

RIVER BEND STATION
OPERATIONS QUALITY ASSURANCE MANUAL (OQAM)

<u>DOCUMENT NO.</u>	<u>TITLE</u>	<u>REV. NO.</u>	<u>DATE</u>
QAD - 1	ORGANIZATION	12	01/05/95
QAD - 2	QA PROGRAM	11	05/27/94
QAD - 3	DESIGN CONTROL	11	09/12/94
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RIVER BEND STATION
OPERATIONAL QUALITY ASSURANCE PROGRAM
OPERATIONS QUALITY ASSURANCE MANUAL
CORPORATE POLICY STATEMENT

Entergy Operations, Inc. (EOI), River Bend Station (RBS) is dedicated to the operation of a safe and reliable power plant and electrical transmission and distribution systems. This dedication not only includes the protection of its employees and facilities but also includes the safety of the public. All work associated with the operation of the River Bend Station facilities will comply with legal and regulatory requirements, codes and standards applicable to these facilities.

Operation of the River Bend Station (RBS) facilities is in accordance with the conditions stated in the Operating Licenses issued by the United States Nuclear Regulatory Commission (NRC). These Operating Licenses incorporated by reference the information found in the Updated Safety Analysis Report (USAR), the Environmental Report-Operating License stage (ER-OL), the Antitrust Review Information Document, and the Application for Operating Licenses Document. EOI has established a Quality Assurance Program in fulfillment of Operating License requirements as stated in the Operations Quality Assurance Manual.

The Operations Quality Assurance Manual (OQAM) describes the Operational Quality Assurance Program policies, requirements and tasks established by EOI to control the safety-related activities at RBS. This program has been developed to achieve the highest degree of quality assurance during the operation of River Bend Station. It is applicable to those structures, systems and components that prevent or mitigate the consequences of postulated accidents that could cause undue risk to the health and safety of the public and EOI employees. The program complies with the requirements of Title 10, Code of Federal Regulations, Part 50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants..." and also incorporates the appropriate provisions of selected NRC Regulatory Guides and ANSI Standards, as stated in the USAR.

The overall responsibility of the program lies with the Vice President-Operations. Authority is delegated through the Director-Nuclear Safety for the preparation and administration of the program. Individual departments performing safety-related activities are responsible for the implementation of their portion of the program. The provisions of the program are mandatory requirements for all EOI employees and contractors. It is the responsibility of each employee to implement and execute the program to assure fulfillment of our commitments.

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10CFR21 and the Energy Reorganization Act of 1974, Section 206 delineates requirements for the reporting of deficiencies and non-conformances. Any River Bend Station employee, i.e., EOI or contract employee, knowing of, or suspecting, a deficiency or non-conformance which may adversely affect SAFETY or QUALITY, is obligated to report it immediately. Such concerns should be reported by means of a condition report (Reference RBNP-0030) for immediate action, or through the normal channels, the employee's Supervisor in the chain-of-command, the Coordinator - Nuclear Safety Concerns (504/336-6200), (504/381-4607 - 24 hour answering service), RBS Industrial Safety (504/635-6094 extension 2091), or directly to the NRC Regional Office at (817/860-8100). RBS employees are encouraged to express such concerns without fear of reprisal by RBS or their employers. EOI will assure that no reprisals in any form will be taken by EOI or the employee's employer.

Compliance with requirements of the OQAM is mandatory for all personnel involved in safety-related activities at RBS. All personnel are to read and acknowledge, by signature, this policy statement as a part of their indoctrination training.

