completed by designated reviewers).
- b) Records Management If applicable record the S&L configured
 Encoding Clerk equipment number in accordance with the
 applicable Material Identification Standard.

22. OPERATIONS EQUIPMENT NO.

- a) Station Encoding Clerk Leave blank (to be completed by designated reviewers).
- b) Records Management If applicable record the Operations
 Encoding Clerk configured equipment number.

The following fields, though not physically on the Encoding Form, are also available. These fields are encoded using the "ADDITIONAL INFORMATION THIS DOCUMENT TYPE" section of the Continuation Form. The "ADDITIONAL INFORMATION" section and the Continuation Form can also be used to record multiple entries (i.e., specifications, purchase orders, description).

23. SYSTEM

Record the applicable system code(s) from Table I, "Nuclear System Codes Table."

24. STARTUP SYSTEM

Record the applicable startup system identifier(s).

25. NPRDS CODE

If applicable record the appropriate NPRDS code(s) from Table IV, "Company - Originator Abbreviations Table."

26. MODEL NUMBER

If applicable record the model number(s).

27. MANUFACTURER'S SERIAL
 NUMBER

If applicable record the manufacturer's serial number(s).

28. SPIN NUMBER

If applicable record the Westinghouse spin number(s) in accordance with the applicable Material Identification Standard.

NUCLEAR DIVISION RECORDS MANAGEMENT MANUAL	PROCEDURE NO.	REV. NO.
TITLE	RMP 3.01	1
PREPARATION OF THE NUCLEAR DIVISION PLANT DOCUMENT INDEX SYSTEM ENCODING FORM	DATE 8-27-82	PAGE 13 OF 25

ATTACHMENT 1 (Cont'd)
INSTRUCTIONS FOR COMPLETING THE
PLANT DOCUMENT INDEX SYSTEM
ENCODING FORM

- | | |
|--|---|
| 29. <u>LOT/BATCH NUMBER</u> | If applicable record the lot or batch number(s) in accordance with the applicable Material Identification Standard. |
| 30. <u>MATERIAL/SPECIFICATION NUMBER</u> | If applicable record the material type or specification identifier(s). |
| 31. <u>ASME CLASS</u> | If applicable record the ASME Class identifier (1, 2, 3, MC, or NF). |
| 32. <u>SHOP ORDER NUMBER</u> | If applicable record the shop order number(s). |
| 33. <u>SHIPPING MANIFEST NUMBER</u> | If applicable record the shipping manifest number(s). |
| 34. <u>REFERENCE DRAWING NUMBER</u> | If applicable record any drawing number(s) that are referenced on the document. |
| 35. <u>BASE METAL HEAT NUMBER</u> | If applicable record the base metal heat number(s). |
| 36. <u>FILLER METAL HEAT NUMBER</u> | If applicable record the filler metal heat number(s). |
| 37. <u>PERFORMER</u> | If applicable record the performer(s) name(s) that accomplished the task. |
| 38. <u>REFERENCE</u> | Record any additional information that will further enhance the retrievability of the document. |

Upon completion of the encoding, record an "X" in the "NEW" block at the bottom of the Encoding Form.

Full-page advertisements placed in the Washington Post and the New York Times today by Edison Electric Institute and the Atomic Industrial Forum say "most of the stories" on the recent Sandia laboratory study of siting nuclear power plants "were wrong. . . The 'worst-case' projections were totally discounted and were not included in the report to the NRC. Even so, the frightening projections were leaked to some news organizations resulting in a spate of stories describing the potential of a fearful toll from an accident with a one-in-a-billion chance of occurring." In a letter to the editor of the Washington Post today, Edison Electric Institute's John J. Kearney writes that "reporter Milton R. Benjamin fell for one of the oldest ploys in the dogeared book of anti-nuclear scare tactics: the 'worst-case' scenario. . . 'Worst-case' scenarios for nuclear power plants assume a wildly exaggerated series of 'what ifs' that result in incredibly unrealistic damage figures." In an op-ed article in the Post 11/6, G. A. Keyworth II, science adviser to President Reagan, comments on the Post article on the Sandia study on 11/1. "The study clearly states that the results presented in the report do not in any way represent the real risks associated with nuclear accidents. Unfortunately, the article misuses background information from the study to provide a list of possible consequences of an accident at every nuclear site in the country. . ."

WASHINGTON--President Reagan appointed Interior Undersecretary Donald P. Hodel as the new Secretary of Energy, drawing praise from several energy industry spokesmen and rage from environmentalists. Both sides said Hodel's appointment signals a continued push for development of nuclear power. Hodel was chief of the Bonneville Power Administration under the Nixon and Ford administrations. Washington Post, 11/6 and Wall Street Journal, 11/8.

BRUSSELS--About 13,000 gallons of lightly radioactive water spilled inside the Tihange nuclear power plant and a small amount of radioactive gas escaped into the atmosphere when a compressor pump malfunctioned. New York Times, 11/6.

NEW YORK--Moody's Investors Service lowered its rating on bonds and preferred stock of Public Service Co. of Indiana to single-A-3 from single-A-2 because of "long-term concern" over the utility's 83% stake in development of the Marble Hill nuclear power plant. Moody said the "magnitude of expenditures required to complete Marble Hill is expected to strain the company's cash flow" and undermine its financial strength. Wall Street Journal, 11/8.

Michael VerMeulen writes in Parade Magazine, 11/7, about the hard times and why towns are welcoming nuclear dumps and prisons. He says the 800 citizens of Naturita, Colorado "are holding their breath in rapt hopes of attracting a nuclear waste dump and, so they think, rescuing themselves from economic disaster." Chem-Nuclear Systems is testing about 1000 acres outside the town for development of a dumping site.

Jerry Knight of the Washington Post writes that American Uranium Co. has just opened the nation's first retail market in uranium in Washington, D.C. To get around NRC regulation that radioactive material can only be stored in a Federally licensed nuclear storage facility, American Uranium sells uranium certificates. The actual uranium, Jack Edlow explains, stays in his licensed nuclear warehouse in East St. Louis, IL. For storing the uranium he sells, Edlow charges 10 cents a pound for six months. 11/8.

In a letter to the editor of the New York Times, Consumer Power Company's Walter Boris writes that the real objective of the nuclear industry in advocating a quota on imported uranium "is to assure an adequate and reliable supply of uranium for our public utilities. We view this as a safeguard in the event foreign producers form a cartel to dictate prices and supplies for our nuclear industry." 11/6.

FOIA-84-293

K/97



location: NUCLEAR DIVISION

date: NOVEMBER 12, 1982

subject: QUALITY TREND REPORT - THIRD QUARTER 1982

attention: S. W. SHIELDS

The Trend Analysis (attached) accomplished in the attached graphs and Investigation Reports indicates the following:

- A. The number of NCR's written per month is continuing to increase, but the rate of increase continues to decrease as expected with the completion of SPP-17 activities.
- B. We continue to close NCR's at a significantly faster rate than the rate of issuance.
- C. The rate of issuing CAR's is decreasing for the first time.
- D. The rate of closing CAR's; however, is not nearly as fast as our rate of issuance. Steps have been taken with Quality Engineering to turn this trend around.
- E. The rate of issuing AFR's continues to be nearly flat, with the rate of closure continuing to be significantly faster than the rate of issuance after corrective action was taken as a result of the Second Quarter Trend Analysis.
- F. Conditional Releases (CR's) have been trended for the first time. The rate of issuance is increasing at a very slow and acceptable rate, however, the rate of closure is totally unacceptable and steps to assure corrective action have been initiated within Quality Engineering. The larger percentage of open CR's is the result of documentation problems with NSSS components. Corrective action includes the involvement of Westinghouse.
- G. Construction Surveillance Reports (CSR's) have been analyzed for the first time as an indicator of the adequacy of the contractor's first line inspection. This analysis resulted in completing four Suspected Trend Investigation Reports (STIR's, attached). The

FOIA-84-293

KH8

NOVEMBER 12, 1982

contractors affected were J. L. Manta, Bechtel, Pullman Sheet Metal and Newberg. Trend investigation revealed that although adverse trends did exist within each of those organizations, previous corrective action has now reversed the trend. Each will continue to be closely monitored to assure continued effectiveness of the corrective action.

- H. Analysis of AFR's and CAR's indicated a potential adverse quality trend within Newberg related to the areas of handling, housekeeping, storage and maintenance. Upon investigation, each appears to have adequate and effective corrective action taken. In addition, no heavy concentration of deficiencies existed within any one of the related areas. Surveillances in these areas will be increased during this quarter to provide added monitoring.
- I. An adverse quality trend was indicated within PSI Quality Engineering, related to inspection control. Investigation indicated a problem existed in the fourth quarter 1981 and the first quarter 1982. Intensive training conducted in April, 1982, corrected and reversed this trend.
- J. AFR and CAR analysis indicated a potential adverse quality trend in the area of storage, handling and maintenance of PSI procured items and materials. Investigation revealed that the transfer of the responsibility for these activities to Bechtel appears to have corrected this trend. Bechtel now has a staff of seven QA/QC personnel onboard, and the quality of these activities is significantly improving. PSI will, however, increase surveillances in these areas during the next quarter to provide added monitoring.
- K. A potentially adverse quality trend was indicated within Project Engineering, related to inadequate procedures to control their responsibilities related to design and procurement document control. Investigation has revealed the problems were identified in late 1981 and early 1982, with a significant decrease in identified problems thereafter. No corrective

NOVEMBER 12, 1982

action is deemed necessary at this time; however, increased audits will be scheduled for the first quarter 1984, to provide added assurance that the adverse trend continues to have been effectively corrected.

No Corrective Action Requests or Management Corrective Action Reports have been initiated as a result of this Third Quarter 1982 Trend Analysis.

If you have questions, or a need for further information, please contact me.



L. O. RAMSETT
QUALITY ASSURANCE OFFICER

LOR/RPK/lmw

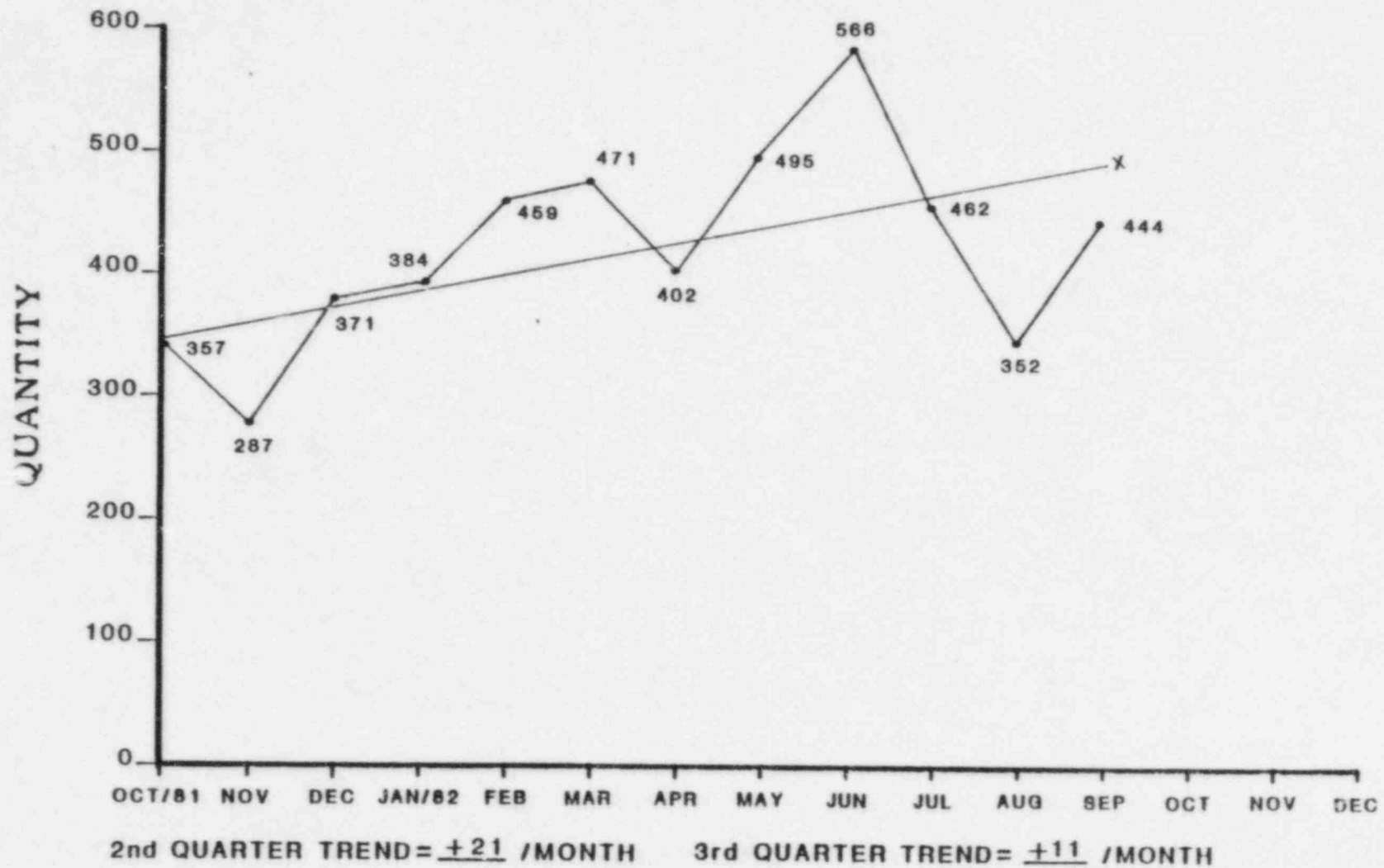
Attachments

cc: W. Petro
N. Reichel
T. Burns
R. Keele
M. Linn
R. Hughes
S. Sallee
F. Carchedi
J. Harrison