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DIRECTOR - NUCLEAR SAFETY
(Signature/KCN/Date)

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REVISION: 5

EFFECTIVE DATE: JAN 05 1995



ENTERGY

RIVER BEND STATION
OPERATIONS QUALITY ASSURANCE MANUAL (OQAM)
*QUALITY ASSURANCE DIRECTIVE (QAD)

*ORGANIZATION

DIRECTIVE NUMBER:

*QAD-1

REVISION NUMBER:

*12

Effective Date:

* JAN 05 1995

Flora B. Rogers 2822 11-18-94
PREPARER
(Signature/KCN/Date)

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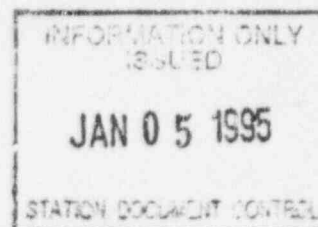
JAN 05 1995

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1.0

PURPOSE

- 1.1 This directive describes the River Bend Station (RBS) organization and selected key personnel responsibilities for developing, implementing, and verifying the effectiveness of the Quality Assurance Program (QA Program) for RBS. A complete organization description can be found in Reference 2.10, (USAR Section 13.1, "Organizational Structure of Applicant").
- 1.2 This directive outlines the organization from the Vice President - Operations, to the Director/Manager/Supervisor level, and delineates the authority, responsibility, and lines of communication for RBS departments performing activities affecting safety-related structures, systems, components, and "QA Program Applicable" items, services and activities.
- 1.3 These activities may be delegated to other qualified organizations, but program responsibility is retained and exercised by RBS. Lower tier organizational structures are defined in departmental administrative procedures.

2.0

REFERENCES

- 2.1 Title 10, Code of Federal Regulations, Part 19 (10CFR19), "Notices, Instructions, and Reports to Workers; Inspections"
- 2.2 10CFR20, "Standards For Protection Against Radiation"
- 2.3 10CFR21, "Reporting of Defects and Noncompliance"
- 2.4 10CFR50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants"
- 2.5 10CFR50.59, "Changes, Tests and Experiments"
- 2.6 10CFR50.73, "Licensee Event Report System"
- 2.7 American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code, Section XI - Division 1, "Rules for Inservice Inspection of Nuclear Plant Components"
- 2.8 Nuclear Regulatory Commission (NRC), Regulatory Guide 1.33, "Quality Assurance Program Requirements - Operation"
- 2.9 River Bend Station, Updated Safety Analysis Report (USAR)
- 2.10 USAR, Section 13.1, "Organizational Structure of Applicant"
- 2.11 River Bend Station Technical Specifications, Section 6.0, "Administrative Controls"
- 2.12 Operations Quality Assurance Manual (OQAM)

3.0

DEFINITIONS

Not applicable to this directive.

RESPONSIBILITIES

- 4.1 The Vice President - Operations has the responsibility for the safe and reliable operation of RBS. The Vice President - Operations is responsible for establishing the policies, goals, and objectives of the QA Program during the operational phase of RBS. The Vice President - Operations reports to the Executive Vice President & Chief Operating Officer (COO) who reports to the President & Chief Executive Officer (CEO). The Vice President - Operations has delegated the authority for the development, administration, and verification of the QA Program to the Director - Nuclear Safety. This delegation is identified in the Corporate Policy Statement and is part of Reference 2.12 (OQAM). This policy statement requires that strict adherence to quality assurance requirements be maintained when dealing with safety-related matters. The Vice President - Operations maintains awareness of QA matters and QA Program effectiveness through review of audit result summaries and open item status reports submitted by the Director - Nuclear Safety, NRC inspection reports, independent management assessment/audits, Nuclear Safety and Assessment Group (NSAG) special analysis, operating experience and other reports that may be required. The Vice President - Operations has delegated authority for implementing portions of the QA Program to the following:
- 4.1.1 General Manager Plant Operations
 - 4.1.2 Director - Nuclear Safety
 - 4.1.3 Director - Plant Projects & Support
 - 4.1.4 Manager - Training
 - 4.1.5 Manager - Site Business Services
 - 4.1.6 Director - Engineering
- 4.2 - The General Manager Plant Operations reports directly to the Vice President - Operations and is responsible for the overall safe, reliable and efficient operation of River Bend Station, for maintaining compliance with the requirements of the Operating License and Technical Specifications, for maintaining a properly trained and licensed operating staff, and for execution of administrative controls through approval and issuance of station procedures. The General Manager Plant Operations is assisted in these responsibilities by the following organizations:

NOTE

In the event of unexpected contingencies of a temporary nature, or when the General Manager Plant Operations is unavailable, the following persons are responsible in the order listed for plant operation activities:

1. Manager - Operations
2. Superintendent - Operations

3. Superintendent - Operations Shift

Outside of normal working hours, the General Manager Plant Operations' representative on site is the on-shift Superintendent - Operations Shift.

- 4.2.1 The Manager - Operations is responsible for the safe, reliable, and efficient operation of River Bend Station and for processing, storage, and shipment of radioactive wastes. The Manager - Operations ensures that a staff of qualified Operations, Station Technical Advisors (STA's) and Radwaste personnel are maintained and that programs and procedures to support Operations and Radwaste activities are developed and maintained consistent with requirements imposed by regulatory agencies.
- 4.2.2 The Manager - Maintenance is responsible for plant maintenance including corrective and preventive maintenance, for performance of surveillance tests that fall under the jurisdiction of the maintenance organization, for the performance of preventive maintenance on spare parts stored in the warehouses. The Manager - Maintenance also has responsibility for preparing and maintaining schedules, for ensuring the measuring and test equipment (M&TE) and relay shop functions, for ensuring necessary planning activities are performed, for handling the Total Plant STP Scheduling, for maintaining the housekeeping of the plant and for maintaining the fire protection and implementing the Entergy Operations, Inc. (EOI) Welding Program.
- 4.2.3 The Manager - Project Outage is responsible for the preparation for scheduled and unscheduled outages. Plant Operations line organization is responsible for performing outage work. The Manager - Project Outage is responsible for preparing unscheduled outage contingency plans and managing the preparation for refueling and other scheduled outages. The Manager - Project Outage is also responsible for preparing outage reports. The Manager - Project Outage is responsible to the General Manager Plant Operations for the strategic management of outages and to assist Plant Operations line organizations in the execution of outages. The Manager - Project Outage is also responsible for the preparation and management of refueling and other major projects and for long range scheduling.
- 4.2.4 The Superintendent - Radiation Control is responsible for implementation and supervision of the Radiological Protection Program, the Radiological Health Program, the Radiological Engineering Program, Dosimetry and Safety to assure that applicable Federal and State requirements and EOI commitments are met or exceeded in order to maintain radiation exposure to plant personnel and the general public As Low As Reasonably Achievable (ALARA). The Superintendent - Radiation Control is responsible for tracking and trending radiation exposure to ascertain the quality and effectiveness of measures taken to reduce individual and overall amounts received (see Reference 2.1 [10CFR19, "Notices, Instructions, and Reports to Workers; Inspections"] and Reference 2.2 [10CFR20, "Standards for Protection Against Radiation"]).