J. Thomas
C. Beckham
B. Morrison
J. Roberts
W. Muensterman
R. Borchert
H. Curry
J. Parks

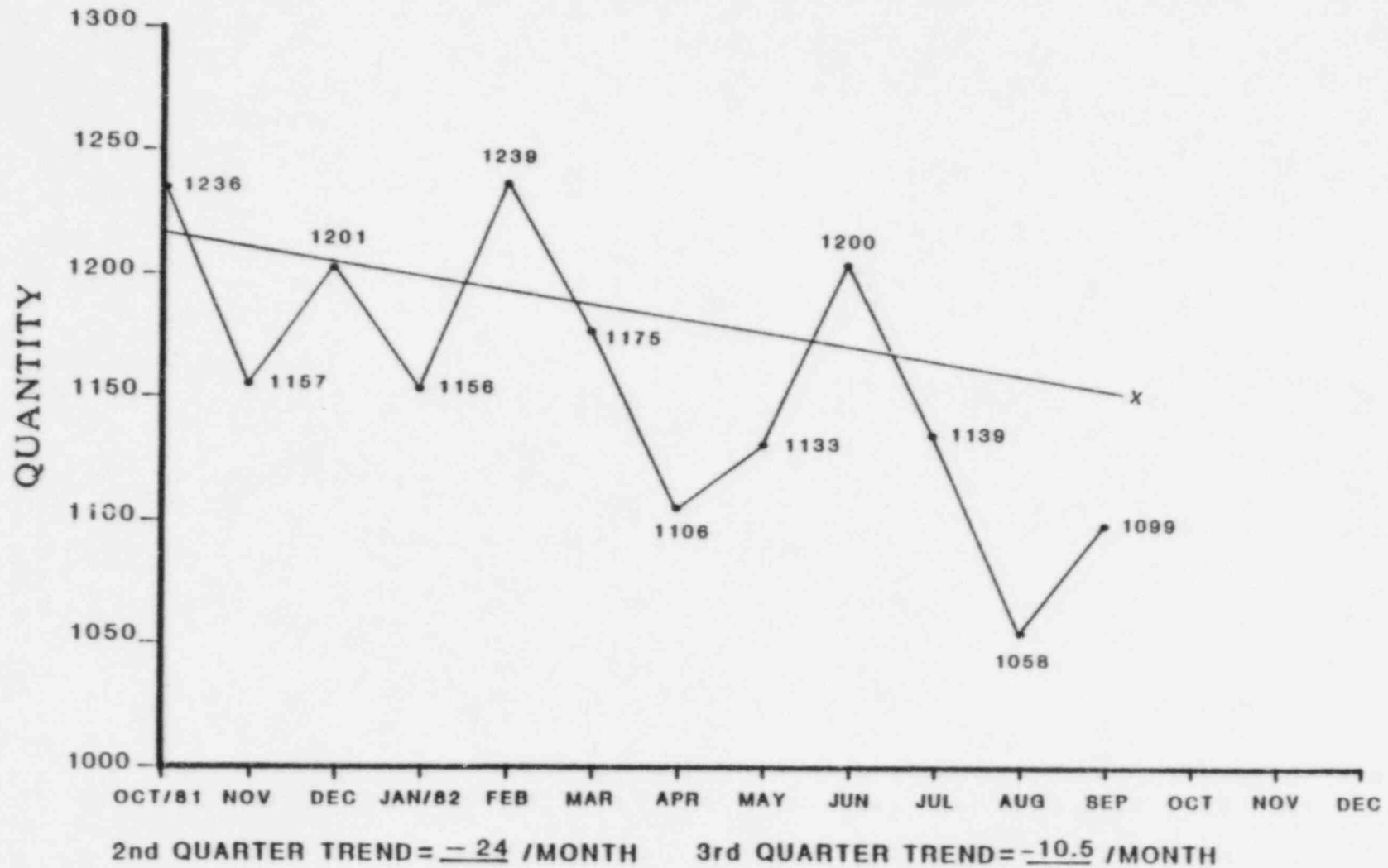
NONCONFORMANCE REPORTS ISSUED

3rd Quarter 1982 Report



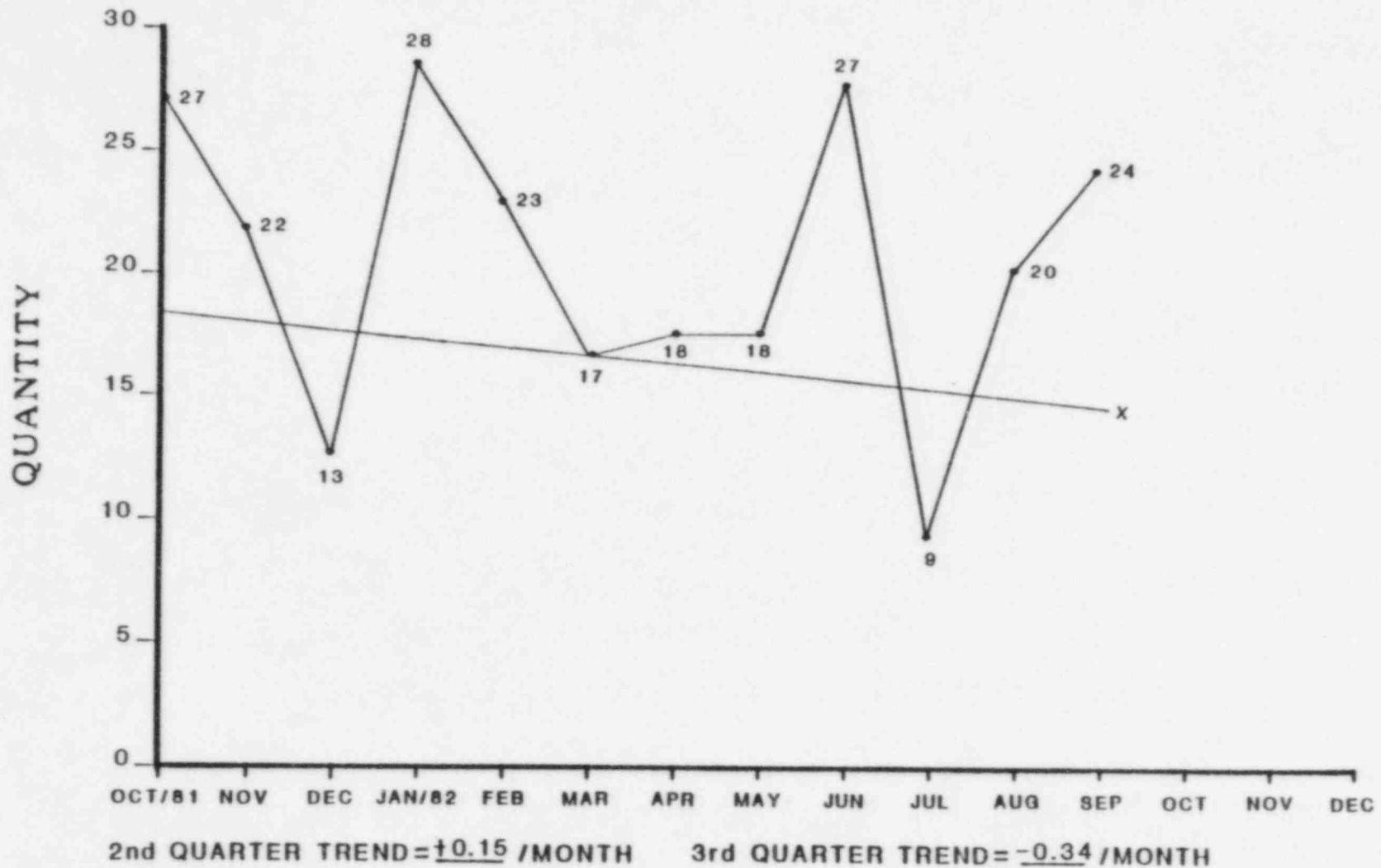
NONCONFORMANCE REPORTS REMAINING OPEN

3rd Quarter 1982 Report



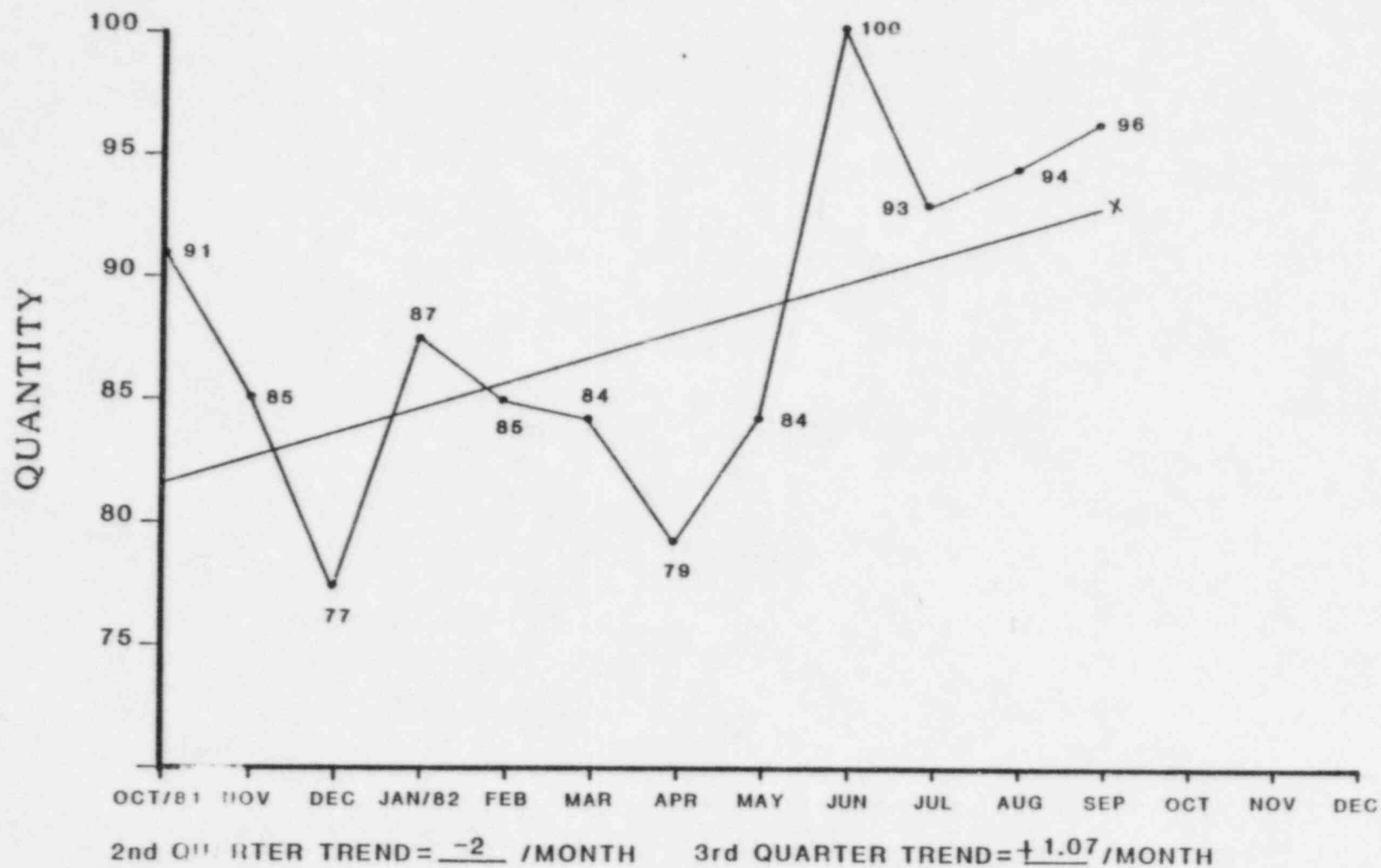
CORRECTIVE ACTION REQUESTS

3rd Quarter 1982 Report



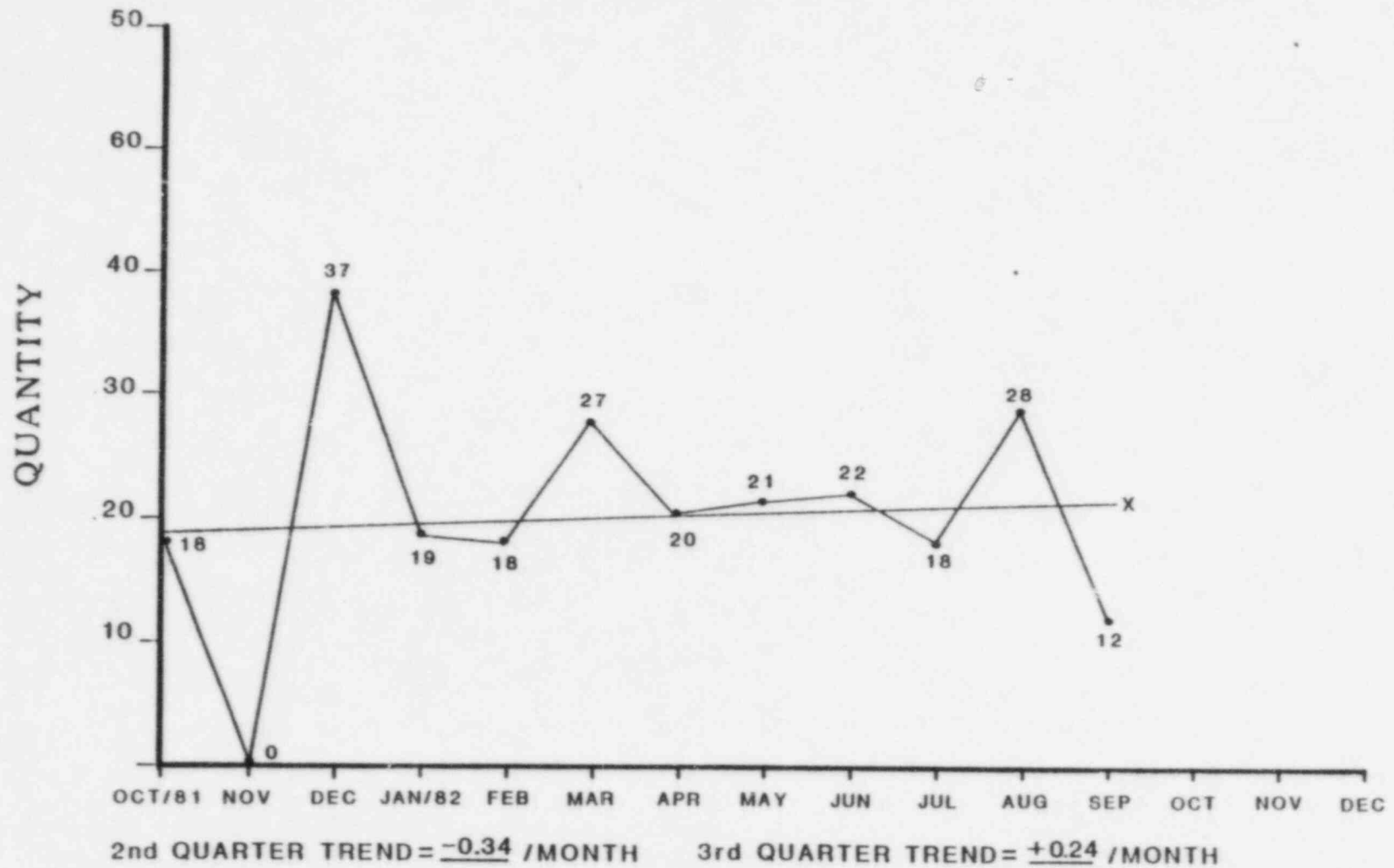
CORRECTIVE ACTION REQUESTS REMAINING OPEN

3rd Quarter 1982 Report



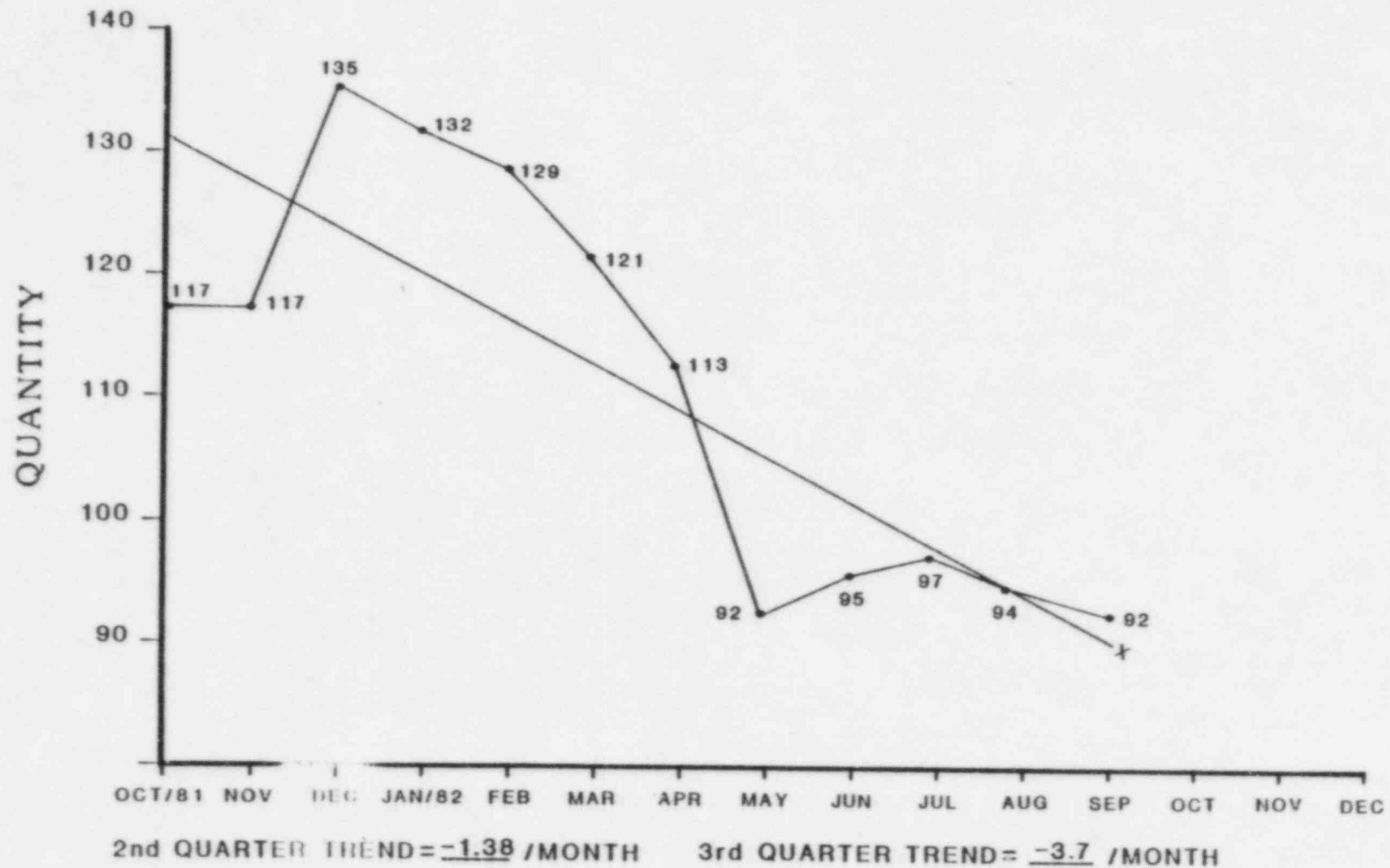
AUDIT FINDING REPORTS ISSUED

3rd Quarter 1982 Report



AUDIT FINDING REPORTS REMAINING OPEN

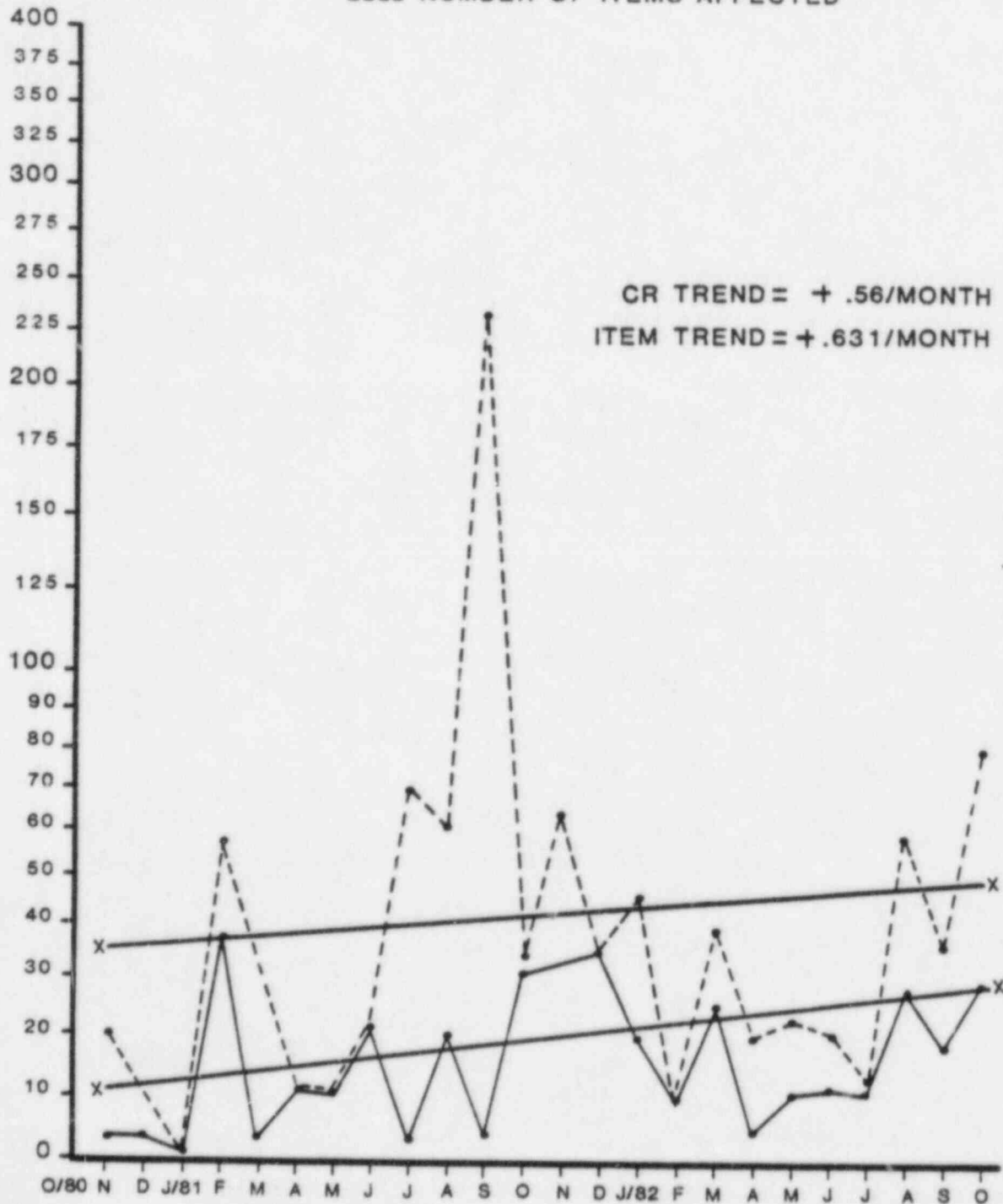
3rd Quarter 1982 Report



3rd Quarter 1982 Report

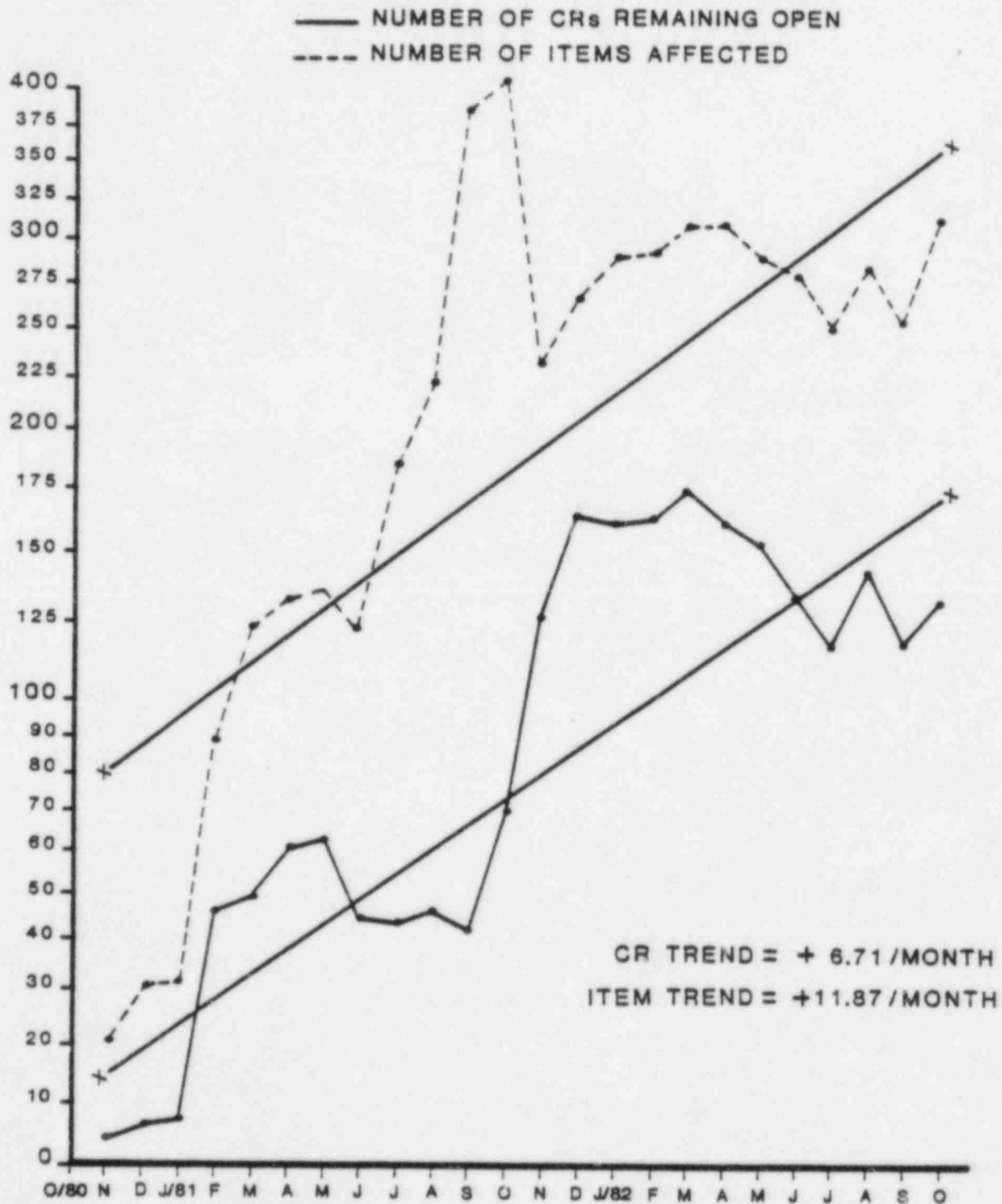
CONDITIONAL RELEASES (CRs)