- 4.2.5 The Superintendent - Plant Security is responsible for the conduct and content of security programs for both the Protected Area and the Industrial Security Area. The Superintendent - Plant Security is responsible for activities of the security force (including training and qualification) that implement the River Bend Station Physical Security Plan.
- 4.2.6 The Superintendent - Chemistry is responsible for ensuring that a staff of qualified Chemistry and Environmental personnel are maintained and programs and procedures to support Chemistry and Environmental activities are developed and maintained consistent with requirements imposed by regulatory agencies.
- 4.3 The Director - Nuclear Safety reports directly to the Vice President - Operations ensuring organizational freedom and is responsible for providing Senior River Bend and Corporate Management an independent oversight of safety-related matters involving River Bend Station. The Director - Nuclear Safety is responsible for management of the Quality Assurance Program, Nuclear Safety & Assessment functions, Emergency Planning, Human Performance Analysis, Nuclear Concerns and Licensing activities to ensure River Bend Station is operated and maintained in accordance with NRC rules and regulations, other agency rules, and the guidance practices of the Institute of Nuclear Power Operations (INPO). The Director - Nuclear Safety is responsible for interfaces with the NRC and for routine and non-routine reports provided to Federal and Safety environmental agencies. The Director - Nuclear Safety serves as the Chairman of the Nuclear Review Board (NRB) and is the point of contact with the Institute of Nuclear Power Operations (INPO), the Board Committee on Nuclear Safety and the Boiling Water Reactor Owner's Groups (BWROG). The Director - Nuclear Safety is also responsible for the review and concurrence of nonconformance dispositions. The Director - Nuclear Safety is informed of corrective action determinations associated with safety-related structures, systems, and components. The Director - Nuclear Safety is assisted in these responsibilities by the following organizations:
- 4.3.1 The Manager - Licensing coordinates and effects official communications with the NRC staff and appropriate state and local officials, and provides recommendations on regulatory and industry issues. In addition, the Manager - Licensing is responsible for updating Reference 2.9 (River Bend Station USAR), maintaining the operating license and technical specifications and determinations of reportability of potential safety problems that may require reporting to the NRC pursuant to Reference 2.3 (10CFR21, "Reporting of Defects and Noncompliance") or Reference 2.6 (10CFR50.73, "Licensee Event Report System"). The Manager - Licensing is responsible for the development and implementation of the Operating Experience Program at River Bend Station. The Manager - Licensing will ensure regulatory compliance and fulfillment of licensing commitments.
- 4.3.2 The Manager - Quality Assurance is responsible for managing the operational phase QA Program on site. Specific responsibilities include:
1. Coordinating the RBS Operational Phase QA Program, which is directed toward implementing applicable regulatory requirements and, in particular, the QA criteria of Reference 2.4 (10CFR50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel

Reprocessing Plants"), and Reference 2.8 (NRC Regulatory Guide 1.33, "Quality Assurance Program Requirements - Operation").

2. Assuring effective implementation of the RBS Operational Phase Quality Assurance Program by conducting planned and periodic surveillances, inspections, and audits. Corrective actions to identified deficiencies are taken, documented and provided to appropriate levels of management including initiation of a Stop Work Directive. Corrective actions are verified.
3. Developing, maintaining, and implementing department procedures, instructions (OQP&I) and Directives (OQAM) and reviewing all changes to these documents.
4. Assuring other RBS departments develop QA implementing procedures and instructions that contain appropriate QA requirements through audits and surveillances.
5. Verifying implementation of the QA Department training program and assuring that the Operational Phase QA organization is adequately staffed by trained, qualified personnel. Training covers the quality-related policies, procedures and requirements applicable to the person involved. Proficiency tests are administered to station personnel who perform inspection activities affecting quality.
6. Assisting the Manager - Training in developing QA indoctrination for all RBS personnel.
7. Establishing a Quality Control organization and implementing the Quality Control program at the station
8. Ensuring that the design basis, as presented in the Operating License, is protected by conducting reviews, surveillances, assessments, inspections, and/or audits.
9. Member Nuclear Review Board (NRB).
10. Representative (Non-voting) of the Facility Review Committee.
11. Maintaining awareness of the day-to-day operations of the plant in order to assure adequate QA/QC coverage. Evaluate and report the status and adequacy of the QA/QC Program to the management on a periodic basis.
12. Evaluate and report the status and adequacy of the Corrective Action Program to Plant management on a periodic basis.
13. Review and concurrence of nonconformance dispositions.
14. The Manager - Quality Assurance is assisted in these responsibilities by the following organizations:
 - a. Supervisor - Quality (Quality Systems)

The principal responsibilities of the Supervisor - Quality (Quality Systems) are as follows:

- 1) Perform QA Program audits mandated by regulatory agencies, additional audits as requested by RBS Management or the NRB and surveillances of QA Program and/or QAPA activities and special assignment items performed on site or remote to RBS as applicable.
- 2) Coordination and support of joint utility audits and assessments.
- 3) Assist the Manager - Training in developing and maintaining the QA Training and Indoctrination Program to ensure adequate training is provided to those personnel performing QA audits/surveillances and review activities.
- 4) Review and/or approve applicable documents as indicated in Attachment 1 of QAD-6.
- 5) Coordination of Safety System Functional Assessment activities (SSFAs) conducted at RBS.

b. Supervisor - Quality (Quality Control)

The Supervisor - Quality (Quality Control) maintains a working interface and communications with the Manager - Maintenance as well as other members of Plant Operations.