— NUMBER OF CRs ISSUED
---- NUMBER OF ITEMS AFFECTED



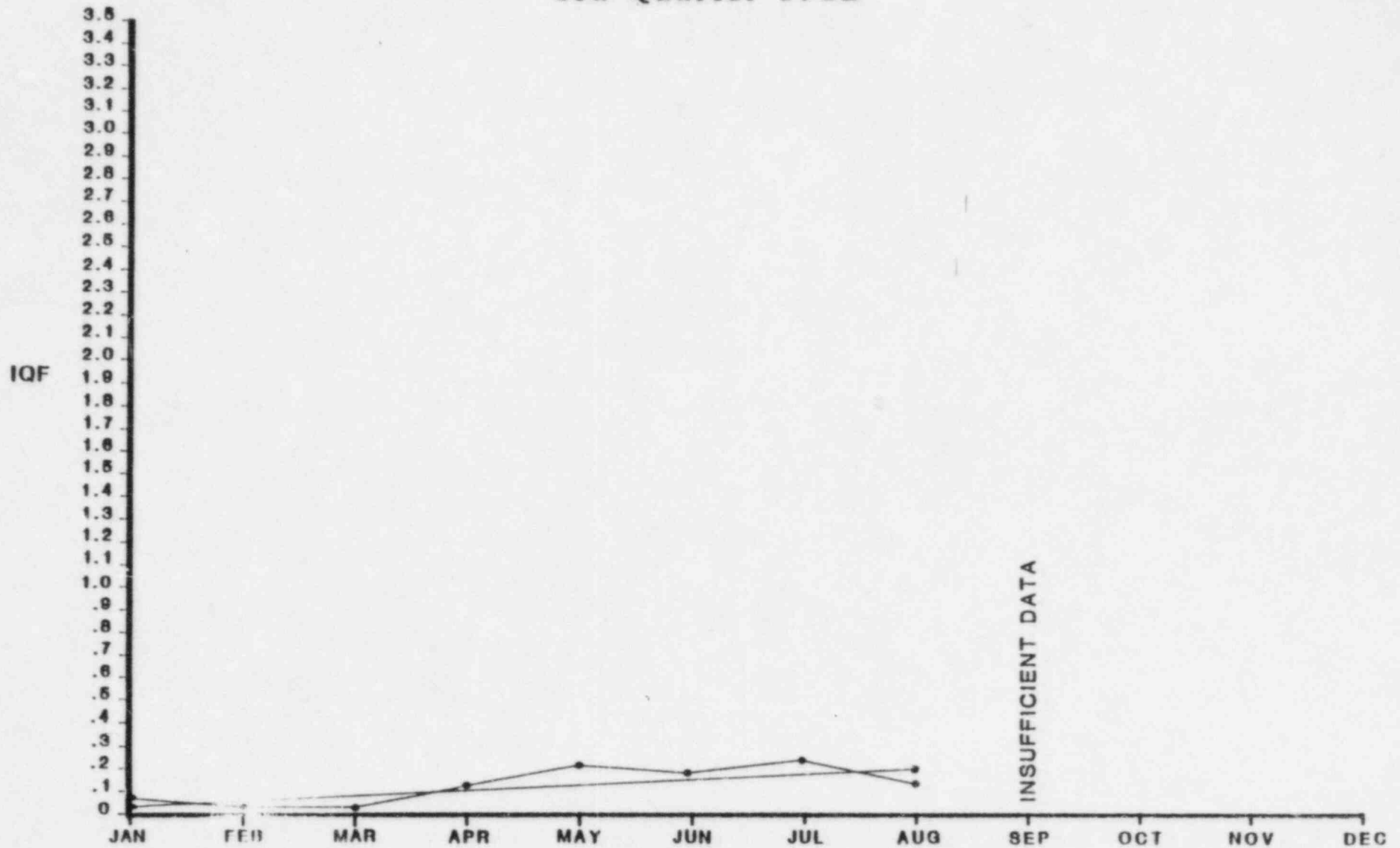
3rd Quarter 1982 Report

CONDITIONAL RELEASES (CRs)
REMAINING OPEN



CHERNE

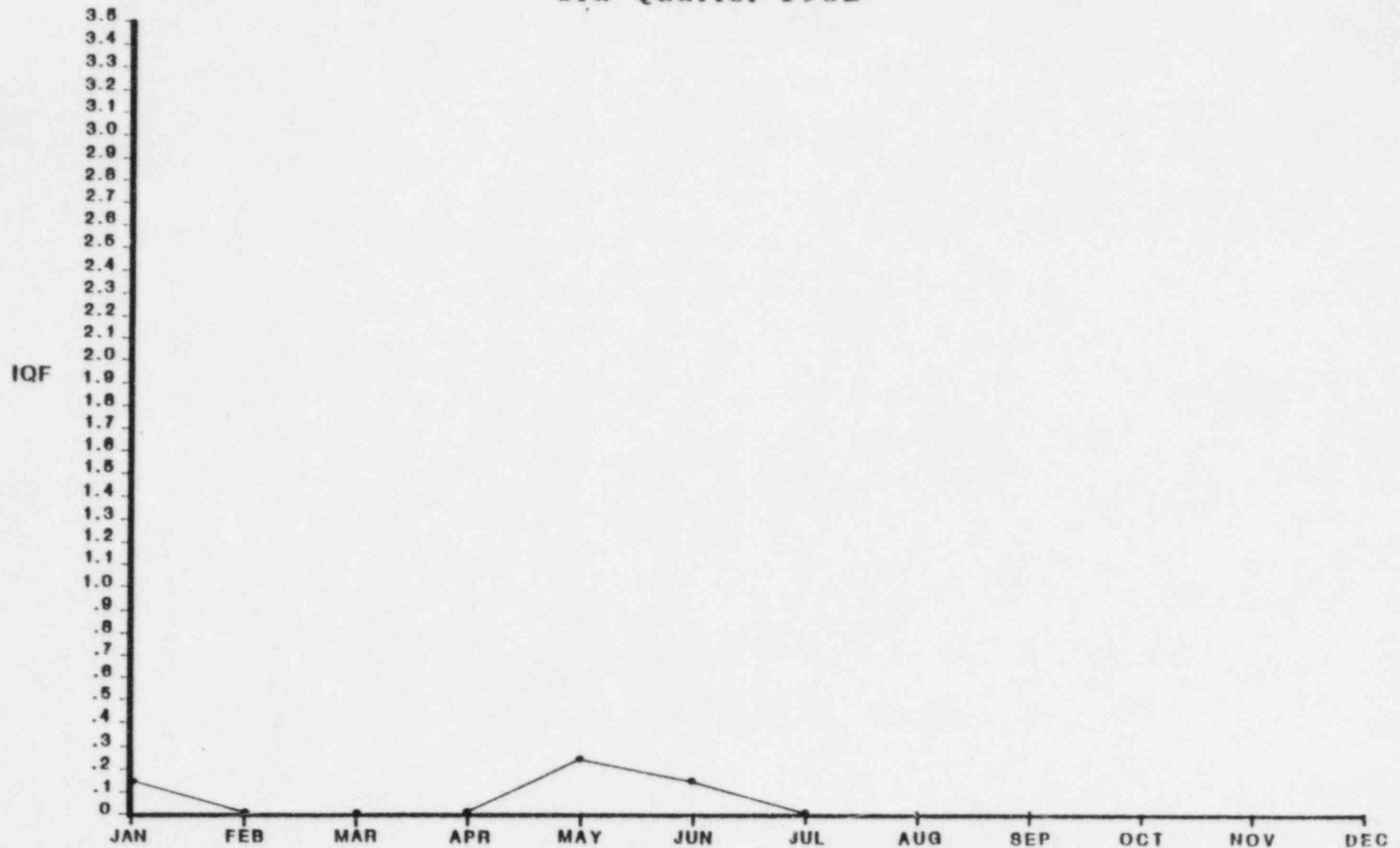
3rd Quarter 1982



IQF = INSPECTION QUALITY FACTOR = $\frac{\text{DEFICIENCIES}}{\text{SURVEILLANCES}}$  INDICATES THE ADEQUACY OF THE CONTRACTORS 1st LINE INSPECTION

CHICAGO BRIDGE & IRON

3rd Quarter 1982



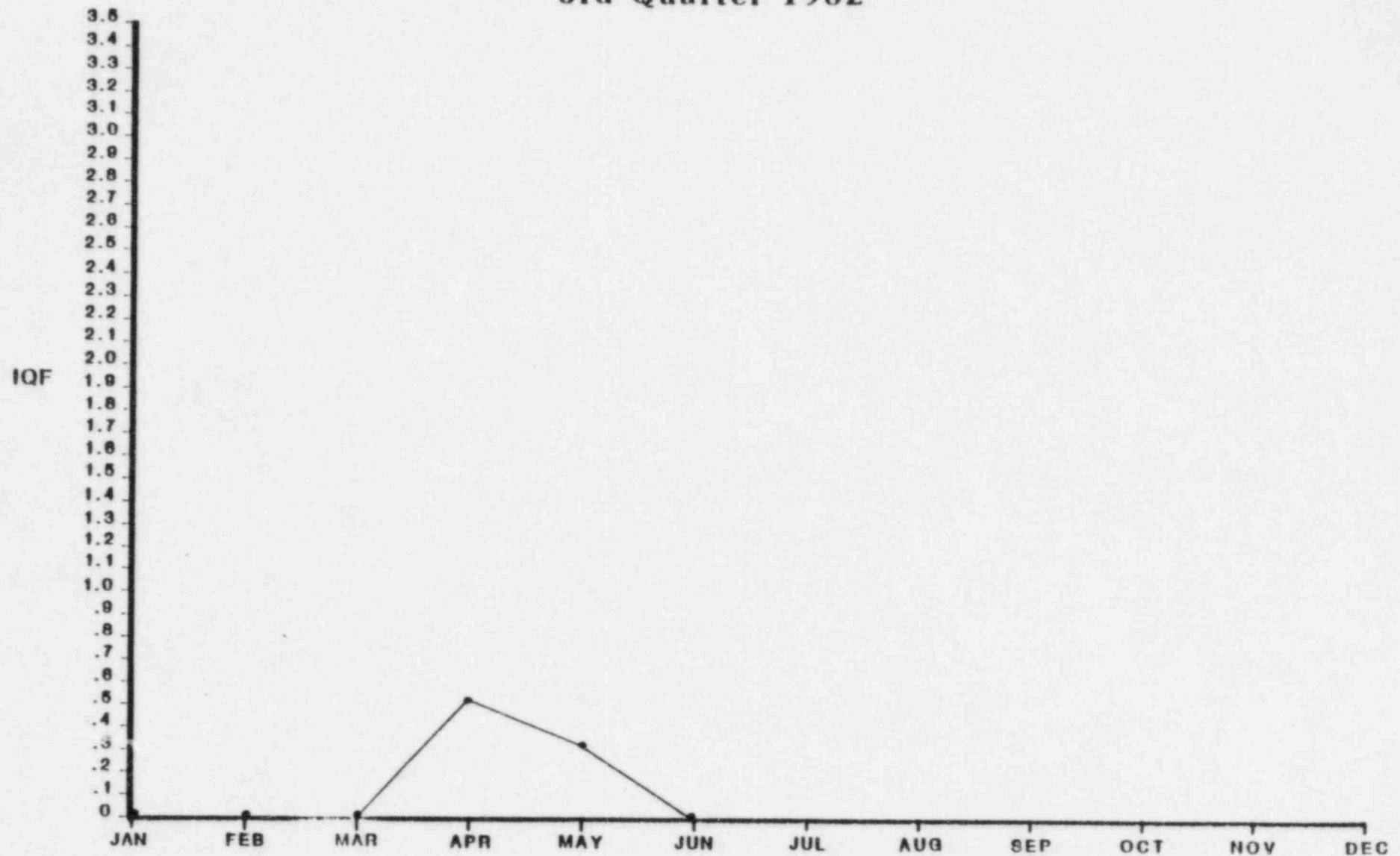
IQF = INSPECTION QUALITY FACTOR = $\frac{\# \text{DEFICIENCIES}}{\# \text{SURVEILLANCES}}$



INDICATES THE ADEQUACY OF THE
CONTRACTORS 1st LINE INSPECTION

NISCO

3rd Quarter 1982

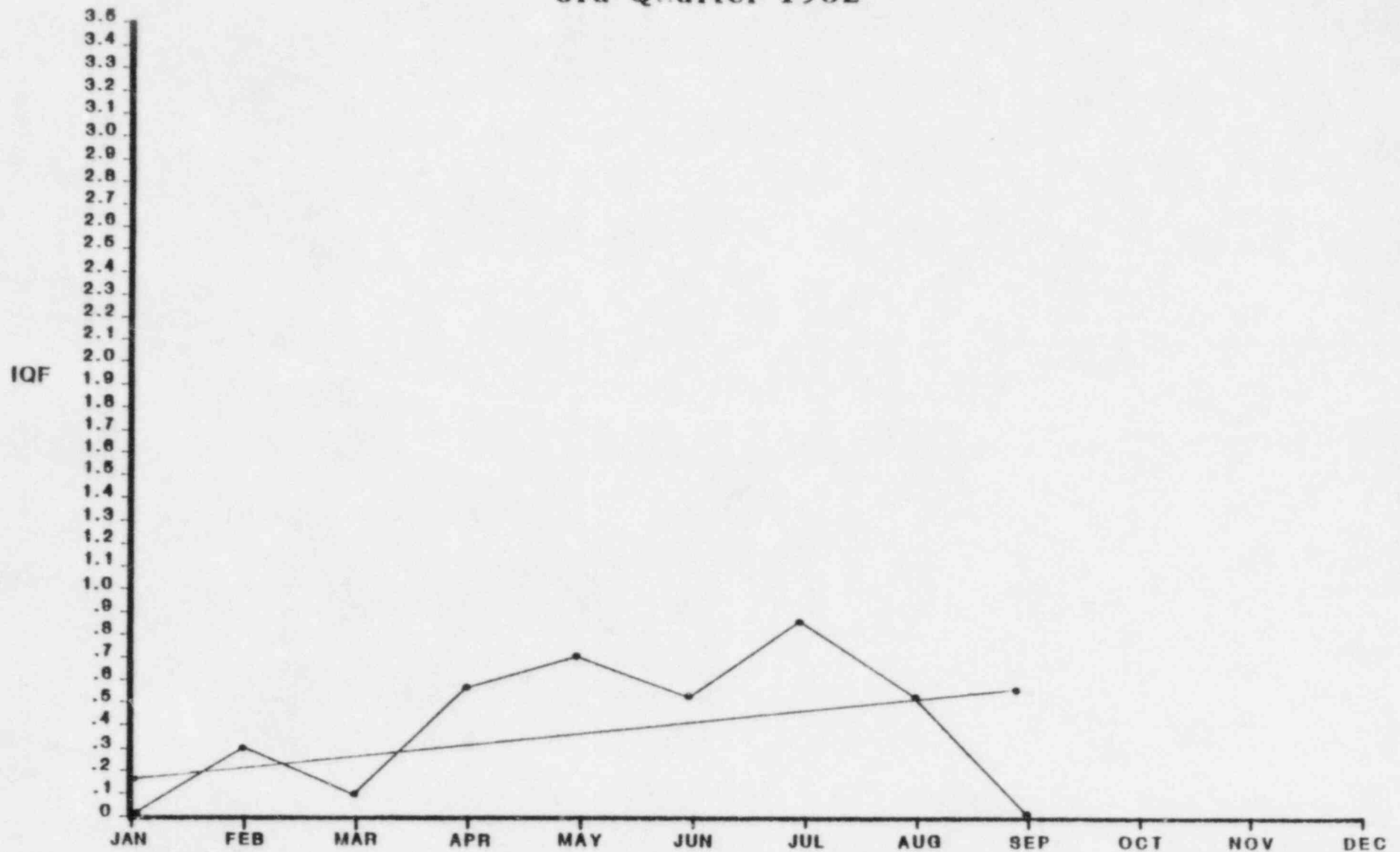


IQF = INSPECTION QUALITY FACTOR = $\frac{\# \text{DEFICIENCIES}}{\# \text{SURVEILLANCES}}$



INDICATES THE ADEQUACY OF THE
CONTRACTORS 1st LINE INSPECTION

J. L. MANTA
3rd Quarter 1982



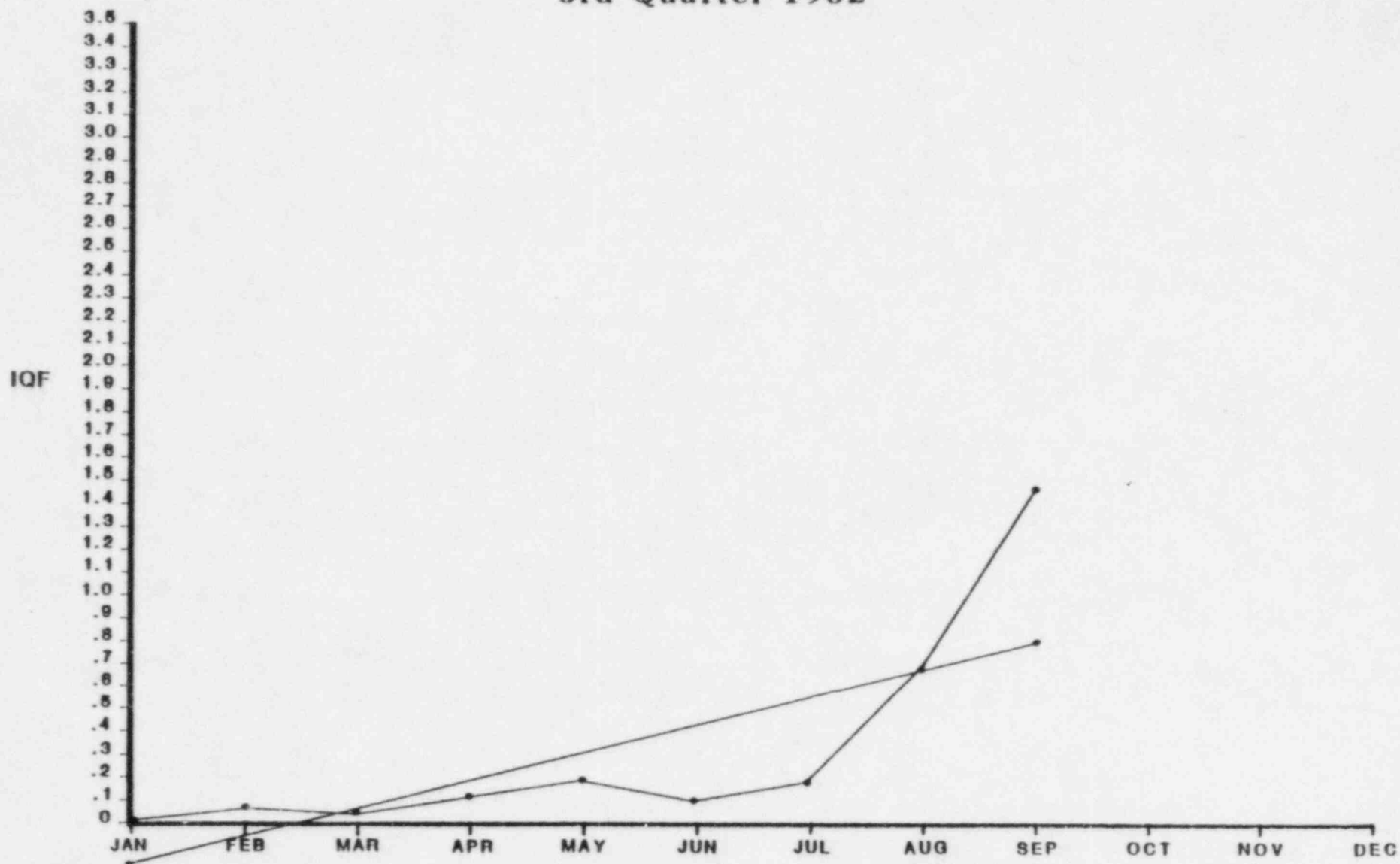
IQF = INSPECTION QUALITY FACTOR = $\frac{\# \text{DEFICIENCIES}}{\# \text{SURVEILLANCES}}$



INDICATES THE ADEQUACY OF THE
CONTRACTORS 1st LINE INSPECTION

PULLMAN SHEET METAL

3rd Quarter 1982



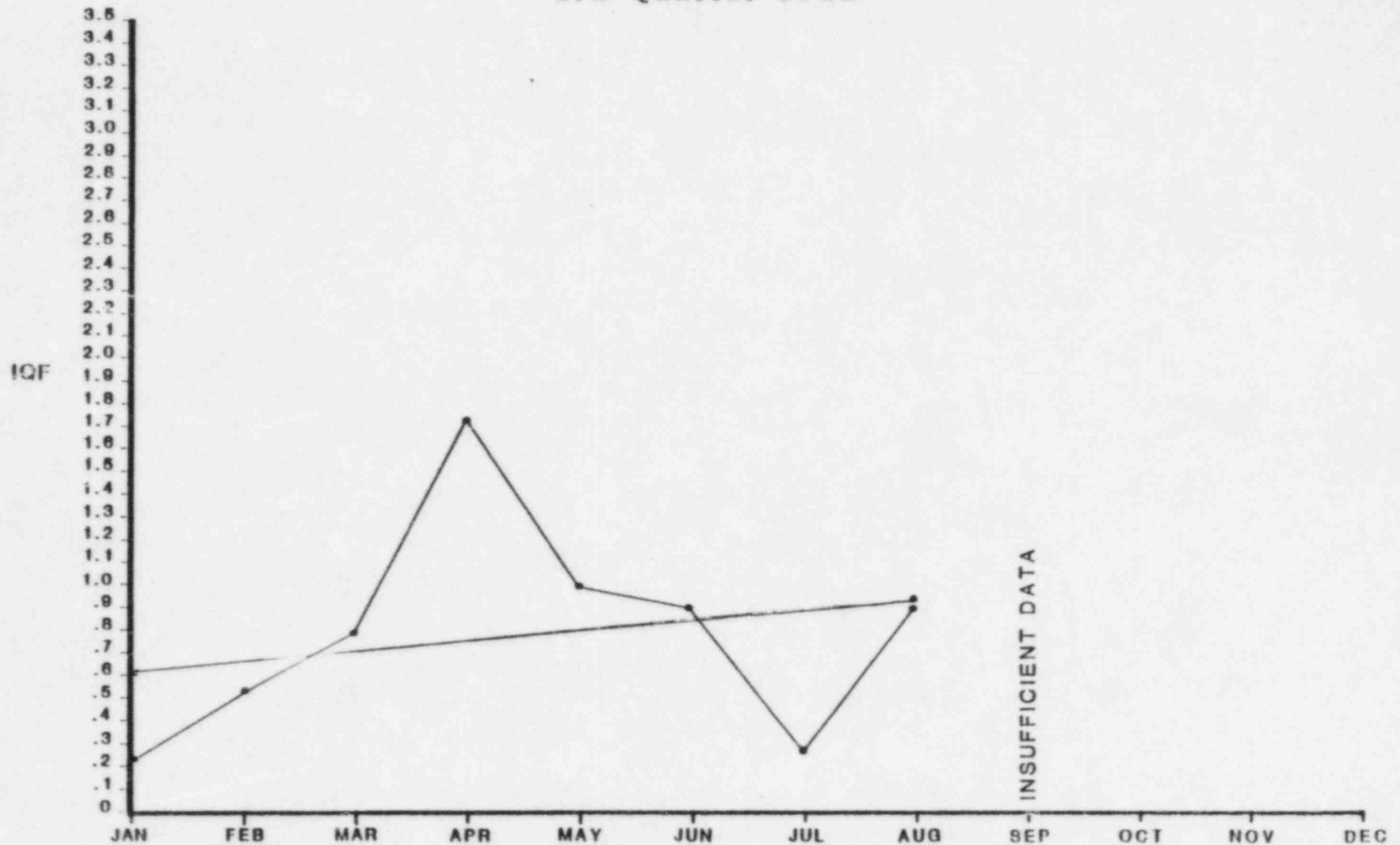
IQF = INSPECTION QUALITY FACTOR = $\frac{\# \text{DEFICIENCIES}}{\# \text{SURVEILLANCES}}$




INDICATES THE ADEQUACY OF THE CONTRACTORS 1st LINE INSPECTION

NEWBERG

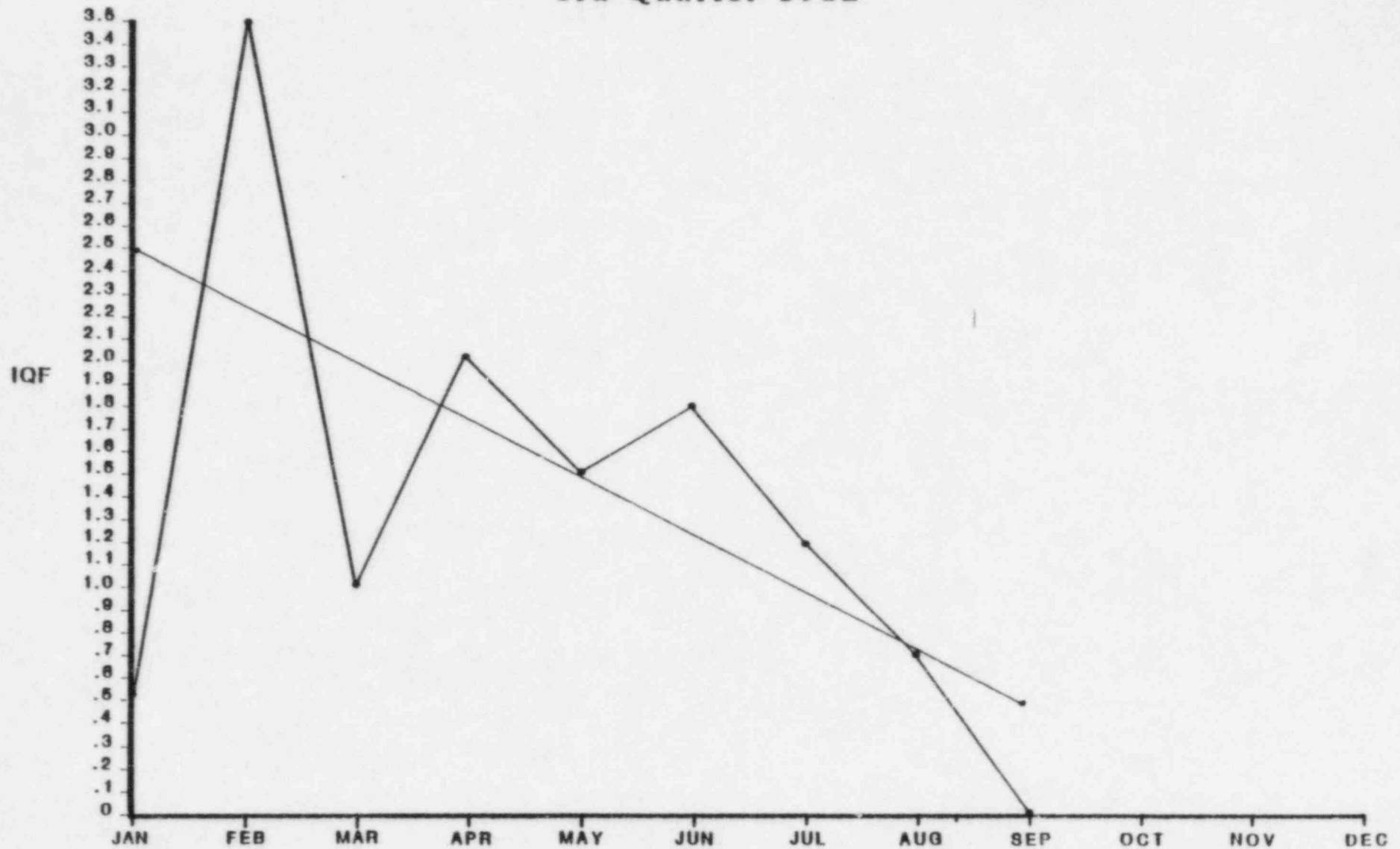
3rd Quarter 1982



IQF = INSPECTION QUALITY FACTOR = $\frac{\# \text{DEFICIENCIES}}{\# \text{SURVEILLANCES}}$  INDICATES THE ADEQUACY OF THE CONTRACTORS 1st LINE INSPECTION

COMMONWEALTH - LORD JV

3rd Quarter 1982



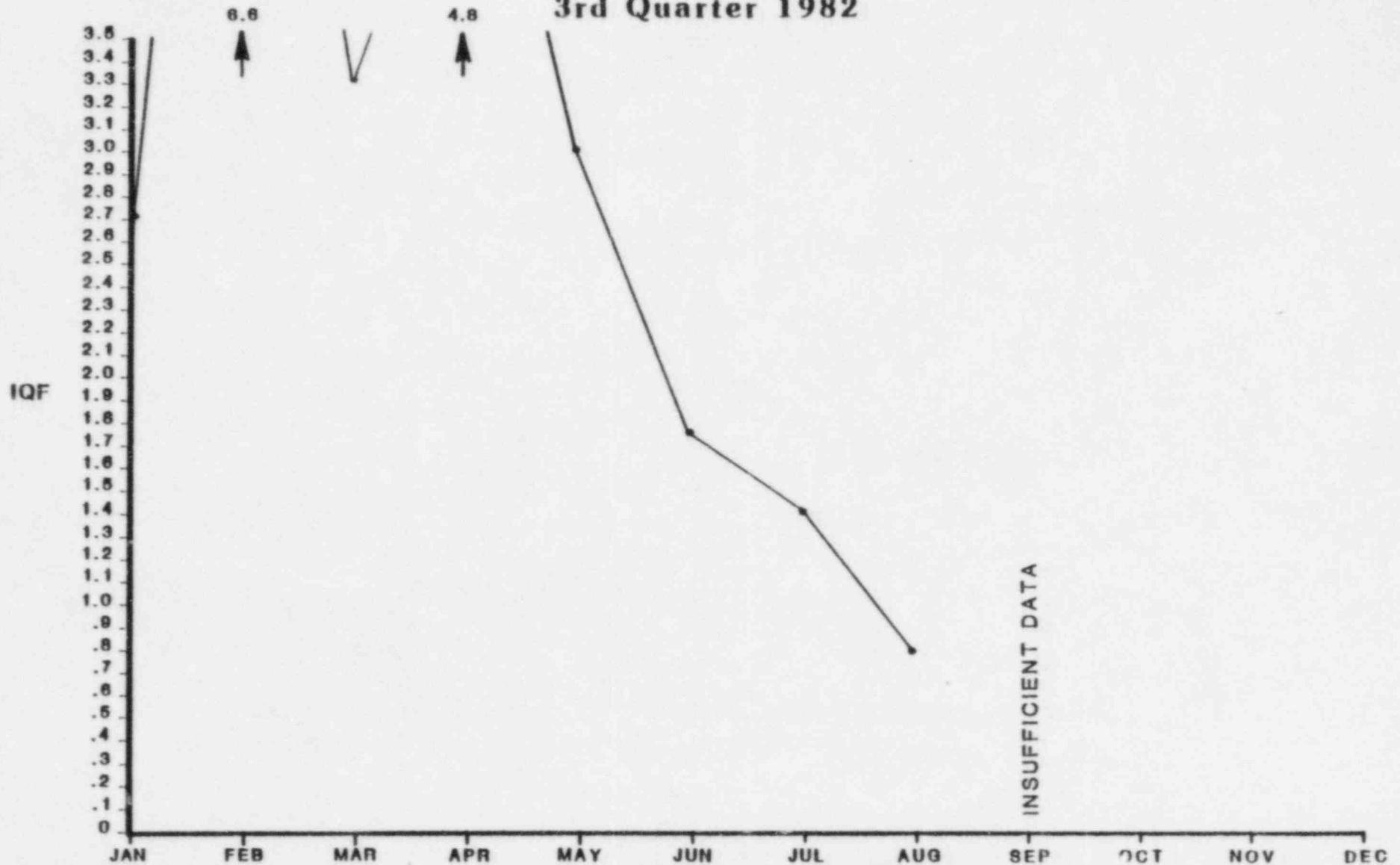
IQF = INSPECTION QUALITY FACTOR = $\frac{\# \text{DEFICIENCIES}}{\# \text{SURVEILLANCES}}$



INDICATES THE ADEQUACY OF THE CONTRACTORS 1st LINE INSPECTION

BECHTEL

3rd Quarter 1982



IQF = INSPECTION QUALITY FACTOR = $\frac{\# \text{DEFICIENCIES}}{\# \text{SURVEILLANCES}}$



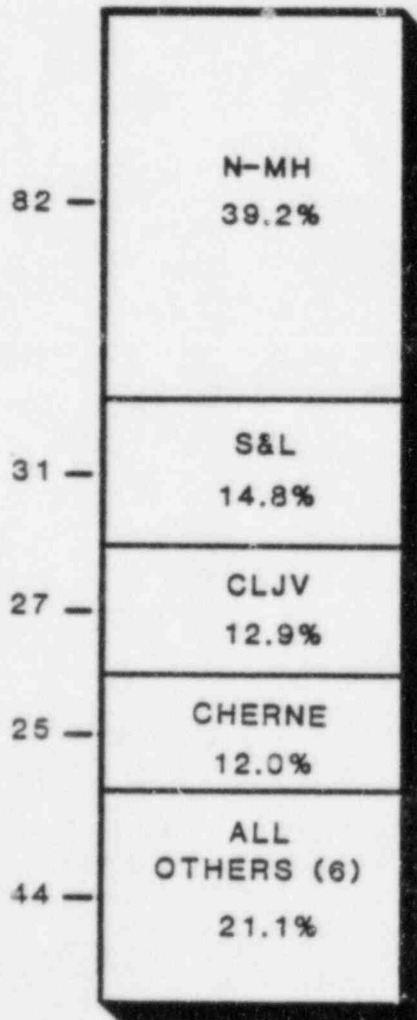
INDICATES THE ADEQUACY OF THE CONTRACTORS 1st LINE INSPECTION

3rd Quarter 1982 Report

CAR & AFR
ORGANIZATION DISTRIBUTION

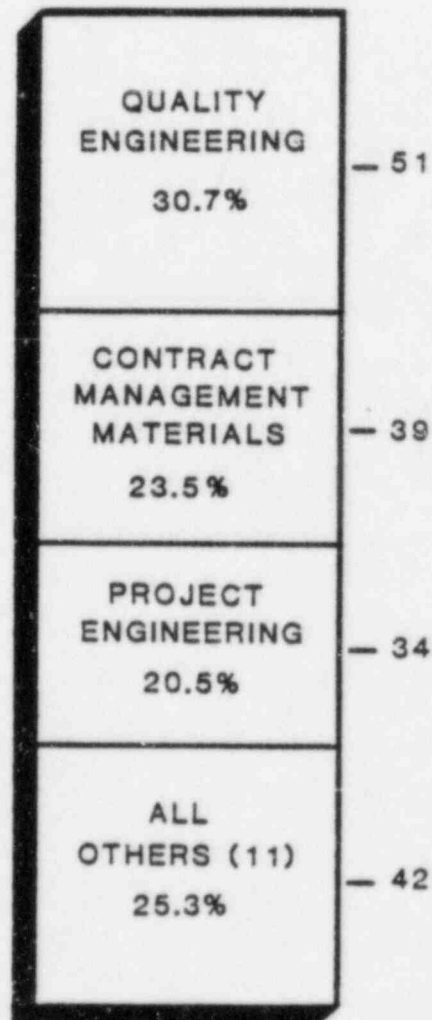
NOTE: 12 Months Data

CONTRACTORS
(CARs & AFRs)



Total 209

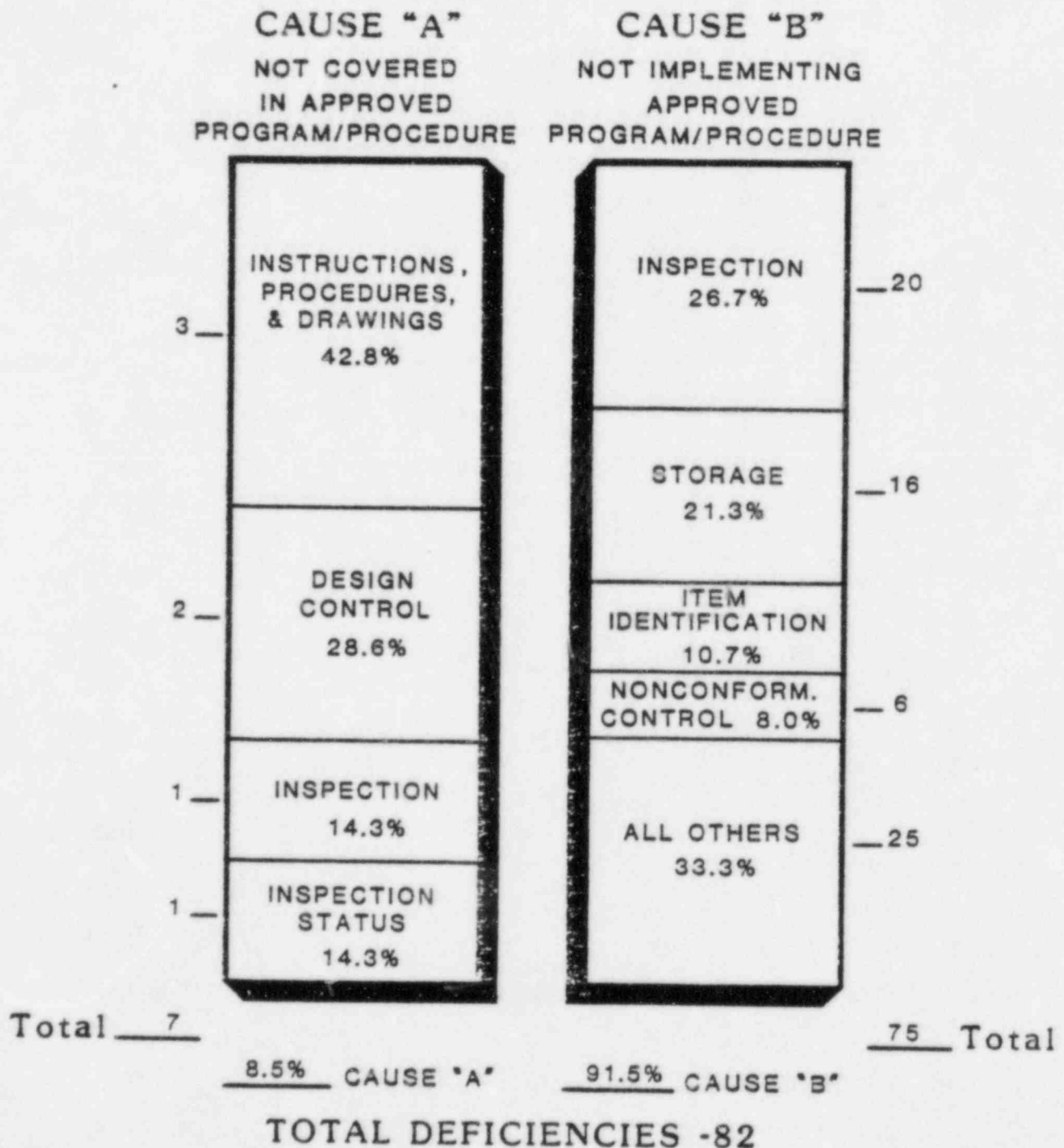
PSI
(CARs & AFRs)



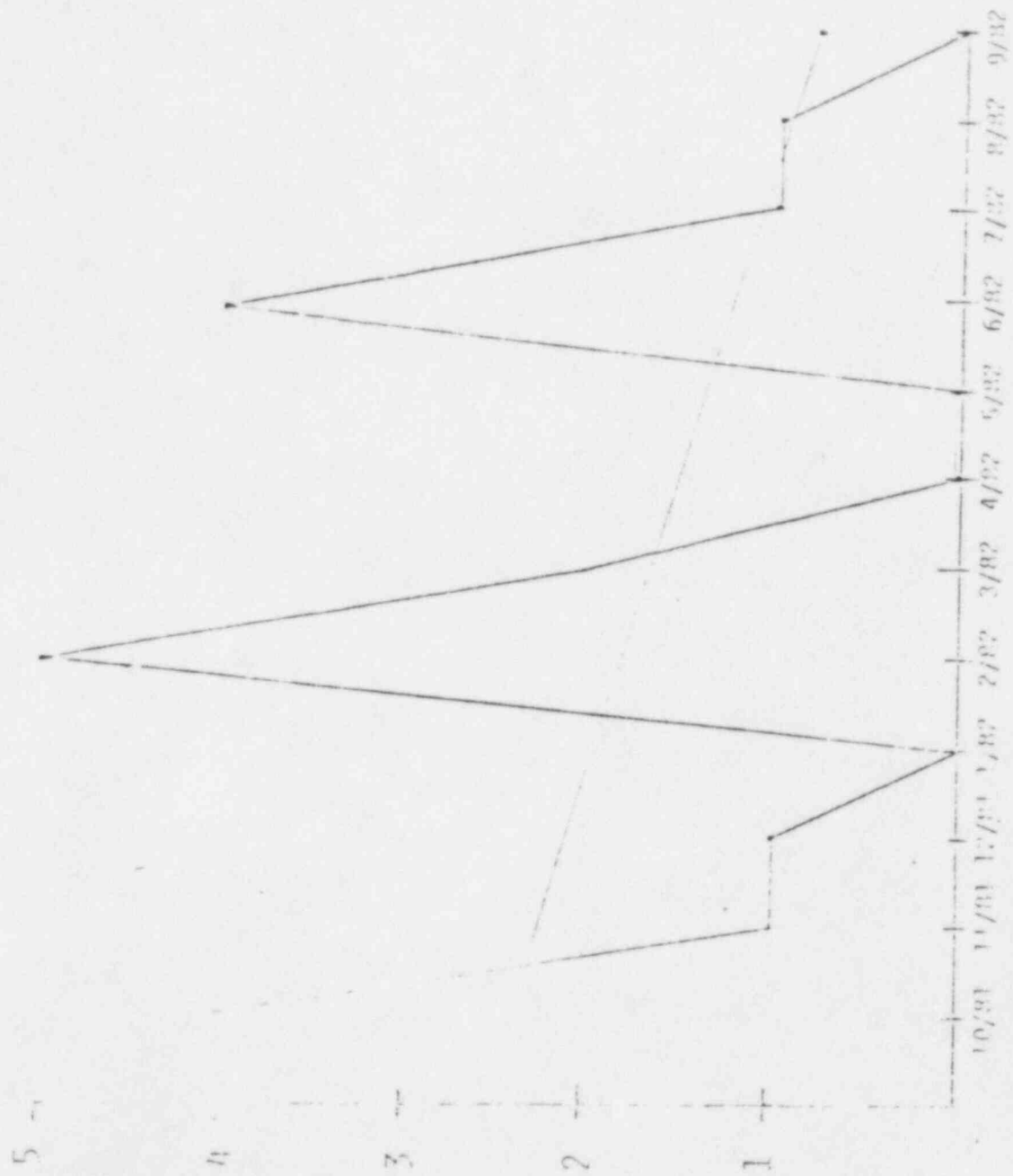
166 Total

3rd Quarter 1982 Report

NEWBERG
DEFICIENCY & CAUSE DISTRIBUTION
(AFRs & CARs)

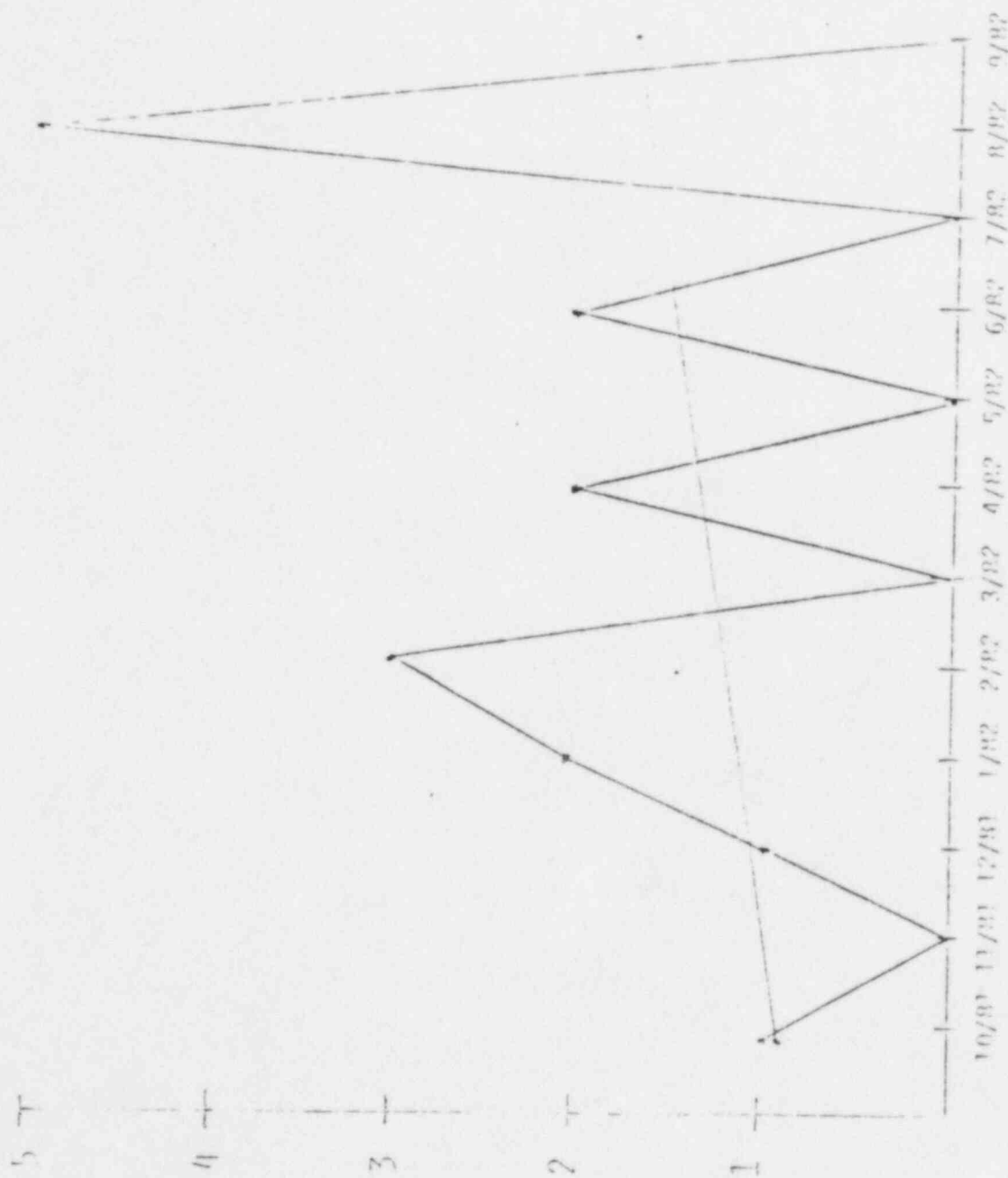


NEUBERG AFR'S & CAR'S RELATED TO INSPECTION



TREND = -.14%/MONTH

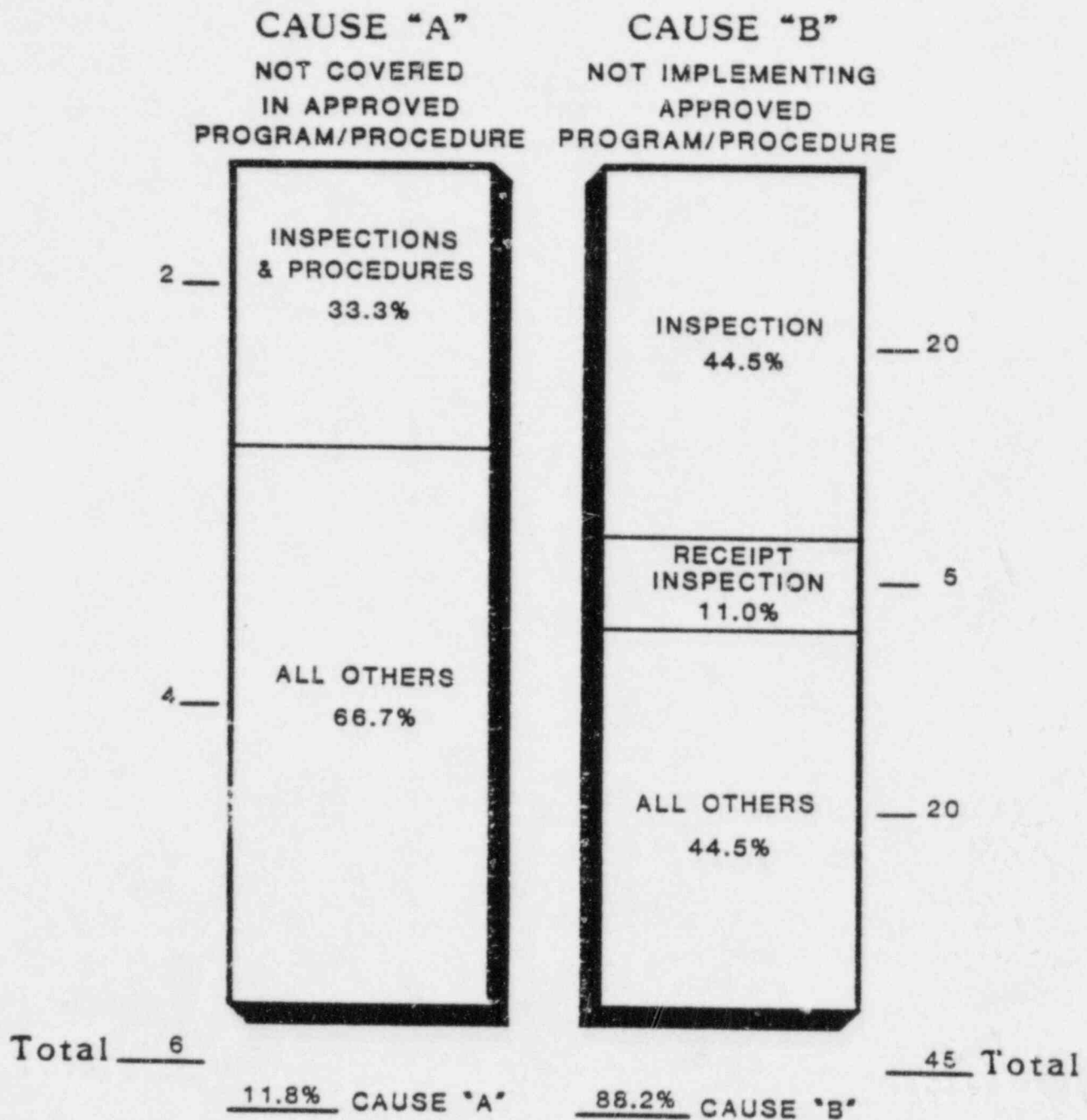
NEWBURG AER'S & CAR'S RELATED TO STORAGE



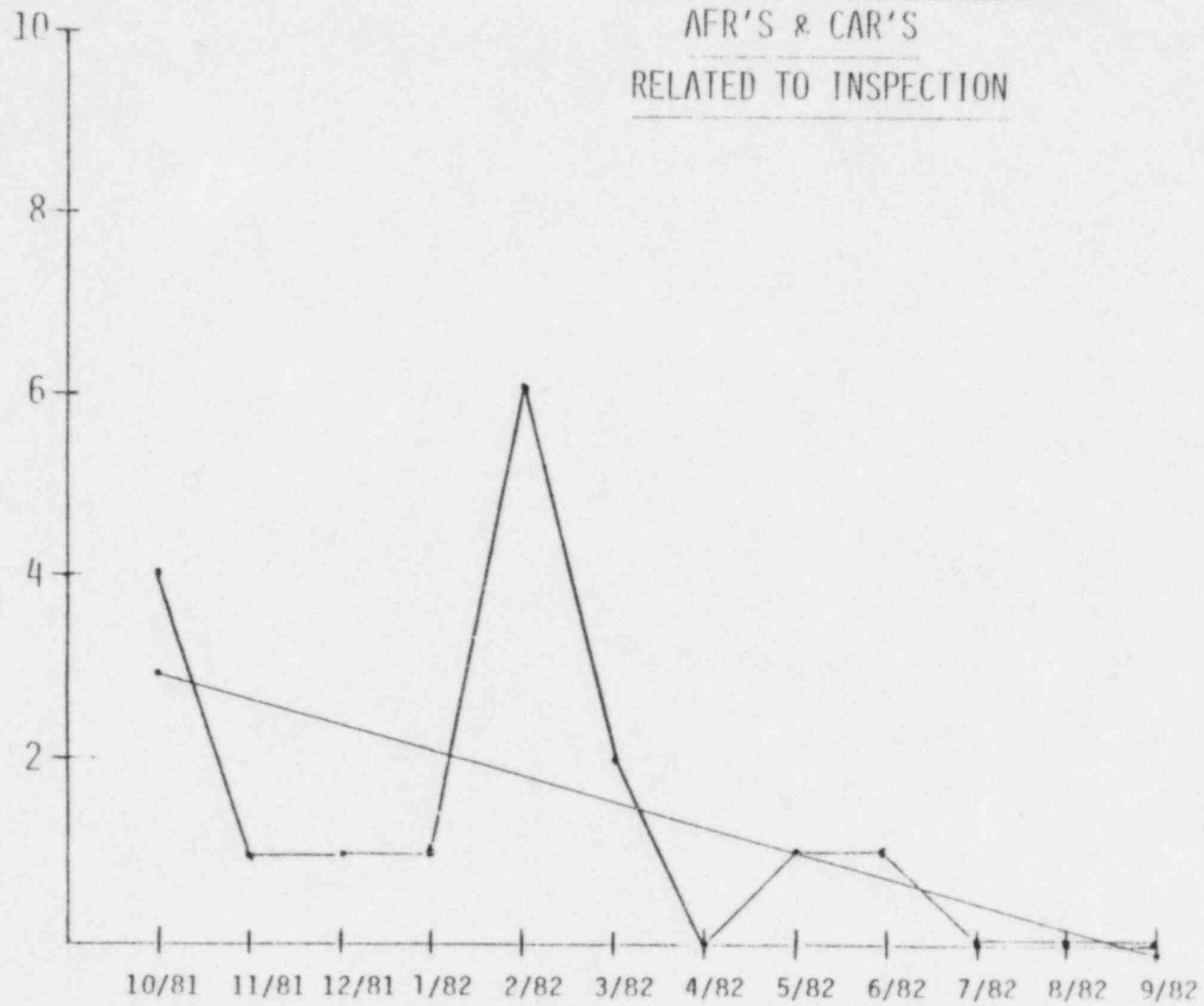
TREND = -0.07/MONTH

3rd Quarter 1982 Report

PSI QUALITY ENGINEERING
DEFICIENCY & CAUSE DISTRIBUTION
(AFRs & CARs)



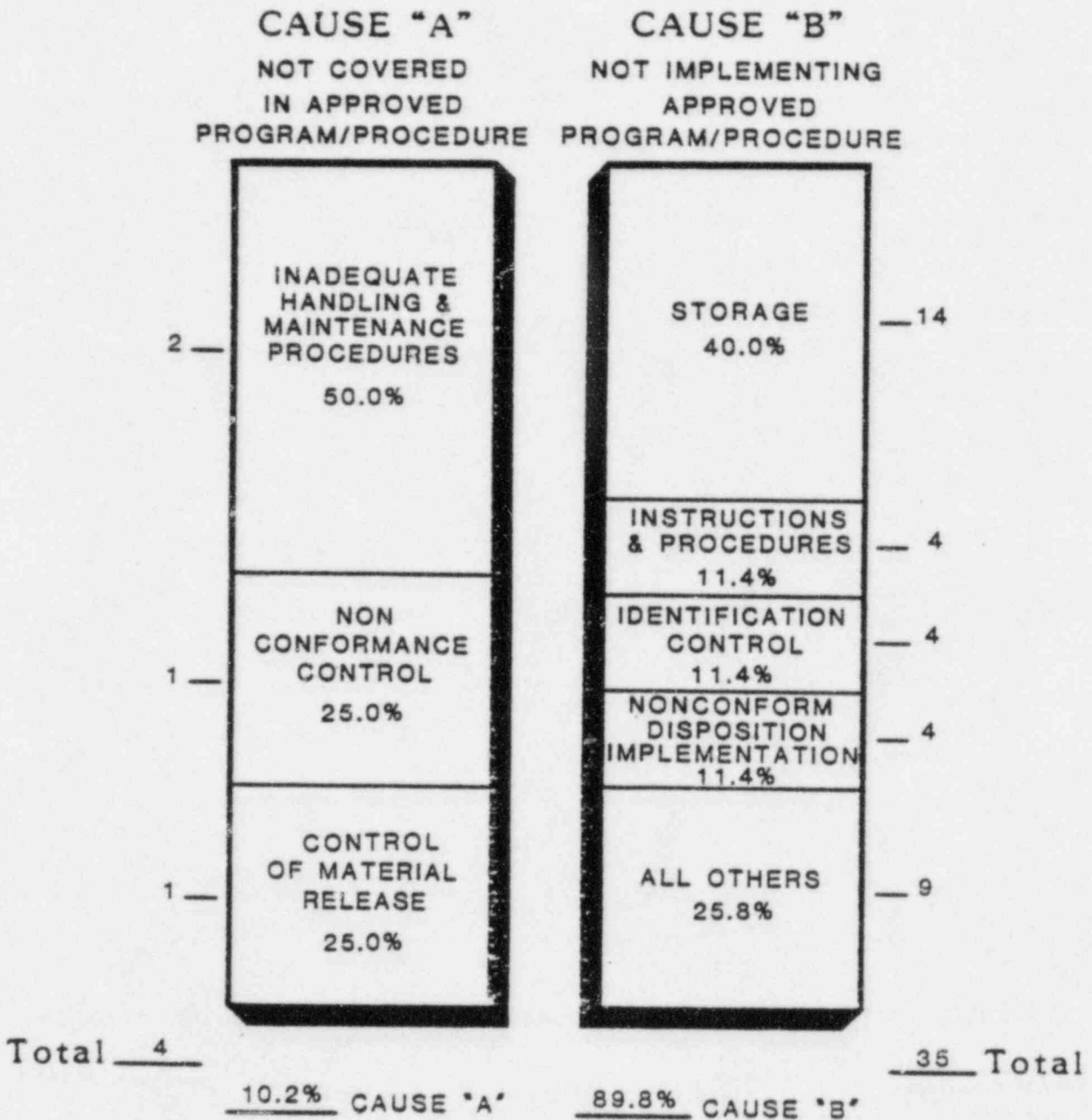
PSI QUALITY ENGINEERING
AFR'S & CAR'S
RELATED TO INSPECTION



TREND = -.269/MONTH

3rd Quarter 1982 Report

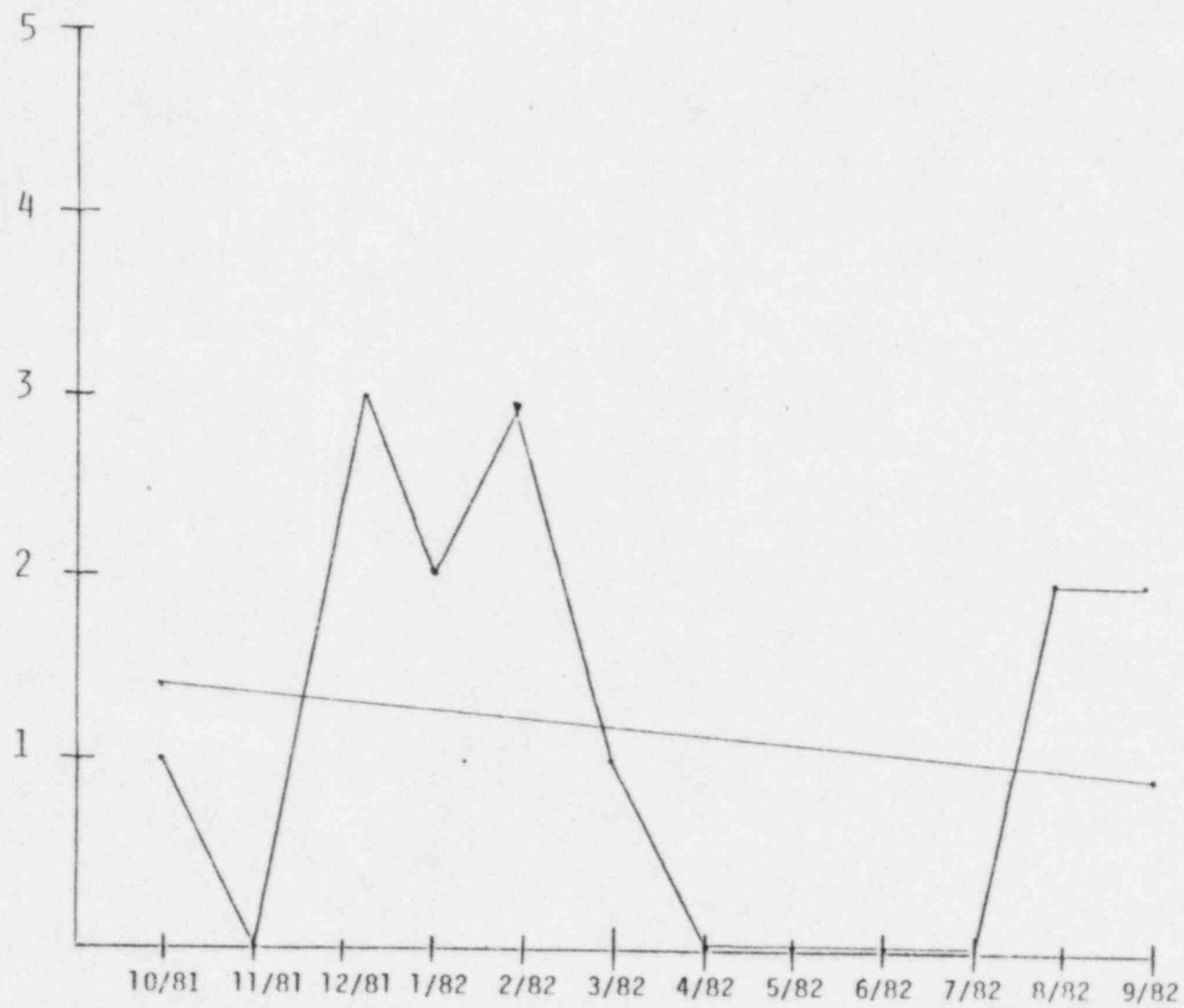
PSI CONTRACT MANAGEMENT MATERIALS
DEFICIENCY & CAUSE DISTRIBUTION
(AFRs & CARs)



CONTRACT MANAGEMENT - MATERIALS

CAR'S & AFR'S

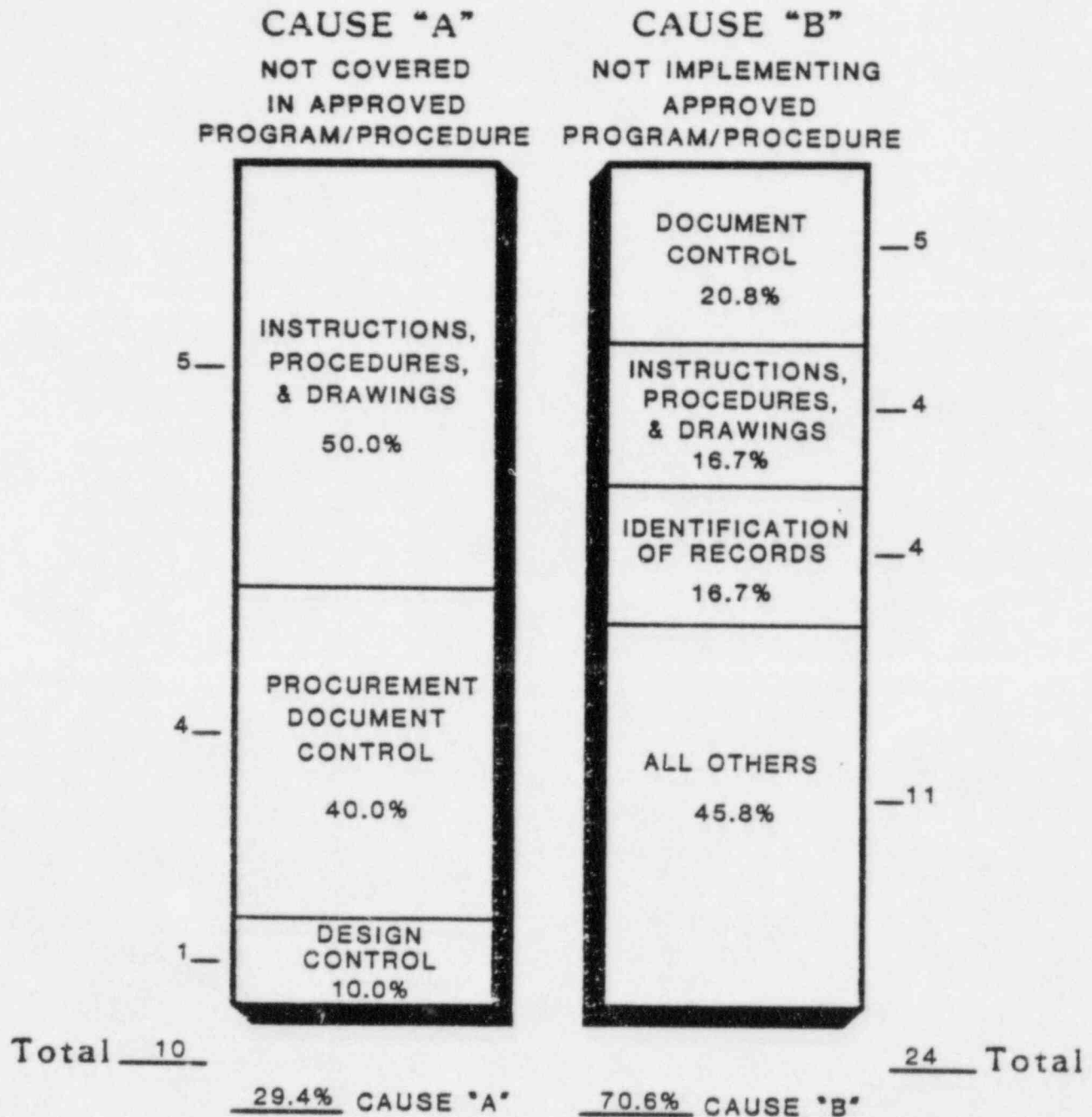
RELATED TO STORAGE



TREND = $-.042/\text{MONTH}$

3rd Quarter 1982 Report

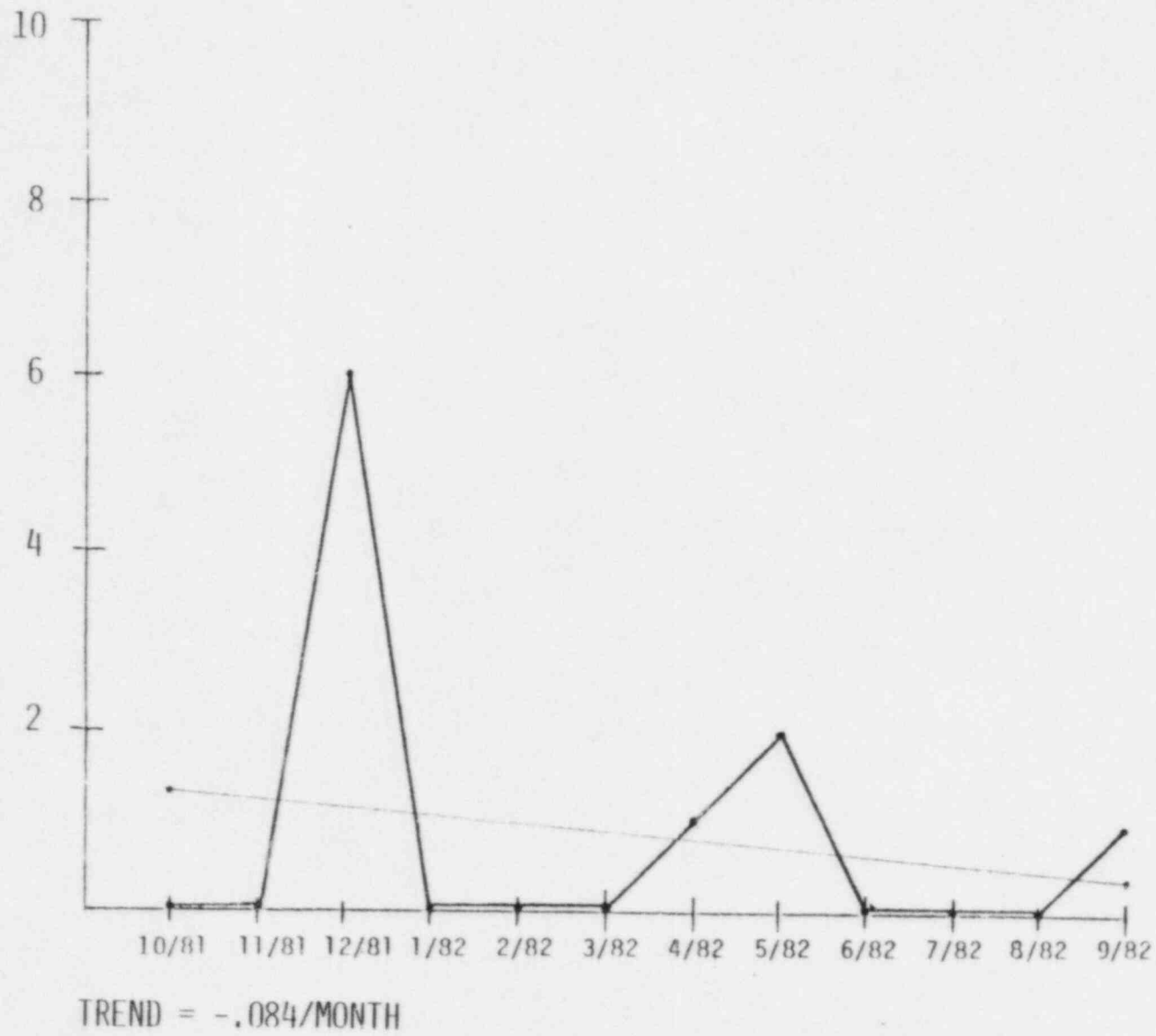
PSI PROJECT ENGINEERING
DEFICIENCY & CAUSE DISTRIBUTION
(AFRs & CARs)



PSI PROJECT ENGINEERING

AFR'S & CAR'S

RELATED TO LACK OF PROGRAM/PROCEDURE COVERAGE





I.F. 61-733 R 10/82

QUALITY ASSURANCE DEPARTMENT
SUSPECTED TREND INVESTIGATION REPORT

PAGE 1 OF 3

3

10/26/82

INITIATION

TO: B. Morrison	QA SECTION: Audits	REPORT NO.: STIR-014	DATE: 10/26/82
RESPONSIBLE ORG: Quality Engineering			REPORT QUARTER: 3rd QTR 1982 YEAR

SUSPECTED TREND:
Adequacy and effectiveness of Inspection Control.
Reference the attached PSI AFR's and CAR's.

☒ ATTACHMENT(S)

QUALITY ADMINISTRATION SUPERVISOR

DATE

INVESTIGATION PROCESS AND METHODS USED: (INCLUDED OBJECTIVE EVIDENCE REVIEWED)

A review of the CARs and AFRs included on Attachment #1 has been performed. The results of this review are documented on Attachment "A".

DESCRIPTION OF INVESTIGATION

☒ ATTACHMENT(S)

RESPONSIBLE INVESTIGATOR

DATE

IS CONDITION ADVERSE TO QUALITY?

YES ☐NO ☒

MCAR/CAR NO.

COMMENTS

Based on Attachment "A", it is evident that the CARs and AFRs issued were effective and a Trend does not exist within the Quality Engineering Section in the area of Inspection Control.

☐ ATTACHMENT(S)

QA DEPT. SECTION MANAGER

DATE

RESULTS

SUSPECTED TREND:

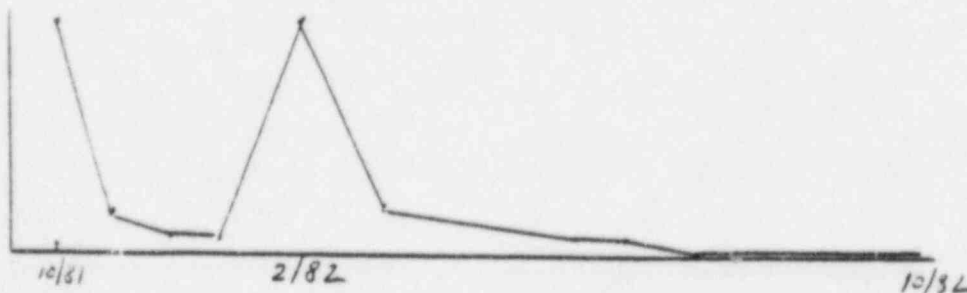
<u>AFR's</u>	<u>CAR's</u>
1PSI20N01	281PSI0180
1PSI20N02	281PSI0187
1PSI20N03	281PSI0203
1PSI20N04	281PSI0226
1PSI23N03	282PSI0007
2PSI09N02	282PSI0030
	282PSI0031
	282PSI0034
	282PSI0035
	282PSI0036
	282PSI0044
	282PSI0058
	282PSI0067
	282PSI0119

ATTACHMENT "A"

The AFR's and CAR's referenced on Attachment 1 were accumulated and reviewed to determine if a possible trend exists. The results of this review are:

- 1) Of the twenty (20) AFR's and CAR's identified on this STIR;
 - a) four (4) AFR's and two (2) CAR's were issued in 10/81;
 - b) one (1) AFR and one (1) CAR were issued in 11/81;
 - c) one (1) CAR was issued in 12/81;
 - d) one (1) CAR was issued in 1/82;
 - e) six (6) CAR's were issued in 2/82;
 - f) two (2) CAR's were issued in 3/82;
 - g) one (1) AFR was issued in 5/82;
 - h) one (1) CAR was issued in 6/1/82.

Graphically, this represents a positive downward trend in the number of deficiencies noted in Q.E. in the area of Inspection Control.



- 2) Of the twenty (20) AFR's and CAR's identified in this STIR, ten (10) CAR's were issued concerning activities of the Civil Inspection & Testing Services Group. All of these CAR's were issued between 11/81 through 3/82 except for one (1) which was issued in 6/82.

The CAR's issued between 11/81 and 3/82 required training of appropriate personnel to prevent recurrence of a similar deficiency. The CAR issued in 6/82 was not caused by inadequate inspection, but rather due to a breakdown of equipment. Therefore since no CAR's or AFR's have been issued since 3/82 that identify inadequate inspection, the training conducted as action to prevent recurrence appears to be effective.

QUALITY ASSURANCE DEPARTMENT
SUSPECTED TREND INVESTIGATION REPORT

PAGE 1 OF 3

INITIATION

TO: S. Sallee	QA SECTION: Materials Quality Engineering	REPORT NO.: STIR-013	DATE: 10/26/82
RESPONSIBLE ORG: PSI Contract Management - Materials			REPORT QUARTER: 3rd QTR 1982 YEAR

SUSPECTED TREND:
Adequacy and effectiveness of storage activities.
Reference the attached PSI AFR's and CAR's.

☒ ATTACHMENT(S) Attachment #1
QUALITY ADMINISTRATION SUPERVISOR [Signature] DATE 10/26/82

INVESTIGATION PROCESS AND METHODS USED: (INCLUDED OBJECTIVE EVIDENCE REVIEWED)

DESCRIPTION OF INVESTIGATION

A review of the CARs and AFRs included on Attachment #1 has been performed. The results of this review are documented on Attachment "A".

☒ ATTACHMENT(S) Attachment #1
RESPONSIBLE INVESTIGATOR [Signature] DATE 11-5-82

RESULTS

IS CONDITION ADVERSE TO QUALITY? YES ☐ NO ☒ MCAR/CAR NO. _____

COMMENTS
Based on Attachment "A", it is evident that the CARs and AFRs issued were effective and a Trend does not exist within the Quality Engineering Section in the area of storage activities.

☐ ATTACHMENT(S) Attachment #1
QA DEPT. SECTION MANAGER [Signature] DATE 11-2-82

FILE

CAP's

1PS12ENC1
1PS125N08
2PS104P02

281PS1019F
281PS10221
282PS1000F
282PS1002C
282PS10025
282PS10033
282PS10039
282PS10068
282PS10078
282PS10146
282PS10162
282PS10179
282PS10181

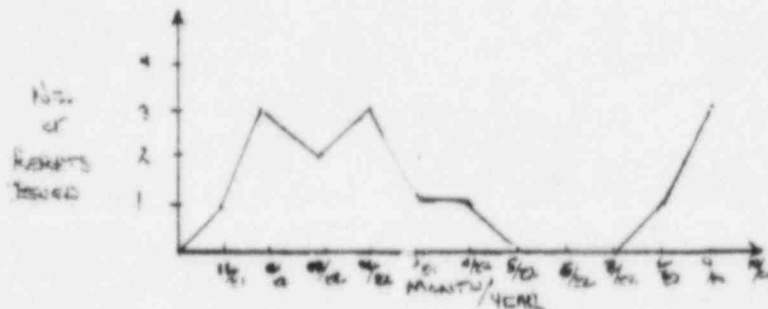
ATTACHMENT "A"

The AFR's and CAP's referenced on Attachment 1 were accumulated and reviewed to determine if a possible trend exists. The results of this review are:

1. Of the Sixteen (16) AFR's & CAR's identified on this STIR:

- | | | |
|----|-------------------------------|-------|
| a. | One CAR issued | 11/81 |
| b. | One CAR, 2 AFR's issued | 12/81 |
| c. | Two CAR's issued | 1/82 |
| d. | Two CAR's, and One AFR issued | 2/82 |
| e. | One CAR issued | 3/82 |
| f. | One CAR issued | 4/82 |
| g. | One CAR issued | 8/82 |
| h. | Three CAR's issued | 9/82 |

This is graphically represented below:



2. Of the sixteen reports referenced, if coded under the present cause and deficiency coding system per PMP 16-2, twelve (12) CAR's identify deficiencies related to storage. Of these twelve (12) reports, two identify deficient storage buildings (warehouses); two identify improperly drained or flooding areas, four identify Level A storage exceeding allowable humidity levels or inoperative measuring equipment; three identify material not capped, stacked, or supported properly; and one identifies Level D storage deficiencies not corrected in a timely manner.

Graphically, the last two months shows another increase in identified deficiencies. But, considering the number of surveillances in the last quarter (66) by Storage & Maintenance surveillance group, it does not appear to be a significant trend. Nevertheless, surveillances of storage will be increased during the next quarter to assure identification and required correction if a trend is developing.

3. The remaining four (4) reports are shown with the cause and deficiency code per PMP 16-2 shown in brackets: 1. AFR 81 PSI 25 NC1 [051-A]; 2. AFR 81 PSI 25 NC8 [051-A, 081-A]; 3. AFR 82 PSI 04 PD2 [051-A, 081-A]; 4. CAR 281 PSI 0195 [162-B].

QUALITY ASSURANCE DEPARTMENT
 SUSPECTED TREND INVESTIGATION REPORT

PAGE 1 OF 5

INITIATION

TO: B. Morrison	QA SECTION: Audits	REPORT NO.: STIR-012	DATE: 10-26-82
RESPONSIBLE ORG. Project Engineering			REPORT QUARTER: 3rd QTR 1982 YEAR
SUSPECTED TREND: The existance or adequacy of documented procedures covering Instructions, Procedures and Drawings and Procurement Document Control. Reference the attached PSI AFR's and CAR's.			
<input checked="" type="checkbox"/> ATTACHMENT(S)		_____ QUALITY ADMINISTRATION SUPERVISOR	_____ DATE

DESCRIPTION OF INVESTIGATION

INVESTIGATION PROCESS AND METHODS USED: (INCLUDED OBJECTIVE EVIDENCE REVIEWED)

Based on the information depicted on Attachment 1, there is a downward trend in the number of AFRs and CARs issued related to the lack of program/procedures coverage.

However, to ensure that the downward trend is maintained, the Audit frequency will be increased in the subject area during the First Quarter, 1983.

☒ ATTACHMENT(S)

 RESPONSIBLE INVESTIGATOR

 DATE

RESULTS

IS CONDITION ADVERSE TO QUALITY? YES ☐ NO ☒ MCAR / CAR NO _____

COMMENTS

☒ ATTACHMENT(S)

 QA DEPT. SECTION MANAGER

 DATE

SUSPECTED TREND:

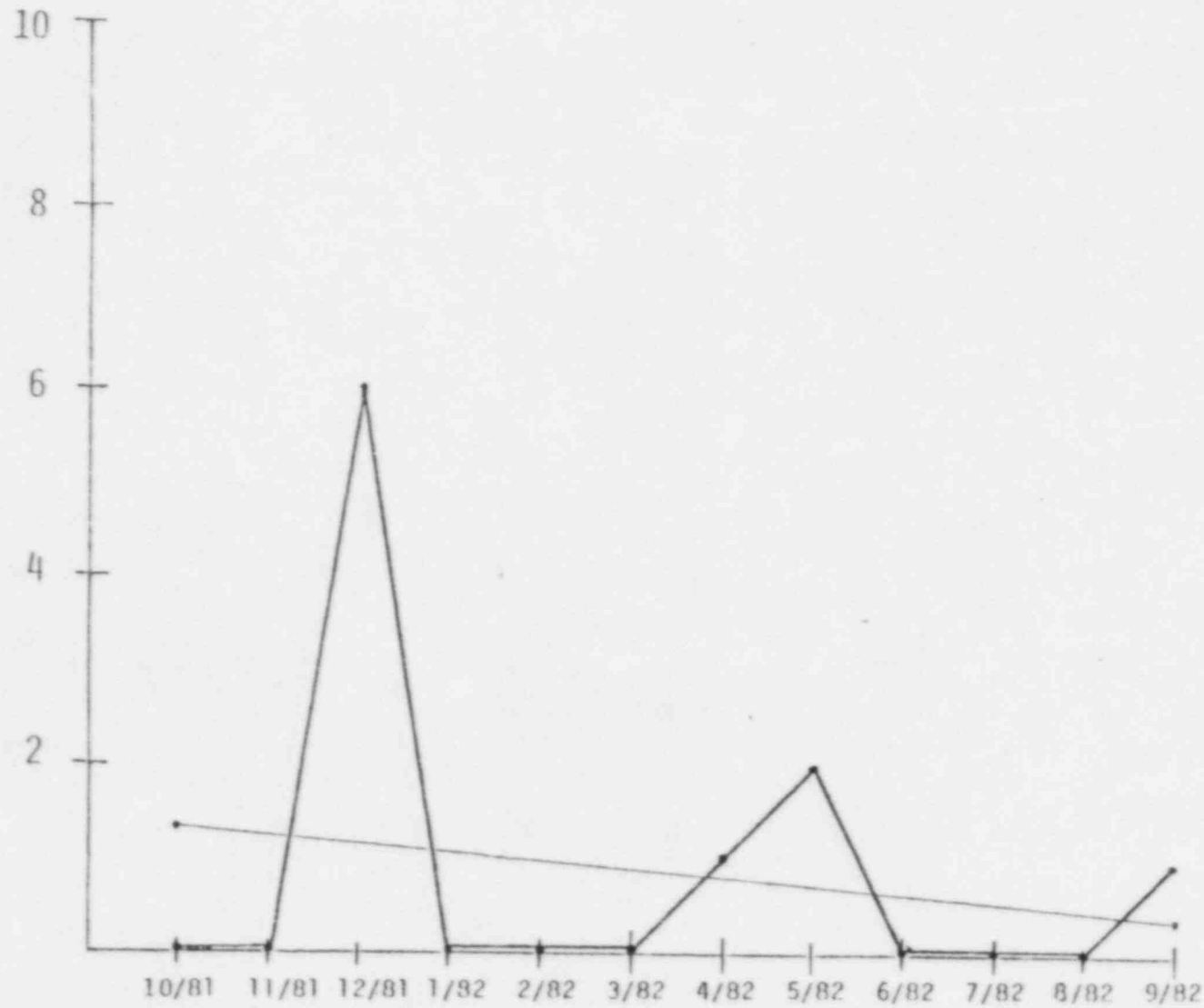
AFR's

1PSI24P02
1PSI24P03
1PSI24P04
2PSI08P01
2PSI09P02
2PSI09P04
2PSI11P01

CAR's

281PSI0219
281PSI0229

RELATED TO LACK OF PROGRAM/PROCEDURE COVERAGE



TREND = $-.084/\text{MONTH}$

ATTACHMENT "A"

STIR-012

The AFR's and CAR's identified on Attachment 1 were reviewed to determine if a negative trend exists as noted under the heading "Suspect Trend".

Suspected Trend in "Procurement Document Control".

<u>AUDIT REPORT</u>	<u>AFR#/CAR#</u>	<u>FINDING</u>	<u>INVESTIGATION</u>
81-PSI-24	PD-2	PMP 1.11 does not require a Bid Spec. to be reviewed by QA prior to issuance.	A valid finding. However it should not be considered in this trend investigation since this was a new requirement of ANSI N45.2.13 (1976) that PSI had just recently endorsed prior to this finding being issued in Dec. 1981. This finding identifies a problem in ensuring PSI commitments are adequately covered in implementing procedures.
N/A	281PSI0229	Purchase Requisition being issued prior to review by QA.	Not a valid CAR. CAR was issued in error.
N/A	281PSI0219	Design Changes not being contracturally imposed on Suppliers and Contractors via PO Change Orders.	This is a "major" CAR that was determined to be considered reportable to the NRC.

Based on the investigations noted above a condition adverse to quality does exist. This conclusion is based on the fact that one (1) document listed above (CAR 281PSI0219) is significant in nature. However, it is recommended not to initiate another CAR or a MCAR until such time that the corrective action to CAR 281PSI0219 (SPP-34) is evaluated for effectiveness.

"Instructions, Procedures and Drawings"

<u>AUDIT REPORT</u>	<u>AFR #</u>	<u>FINDING</u>	<u>INVESTIGATION</u>
81-PSI-24	PD-3	Procedures do not require review by QA of conformed specs. prior to issuing to ensure they agree with bid evaluations and negotiations.	A valid finding.
81-PSI-24	PD-4	Procedures do not define actions required for conforming PSI prepared specifications.	A valid finding.
82-PSI-08	PD-1	PMP 5.01 requires review documentation to be a QA Verification Record. PMP 1.11 did not require review documentation for PSI prepared specs. to be sent to QA Records for retention.	A valid finding.
82-PSI-09	PD-2	PMP organization charts do not address the Supervising Engineer-ASME Piping.	Not a valid finding. (See response to AFR).
82-PSI-09	PD-4	PMP's do not require ERA's to be marked "Safety-Related" as required by AQAM.	A valid finding PMP did not have correct ERA form attached. Proj. Engineering was using ERA form in AQAM which has a block for marking safety category.
82-PSI-11	PD-1	"Notification of Contested FCR" form in S&L's PI-MH-017 is not procedurally addressed in PMP.	A valid finding.



QUALITY ASSURANCE DEPARTMENT
SUSPECTED TREND INVESTIGATION REPORT

LF 61-703 R 10/82

PAGE 1 OF 3

INITIATION

TO: J. Parks	QA SECTION: Civil Quality Engineering	REPORT NO.: STIR-011	DATE: 10/26/82
RESPONSIBLE ORG.: Newberg			REPORT QUARTER: 3rd QTR 1982 YEAR

SUSPECTED TREND: Adequacy and effectiveness of storage activities.
Reference the attached PSI AFR's and CAR's.

☒ ATTACHMENT(S)

[Signature]
QUALITY ADMINISTRATION SUPERVISOR

DATE

INVESTIGATION PROCESS AND METHODS USED: (INCLUDED OBJECTIVE EVIDENCE REVIEWED)

A review of the documents listed on page two (2) has not revealed any trend. There are two (2) that come close to the same type of violation, but no discernable pattern exists. The twelve (12) CAR's are a combination of individual violations with no definite trend.

DESCRIPTION OF INVESTIGATION

☒ ATTACHMENT(S)

[Signature]
RESPONSIBLE INVESTIGATOR

11/10/82
DATE

IS CONDITION ADVERSE TO QUALITY? YES ☐ NO ☒

MCAR/CAR NO. _____

COMMENTS

☐ ATTACHMENT(S)

[Signature]
QA DEPT. SECTION MANAGER

11-11-82
DATE

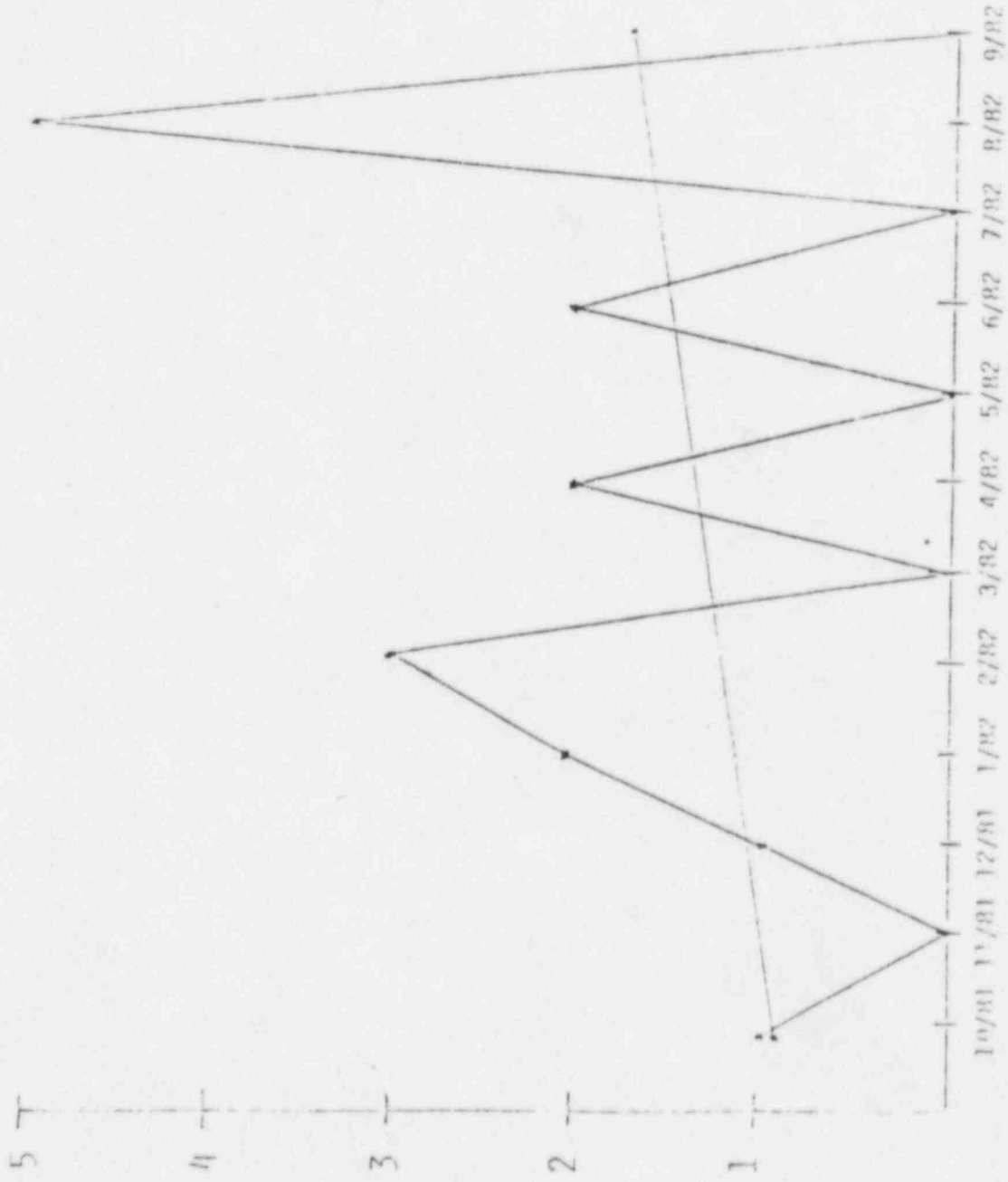
RESULTS

SUSPECTED TREND:

Adequacy and effectiveness of storage activities. Reference the following
PSI AFR's and CAR's:

<u>AFR's</u>	<u>CAR's</u>	<u>CAR's</u>
2NMH01N05	281PSI0181	282PSI0078
2NMH01N06	281PSI0225	282PSI0109
2NMH04N10	282PSI0001	282PSI0130
2NMH04N12	282PSI0015	282PSI0144
	282PSI0045	282PSI0148
	282PSI0071	282PSI0159

NEWBORN AFR'S & CAR'S RELATED TO STORAGE



TREND = +.07/MONTH

QUALITY ASSURANCE DEPARTMENT
SUSPECTED TREND INVESTIGATION REPORT

INITIATION

TO: J. Parks	QA SECTION: Civil Quality Engineering	REPORT NO.: STER-010	DATE: 10-22-82
RESPONSIBLE ORG: J. L. Manta			REPORT QUARTER: 3 QTR 1982 YEAR

SUSPECTED TREND: Adequacy and effectiveness of contractors first-line inspection.
Suspected trend is based on analysis of PSI construction surveillance reports for 1982.

☒ ATTACHMENT(S)

[Signature]
QUALITY ADMINISTRATION SUPERVISOR
DATE

DESCRIPTION OF INVESTIGATION

INVESTIGATION PROCESS AND METHODS USED: (INCLUDED OBJECTIVE EVIDENCE REVIEWED)

Reported deficiencies against Inspection (Deficiency Code 10) show 2 instances against D. Ullrich, 2 instances against R. Rubbens, and 2 instances (shared) against D. Weiss and C. Peapples. No instances were against K. Rung. C. Weiss is now transferred to Production Foreman. R. Rubbens is now transferred off-site. K. Rung is now transferred off-site.

Other deficiencies from surveillance reports were mostly single incidents with the exception of M&TE, Nonconformance, and Special Process violations (2 instances each)(Deficiency Codes 12, 15, and 09 respectively). The period of most deficiencies represents the peak activity period including the coating of Unit #1 containment and full operation of the blast shop. Examined Surveillance Reports MANTA JL-02-0001 to 82-0050 (January - September 1982). Quality Engineer feels that no trends were established and that proper surveillance conducted by PSI Civil Surveillance Group has resulted in a Q.F. of 0 for September.

Quality Engineering has the feeling that more attention is required to the J. L. Manta trending operation and to this end we have written letter NQA-1293-82 to J. L. Manta and intend to more closely watch their response and actions.

☐ ATTACHMENT(S)

[Signature]
RESPONSIBLE INVESTIGATOR
DATE 11/10/82

IS CONDITION ADVERSE TO QUALITY? YES ☐ NO ☒

MCAR/CAR NO _____

COMMENTS

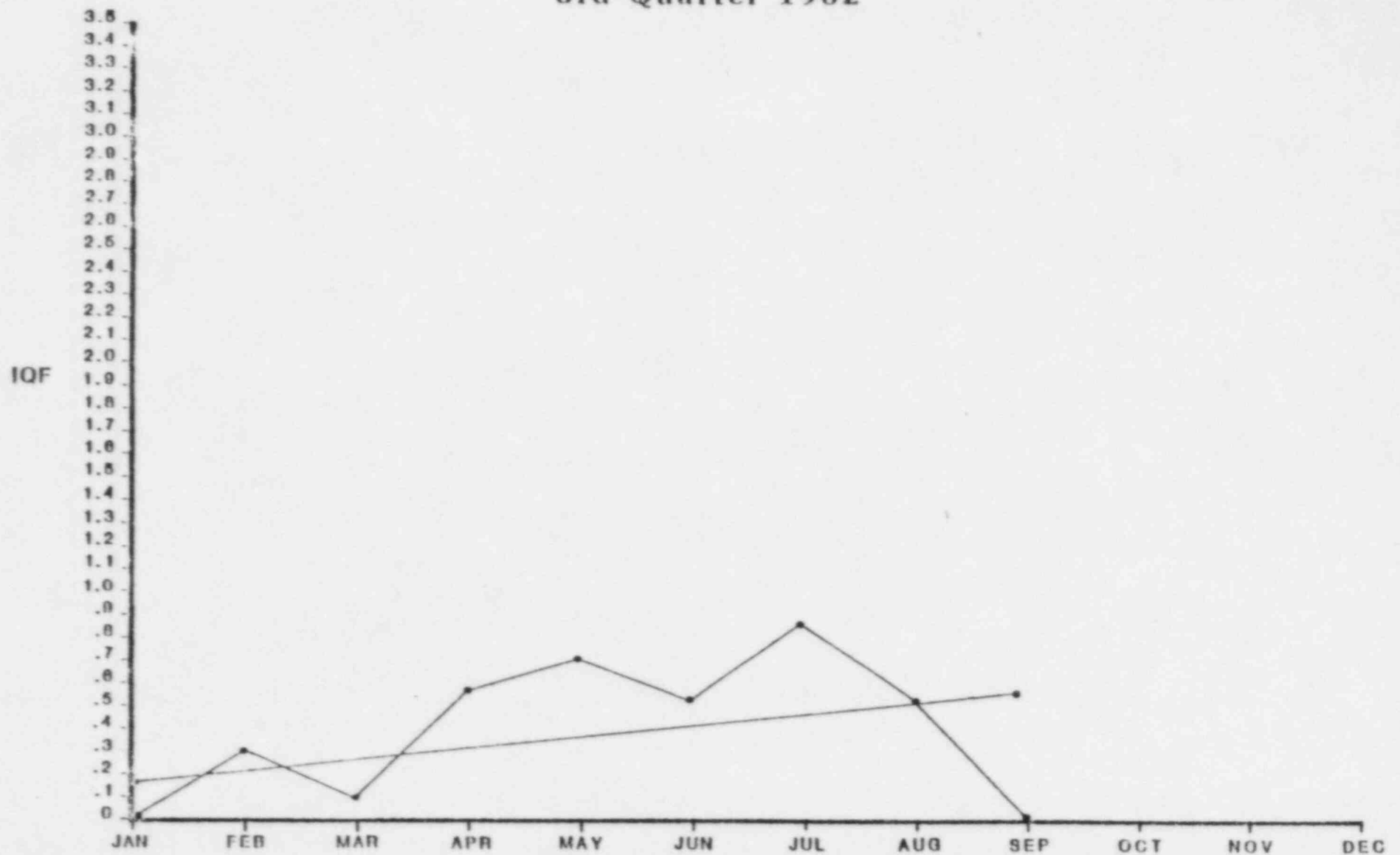
☐ ATTACHMENT(S)

[Signature]
QA DEPT. SECTION MANAGER
DATE 11/10/82

RESULTS

J. L. MANTA

3rd Quarter 1982



IQF = INSPECTION QUALITY FACTOR = $\frac{\text{DEFICIENCIES}}{\text{SURVEILLANCES}}$  INDICATES THE ADEQUACY OF THE CONTRACTORS 1st LINE INSPECTION

QUALITY ASSURANCE DEPARTMENT
SUSPECTED TREND INVESTIGATION REPORT

LF 81-723 R 10/82

PAGE 1 OF 2

INITIATION

TO: S. Sallee	QA SECTION: Materials Quality Engineering	REPORT NO.: STIR-009	DATE: 10-22-82
RESPONSIBLE ORG: Materials Contractor			REPORT QUARTER: 3rd QTR 1982 YEAR
SUSPECTED TREND: Adequacy and effectiveness of Contractor's first-line inspection; suspected trend is based on analysis of PSI Surveillance Reports for 1982.			
<input checked="" type="checkbox"/> ATTACHMENT(S)			<u>Robert P. Lyle</u> QUALITY ADMINISTRATION SUPERVISOR 10-22-82 DATE

DESCRIPTION OF INVESTIGATION

INVESTIGATION PROCESS AND METHODS USED: (INCLUDED OBJECTIVE EVIDENCE REVIEWED)

Surveillance of materials handling for 1982 does indicate a deficiency in the adequacy of controls over material handling, storage and maintenance. However, PSI was directly responsible for administering these activities. Recently, Bechtel Power Corporation was given a contract to administer these activities. The timing of that contract award coincides with the marked improvement identified in the attached chart. Bechtel now has seven QA/QC personnel onboard and the recent improvement is expected to continue, such that an acceptable IQF should be achieved before the end of the next quarter. No further corrective action is deemed necessary at this time.

☐ ATTACHMENT(S) Ed Beedman 11/1/82
RESPONSIBLE INVESTIGATOR DATE

IS CONDITION ADVERSE TO QUALITY? YES ☐ NO ☒ MCAR/CAR NO N/A

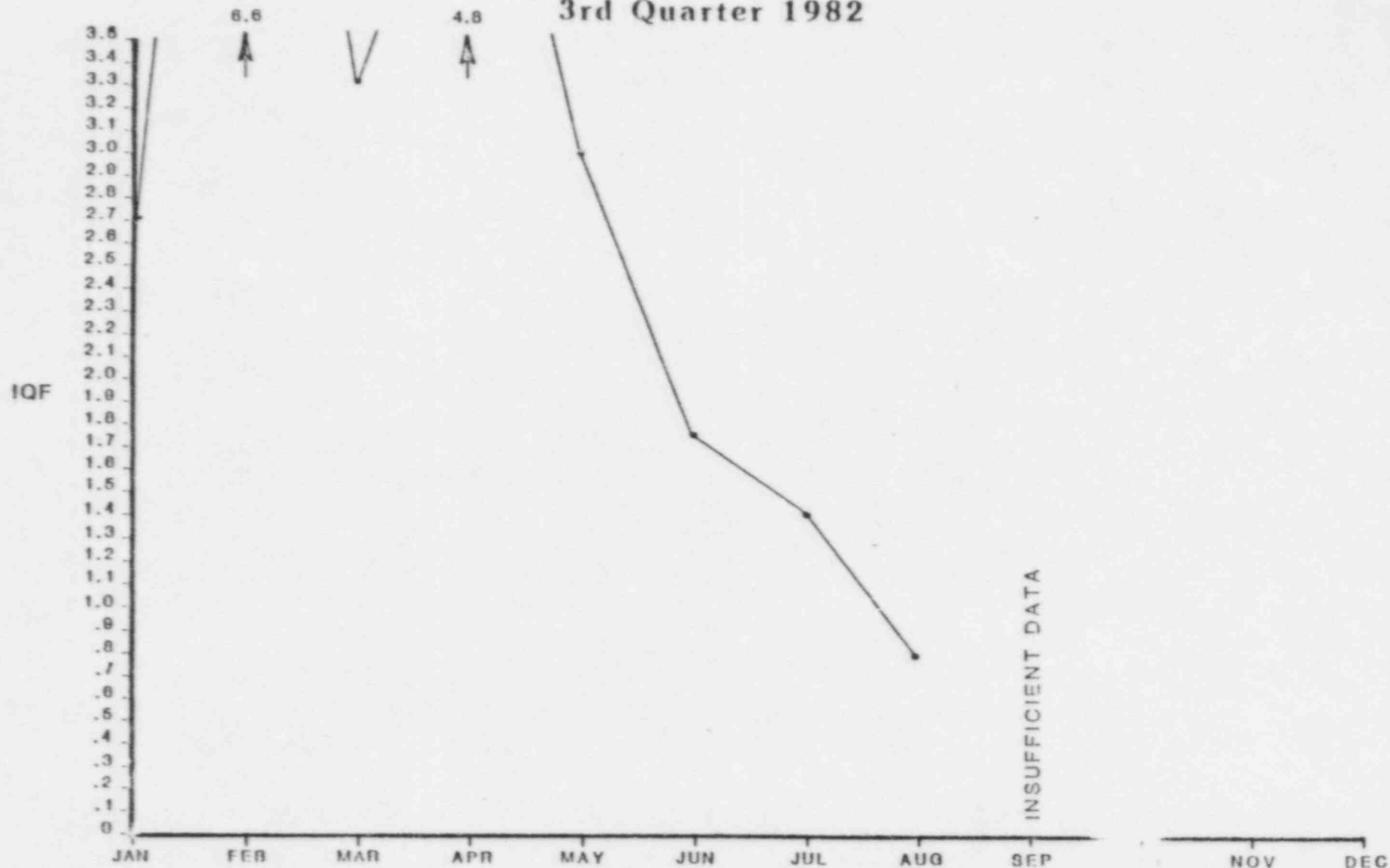
COMMENTS

☐ ATTACHMENT(S) Ed Beedman 11/1/82
QA DEPT. SECTION MANAGER DATE

RESULTS

BECHTEL

3rd Quarter 1982



IQF = INSPECTION QUALITY FACTOR = $\frac{\# \text{DEFICIENCIES}}{\# \text{SURVEILLANCES}}$



INDICATES THE FREQUENCY OF THE CONTRACTORS' INSPECTION

QUALITY ASSURANCE DEPARTMENT
SUSPECTED TREND INVESTIGATION REPORT

LF 61-733 R 10/82

PAGE 1 OF 2

INITIATION

TO: H. Curry	QA SECTION: Electrical Quality Engineering	REPORT NO.: STIA-003	DATE: 10-22-82
RESPONSIBLE ORG. Pullman Sheet Metal			REPORT QUARTER: 3 QTR 1982 YEAR
SUSPECTED TREND: Adequacy and effectiveness of contractors first line inspection. Suspected trend is based on analysis of PSI construction surveillance reports for 1982.			
<input checked="" type="checkbox"/> ATTACHMENT(S)		<i>Robert V. Kile</i> QUALITY ADMINISTRATION SUPERVISOR	<i>10-22-82</i> DATE

DESCRIPTION OF INVESTIGATION

INVESTIGATION PROCESS AND METHODS USED: (INCLUDED OBJECTIVE EVIDENCE REVIEWED)

Following items reviewed:

1. Pullman surveillance reports from July 1982 through October 1982.
2. PSI issued CAR's to Pullman since July 1982.
3. Pullman's NCR's from July through October 1982.

Evaluation results:

During the effected quarter there have been two (2) different surveillance processes conducted. Prior to the middle of August, PSI hold points were placed on each Pullman inspection attribute. This resulted in surveillances for hold points only. In the middle of August, all hold points were removed by PSI and surveillances were conducted based upon a programmatic viewpoint instead of a hold point material approach. This resulted in locating more deficiencies, which showed a dramatic trend change.

It is true Pullman has definite problems as shown by the deficiencies identified by our surveillances, CAR's, and the number of Pullman NCR's initiated because of deficiencies identified by PSI surveillance deficiencies Pullman had failed to identify. In the past two (2) months, Pullman has hired an experienced QA Manager for the site, a QC supervisor, and ten (10) additional inspectors. They have also totally revised their QA Manual and a few implementing procedures.

Conclusion:

Although seven (7) of the last eight (8) surveillances were satisfactory, it is too early to determine the actual effectiveness of the changes which occurred. Therefore, I do not consider a Corrective Action Request is necessary at this time.

Further action should be delayed until it is determined if Pullman's inspection force is truly ineffective.

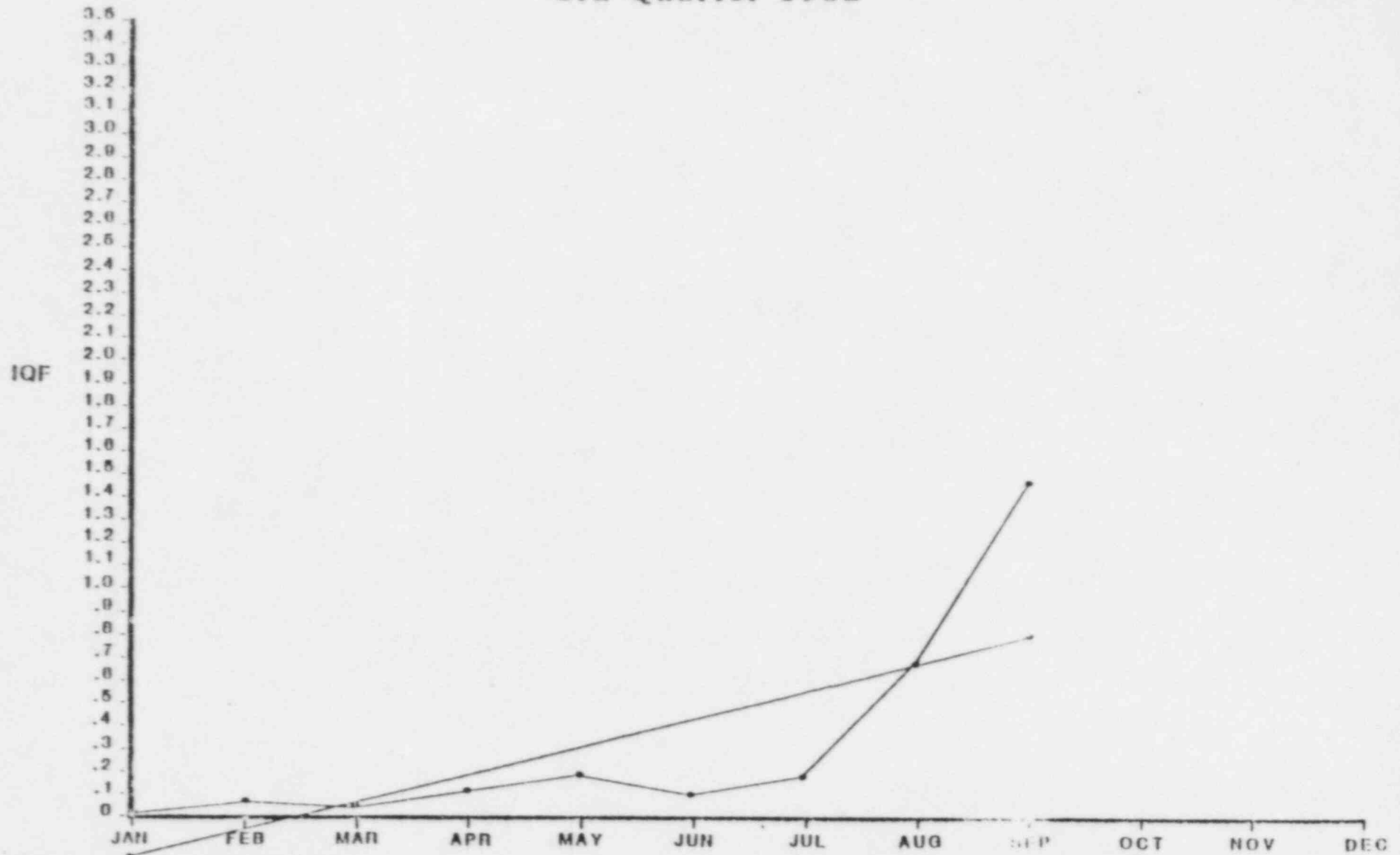
☐ ATTACHMENT(S) *Howard Curry* *10-nov-82*
RESPONSIBLE INVESTIGATOR DATE

RESULTS

IS CONDITION ADVERSE TO QUALITY? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	MCAR/CAR NO. _____
COMMENTS	
<input type="checkbox"/> ATTACHMENT(S)	<i>B. S. Beaman</i> QA DEPT. SECTION MANAGER <i>11-10-82</i> DATE

PULLMAN SHEET METAL

3rd Quarter 1982



IQF = INSPECTION QUALITY FACTOR = $\frac{\text{DEFICIENCIES}}{\text{SURVEILLANCES}}$



INDICATES THE ADEQUACY OF THE CONTRACTORS 1st LINE INSPECTION

SELECTED TREND INVESTIGATION REPORT

10-22-82

PAGE 1 OF 2

INITIATION

TO: J. Parks	CA SECTION: Civil	REPORT NO.: 10-22-82	DATE: 10-22-82
FROM: J. Parks	Quality Engineering	10-22-82	
SUBJECT: 10-22-82			

Flagged, and effectiveness of contractors first-line inspection. Suspected trend is based on analysis of PSI construction surveillance reports for 1982.

☒ ATTACHMENT(S)

[Signature]

QUALITY ADMINISTRATION SUPERVISOR

DATE

INVESTIGATION METHODS AND METHODS USED (INCLUDED OBJECTIVE EVIDENCE REVIEWED)

A review of surveillance data back to, and including April, has not revealed a trend. April percentage (IQF) was high because work activity was at its peak and thus surveillances were more numerous. However, the uniqueness of our surveillance system does not give a true picture. We may issue only one (1) surveillance report per week or bi-weekly with several deficiencies yet the surveillance activity was high. This would tend to show up as a higher Inspection Quality Factor (IQF) and be misleading. Again, my review of surveillance reports does not reveal any adverse trends.

DESCRIPTION OF INVESTIGATION

☐ ATTACHMENT(S)

[Signature]

RESPONSIBLE INVESTIGATOR

11/10/82

DATE

INDICATION ADVERSE TO SAFETY?

YES ☐

NO ☒

VEHICLE/CAR NO.

COMMENTS

☐ ATTACHMENT(S)

[Signature]

CA DEPT SECTION MANAGER

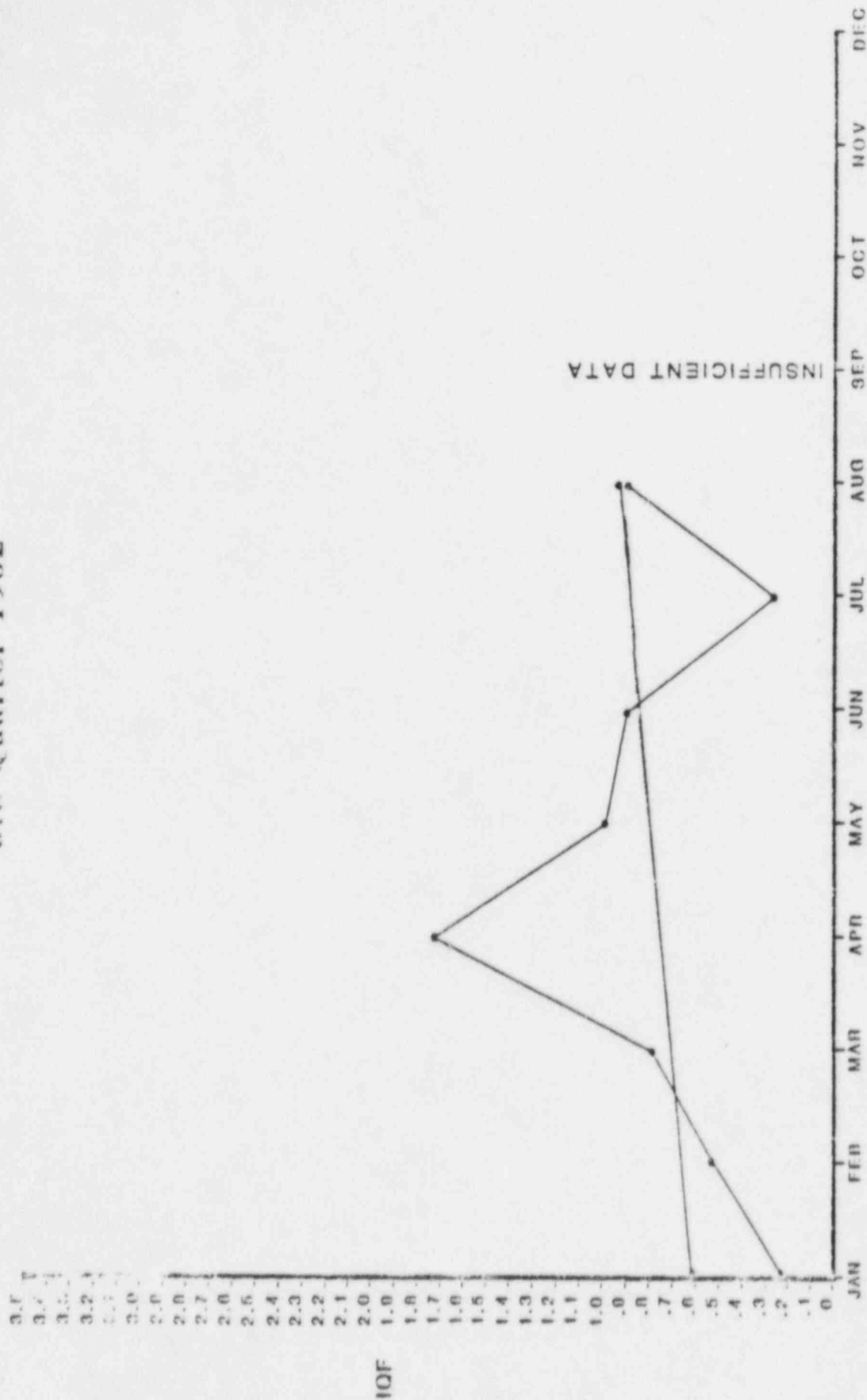
11/11/82

DATE

RESULTS

NEWBERG

3rd Quarter 1982



MARBLE HILL SUBTEAM REPORT

Subteam

W. D. Altman, NRC Headquarters
L. D. Kubicek, EG&G Idaho, Inc.

Dates/Places of Fieldwork

November 15, 1982 - NRC Region III Office, Chicago (Glen Ellyn), Illinois
November 16-19, 1982 - Public Service Indiana, Marble Hill Nuclear Facility,
New Washington, Indiana

Persons Contacted

NRC Region III Office:

D. H. Danielson
Chief, Materials and
Processes Section

R. A. Haass
NRC, Region III
Management Program Section

J. J. Harrison
NRC, Region III
Senior Resident Inspector
Marble Hill

D. R. Hunter
NRC, Region III
Chief, Zimmer Section

F. J. Jablonski
NRC, Region III
Inspector, Project Section 1B

J. E. Klinklin
NRC, Region III
Project Section Chief

W. D. Shaffer
NRC Region III
Chief, Midland Section

T. M. Tambling
NRC, Region III
Chief, Program Support Section

R. F. Warnick
NRC, Region III
Director, Office of
Special Cases

H. M. Wescott
NRC, Project Inspector
Escott Company

C. E. Williams
NRC, Region III
Chief, Plant Systems Section

FOIA-84-293

K/90

Marble Hill Nuclear Facility:

E. D. Aimone
Nuclear Division Personnel Manager
PSI

C. Beckham
Quality Engineering Manager
PSI

J. V. Bott
Nuclear Regulations and Affairs Manager
PSI

J. Friend
Site Audit Supervisor
PSI

T. Gross
Records Management Manager
PSI

S. O. Harris
Division Manager of Training & Development
PSI

J. J. Harrison
Senior Resident Inspector
USNRC

D. Herold
Design Document Control
PSI

D. V. Menscer
President & Chief Operating Officer
PSI

M. L. Morris
Division Administration Manager
PSI

B. Morrison
Audit Manager
PSI

W. M. Petro
Vice President of Nuclear Services
PSI

Marble Hill Nuclear Facility (continued):

L. O. Ramsett
Quality Assurance Officer
PSI

J. Roberts
Contract Manager - Materials
PSI

G. Rosier
Quality Assurance Manager
Cherne

R. S. Sallee
Materials Quality Engineering Manager
PSI

S. W. Shields
Senior Vice President - Nuclear
PSI

D. L. Shuter
Civil Senior Quality Engineer
PSI

R. Simmons
Operations Quality Assurance Supervisor
PSI

J. P. Thomas
Assistant Project Director
PSI

W. A. Wogslund
Executive Director - Nuclear Operations
PSI

Literature Reviewed in Conjunction with Assessment

1. D. M. Hunnicutt, Construction and Engineering Support Branch, NRC Region III, letter to H. D. Thornburg, Office of Inspection and Enforcement, *RL/IE/Utility Meeting - Substantive QA Findings*, August 12, 1975.
2. Chapter 17, Quality Assurance, Marble Hill Preliminary Safety Assessment Report, through Amendment 18, May 1977.
3. R. S. Boyd, Office of Nuclear Reactor Regulation, letter to Dr. J. Coughlin, Public Service of Indiana, Inc., *Issuance of Construction Permits for Marble Hill Nuclear Generating Station*, April 4, 1978.
4. Order Confirming Suspension of Construction, Docket Nos. 50-546, 50-547, August 15, 1979.
5. Management Analysis Company Report, *Public Service Company of Indiana, Inc., Marble Hill Project Diagnostic*, October 2, 1979.
6. J. G. Keppler, NRC Region III, letter to S. W. Shields, Public Service of Indiana, transmitting IE Inspection Reports and Notice of Violation, October 4, 1979.
7. *Construction Problems at Marble Hill Nuclear Facility: Nuclear Regulatory Commission Oversight*, proceedings of hearings before a Subcommittee of the Committee on Government Operations, House of Representatives, November 27-28, 1979.

8. S. W. Shields, Public Service of Indiana, letter to V. Stello, USNRC Office of Inspection and Enforcement, transmitting a description of Licensee Activities Addressing Order Confirming Suspension of Construction, February 28, 1980.
9. Quality Assurance Program Description, Public Service Company of Indiana, Inc., Marble Hill Nuclear Generating Station, Units 1 and 2, April 1980.
10. L. S. Rubenstein, Acting Chief, Light Water Reactors, Branch No. 4, letter to S. W. Shields, Public Service of Indiana, *Marble Hill Quality Assurance Program*, April 28, 1980.
11. J. G. Keppler memorandum to N. C. Mosely, *SALP Board Results for Marble Hill Nuclear Generating Station Units 1 and 2*, December 1980.
12. M. H. Schwarts, Attorney at Law, Bedford, Kentucky, letter to G. M. Snyder, Member of Congress, concerning Report on Concrete Assessment, April 21, 1981.
13. H. J. Wong, Division of Resident and Regional Reactor Inspection, letter to J. H. Sniezek, Director of RRRI, *Summary of January 8, 1981 Meeting with Public Service Company of Indiana, Inc.*, February 9, 1981.
14. W. J. Dircks, Executive Director for Operations, letter to the Honorable G. M. Snyder, House of Representatives, concerning Resumption of Concrete Work at Marble Hill, June 25, 1981.

15. J. G. Keppler, NRC Region III, letter to S. W. Shields, Public Service of Indiana, transmitting report on the *Review of the Evaluation of Concrete at Marble Hill Nuclear Generating Station Units 1 and 2*, Report No. IE-124, July 1, 1981.
16. SALP-1, Details on "Below Average" Facilities in NUREG 0834, prepared for EDO and Commission Briefing in September 1981.
17. C. E. Norelius, Division of Engineering, RIII, memorandum to J. H. Sniezek, Division of Resident and Regional Reactor Inspection Program Staff, *Marble Hill-Bradford/Direks Memo of October 23, 1981*, November 18, 1981.
18. Special Management Report by Public Service Indiana, Marble Hill Nuclear Project, January 1982.
19. J. J. Harrison, Senior Resident Inspector, *Congressional Briefing for Marble Hill Nuclear Generating Station*, February 25, 1982.
20. J. G. Keppler, NRC Region III, letter to S. W. Shields, Public Service of Indiana, *Transmittal of Systematic Assessment of Licensee Performance (SALP) Report*, July 20, 1982.
21. Transcript of Public Meeting, *Briefing on Quality Assurance*, SECY-82-352, September 29, 1982.

22. Transcript of Remarks by Commissioner J. K. Asselstine, USNRC, to ANS Executive Conference on Government and Self-Regulation of Nuclear Power Plants, Williamsburg, Virginia, October 18, 1982.

SUMMARY OF FINDINGS

During the spring of 1979, recurrent problems with the placement and repair of concrete for safety related structures were being experienced which led to questioning of the effectiveness of the overall quality assurance program at the Marble Hill Nuclear Facility. Subsequent investigations by the NRC Region III office confirmed that the problems in the quality assurance program, which earlier had been identified as pertaining to concrete construction activities, extended to other areas as well. Pursuant to this finding, Public Service of Indiana (PSI) issued a stop work order on August 7, 1979 which was later confirmed by the NRC on August 15, 1979.

Based upon the results of the assessment process, the primary root cause of the breakdown of quality assurance at Marble Hill Facility is attributed to the utility's inexperience with a nuclear project. Derivation of this root cause is based upon the utility's failure to recognize the complexity of a nuclear project at the outset, use of techniques and organizational structures which had served well for construction of fossil type plants but were inappropriate for nuclear work, excessive dependency and reliance on the experience of the prime contractors, and misunderstanding of the NRC's role in the construction process.

Secondary causes which contributed to the QA program failure can be summarized as management's lack of understanding of the merit of an institutionalized quality program, failure to manage the project from the outset, and reliance on a false sense of security through dependency on contractors, the NRC, and the replication process to avoid trouble.

Problems within the NRC are also seen to be contributing causes in that the licensing process is too oriented to technical issues. The presence of NRC inspectors is untimely (irregular presence of inspection teams, assignment of resident inspector too late in construction cycle) and ineffective communications exist within the NRC such that messages from the field do not get through for action in a timely fashion.

As a result of the shutdown order, PSI underwent extensive rework of their quality assurance program which finally resulted in approval by the NRC in March 1981 for the resumption of safety related work. Of cardinal importance to the dramatic turnaround was PSI management's recognition there was a serious problem, and a conscious decision to face it openly and substantively. As a result:

- 1) PSI has gone to great lengths to obtain, retain, and further train highly qualified managerial and technical people.
- 2) Extensive reorganization has taken place including relocation of upper management at the construction site.
- 3) A complete and very positive attitude change towards quality assurance (both as a technical program management philosophy and as a specific organization) has taken place which is rooted in top management and endorsed throughout all levels of the organization.

- 4) Emphasis is placed on doing the job right the first time and making the necessary resources available to cause this to happen.
- 5) PSI now very firmly manages all aspects of the nuclear construction process going on at Marble Hill.

Specific Findings/Observations

- 1) A constant theme echoed by both the NRC and the utility was fossil plant "cookbook" type construction, most of which could be left to contractors, was inappropriate for nuclear work. With this approach, the fossil plant construction mind-set manifested itself and led all concerned into trouble because this approach was simply not up to controlling the complexities and rigorous documentation aspects required in the nuclear industry.
- 2) QA/QA is too new of a concept for most utility management to readily accept. It appears that management's attitude towards QA is like a self-fulfilling prophecy. If recognition of quality assurance as a management tool and a positive attitude is not there, adequate resources will not be provided and the QA organization itself will be hamstrung with too many controls to be effective.
- 3) Communications within the NRC, from field offices to headquarters, are not effective. Problems and suggested resolutions are identified and escalated, but it appears as though not much of anything happens as a result.

- 4) Both utility and the NRC field office were in agreement that a competent resident inspector should be assigned at the start of construction. Under current policy, the utility's ways are too set at the 15 percent mark and bringing about needed changes can prove to be extremely difficult. It was also recognized that the NRC is probably too pressed for manpower now to be able to instigate this kind of program and have it be effective.
- 5) There is not any one indicator that can be looked at to determine whether a QA program is effective or not. PSI had methods for measuring performance prior to the shutdown, but they were crude and a good picture on performance could not be formulated. Problems were treated as individual entities into themselves. It was only after the problems kept repeating that trends were looked at and further investigations conducted that the program was recognized as being ineffective and existing primarily on paper.
- 6) Prior to the shutdown, there was no one individual who could be pointed to, and the statement made, "He is the one with the ultimate responsibility for quality assurance." Responsibilities were too spread out and no one could really be held accountable. Problem areas were escalated and resulted in a high level stalemate, such that nothing really effective was done to get at the root problem.
- 7) The existence of a QA program on paper and the utility's verbal salesmanship to the NRC are not sufficient to demonstrate the adequacy of

- 11) The QA manual that existed before the shutdown had essentially the same requirements as are now contained in the various company manuals. The implication that may be drawn from this is that management understanding, attitude, and commitment are keys to a successful QA program.
- 12) Progressive attitudes toward quality assurance are very visible through the company's Hi-Q program; there is a strong team spirit and a seemingly low level of adversative relationships at the managerial/supervisory positions. PSI also stresses employees are to be open about problems and that there will be no recrimination.
- 13) Replication of design was generally seen to be a good philosophy. If it is managed appropriately it can lead to significant cost savings, to follow replication blindly though is asking for trouble.
- 14) Subcontractors perceive overkill with respect to procedures and documentation requirements, but are encouraged that PSI is taking a firm approach to management.
- 15) There is a perceived difference of how NRC regions interface with the utilities. These vibrations, real or perceived, could affect how utilities do things.
- 16) A perception offered by senior management likened the current QA program of the NRC to the one that existed at Marble Hill prior to

the shutdown order. Basically, the program is not seen as very mature or effective for reasons of:

- a. The organization is too fractionated;
- b. is subject to too many controls;
- c. does not report high enough in the management chain;
- d. suffers from lack of good inspection personnel and other resources to do an adequate job;
- e. inconsistency between inspectors because of no real guidance coming from headquarters.

progress

november 16, 1982

● **delayed compliance order granted**

The Indiana Air Pollution Control Board approved a delayed compliance order that allows the company until 1984 to complete a 450-foot stack and associated ductwork being built to handle flue gas from all six units at Wabash River station. The stack itself is now 67 percent complete, says Vice President, Construction **LLOYD A. CREWS**. Considerable work remains to connect the six units into the stack. The new stack is designed to reduce the concentration of sulfur dioxide at ground level in the vicinity of the plant without increasing concentrations farther away. The delayed compliance order was needed because a two-year delay in approval by the Environmental Protection Agency made it impossible for the company to complete the stack by Dec. 31, 1982.

● **Moody's lowers company rating**

Moody's Investors Service has lowered the company's rating on first-mortgage bonds, preferred stock and secured pollution-control revenue bonds to single-A-3 from single-A-2. Moody's said it lowered the ratings because of financing concerns over the company's 83 percent stake in Marble Hill. Moody's said it expects "noticeable deterioration" in the company's financial condition through 1986. The rate change is equivalent to the company's "7" rating from Duff & Phelps and higher than the BBB+ rating issued by Standard & Poor's.

● **radiograph review complete**

The Nuclear Regulatory Commission-ordered review of radiographs supplied by ITT-Grinnell for Marble Hill piping systems is now complete except for a few welds. Of the 69,027 films of welds reviewed, 130 have been identified as being altered, which is in keeping with the two-tenths-of-one-percent rate predicted by the supplier. "Of these 130, 34 have been determined to require further evaluation," says Marble Hill station Quality Assurance Officer **LORREN O. RAMSETT**. "The impact of all

this has not been great." None of the pieces which require additional radiographs has been installed in the plant.

- **765 kv line progressing** Ninety-three percent of the foundations for the company's 40-mile 765 kv line, which will run from Columbus to the Marble Hill substation, are complete. Fifty-three percent of the structures are up, according to CO Construction Field Engineer **STANLEY L. ADAMS**. "The line is completely erected from Marble Hill to near U.S. 50, just east of Seymour," he said. Conductor stringing operations are tentatively scheduled to begin in May 1983 with the entire line completed in 1984.

- **CO open house near** Now that the new addition is in use and the remodeling of the older sections is complete at Corporate Offices, the company has planned an informal open house for all employees, retirees and their families. The open house will be Sunday, Nov. 21 from 1 to 4 p.m. and will consist of self-conducted tours, refreshments, "Mr. Conductor" shows and videotapes. Each department will have a representative on hand to answer questions and give directions. Because of potential traffic through the various areas, it is suggested that valuables be secured and desks and cabinets locked. For more specific details about parking, entrance to the building or the open house in general, see the posters on all company bulletin boards or call CO Manager, Employee Information **DAVID VINCENT**, at extension 1313.

● **Acton named state candidate**

SHARON K. ACTON, CO manager, Conservation Services, has been selected as Indiana's "Business Home Economist of the Year." The award is given by the Home Economists in Business. She will go on to compete in national competition in Milwaukee next June. Candidates will be judged on individual achievement and contributions to their profession.

FOIA-84-293

K1100

● **company sponsors seminar** The company sponsored a two-day economic development seminar in Indianapolis last week where a number of community development experts lectured and answered questions. The business and community leaders attending the seminar learned a variety of community development techniques, including ways to encourage growth through creative financing and tax packages. They were also shown how to use this information to create individualized development plans for their communities. "Hoosier economic recovery won't happen without help," said CO Community Development Supervisor **RICHARD D. ZIMMERMAN**. "Community growth takes dedicated people and careful planning. We're taking positive action to help community leaders stimulate economic growth."

● **company modifications save money** Through modifications and improvements of equipment at Gibson station alone, the company has produced operational savings of about \$745,000. Examples are changes to the make-up demineralizer system and instrument air compressors. Company-engineered design modifications on precipitators at Cayuga and Wabash River stations have resulted in the recovery of 113 megawatts of generating capacity. Replacement of this capacity at today's cost of \$700 per kilowatt would have cost in excess of \$80 million.

● **up the ladder** **CHARLES R. SCHMITT**, from substation maintenance mechanic "c" to "b," Columbus; **CHERYL J. HAYES**, from clerk "b" to "a," Accounts Payable, CO; and **BOBBY R. MULLINS**, from substation maintenance mechanic "b" to "a," Columbus.

● stock market

Public Service Indiana common stock for the week ended Nov. 12, 1982

High: 26 1/2 Low: 24 7/8

Trading: 1,084,300 shares

Year-to-date

High: 27 1/4 Low: 20 1/4

● system load

Week of Nov. 7, 1982.

Peak load:

2,565 megawatts (11/12/82)

Weekly load:

350,926 megawatt-hours,

down 5.88 percent from last year

Year-to-date load:

16,721,208 megawatt-hours,

down .09 percent from last year

Record peak loads:

Winter: 3,923 megawatts (1/11/82)

Summer: 3,942 megawatts (7/13/81)

Edited for the Chairman's Office by Corporate Communications. Direct questions, comments and suggestions to employee information coordinator, CO, extension 1915.



PUBLIC
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INDIANA