The principal responsibilities of the Supervisor - Quality (Quality Control) are as follows:

- 1) Develop and implement station QC procedures and instructions.
- 2) Conduct required QC inspections and monitoring of safety-related and QA Program Applicable activities at the station.
- 3) Assist the Manager - Training in developing and maintaining the QC training and indoctrination program to ensure that adequate training is provided to those personnel performing QC activities.
- 4) Reviewing selected documents, as shown in Attachment 1 of QAD-6, for inclusion of testing and inspection requirements and where applied, documentation of successful completion.
- 5) Provide inspection planning and maintenance-related monitoring, special assigned, and receiving inspection activities.
- 6) Conduct/coordinate surveillances of QA Program and QAPA activities and special assignment items performed on site at RBS and, as applicable, remote to RBS.

- 7) Conduct required NDE inspections of safety-related and QAPA activities at the station and provide NDE support for selected off-site activities.
- 8) Ensure development and coordination of the RBS QA Program and Operations Quality Assurance Manual (OQAM).
- 9) Evaluate and report the status and adequacy of the QC program to the Manager - Quality Assurance, Director - Nuclear Safety, and General Manager Plant Operations on a periodic basis.
- 10) Implement the calibration program for Quality Control Test Equipment (QCTE).
- 11) Designing and controlling Ultrasonic testing calibration blocks for Volumetric inspections.
- 12) Under the direction of the Supervisor - Quality (Quality Control), the NDE Level III is responsible for:
 - a) Establishing techniques, incorporation/implementation of code, standards, and specifications requirements as they pertain to NDE, and verifying the adequacy of NDE procedures.
 - b) Conducting or directing the training and examination of NDE personnel in the methods for which the Level III is qualified.
 - c) Responsible for the performance of surveillances and quality oversight of activities requiring NDE at RBS.

c. Supervisor - Quality (Quality Support)

The principle responsibilities of the Supervisor - Quality (Quality Support) are as follows:

- 1) Provide response to industry and/or regulatory bulletins and notices, and General Information Letters related to the RBS Quality Assurance Program.
- 2) Provide coordination for response to NRB, FRC and NSAG Action Items related to the RBS QA Program.
- 3) Assist the Manager - Training in developing, scheduling and maintaining the QA Training and Indoctrination Program to ensure adequate related training is provided to QA, QC and NDE personnel.
- 4) Provide performance support for the conduct of audit/surveillance program; verify, evaluate, status, ensure adequacy and report on corrective actions taken by RBS department/

groups in response to identified Quality Program or QAPA related conditions.

- 5) Ensure development and coordination of the RBS Quality Assurance Program and Operational Quality Assurance Manual (OQAM).
- 6) Establish, control and implement the Operational Quality Procedures and Instructions (OQP&I).
- 7) Assist other RBS departments and/or groups in the development of procedures for activities affecting safety-related structures, systems and components.
- 8) Track and report selected performance indicators related to the Quality Program.
- 9) Coordinate and/or conduct quality reviews of procedures and/or documents as applicable.

4.3.3 The Manager - Nuclear Safety & Assessment is responsible for conducting an independent ongoing assessment of the overall safety of River Bend Station and presenting the results of that assessment to Senior River Bend Management through the Director - Nuclear Safety and plant line organizations. The assessment consists of detailed and sophisticated engineering analyses of plant operations, maintenance, and design to assure that the plant is operated in a safe and reliable manner in accordance with RBS commitments to the NRC. The assessment is not limited to nuclear reactor safety, and may include any area of River Bend.

The Manager - Nuclear Safety & Assessment is responsible for trending nonconformances and Condition Reports (CRs); and also for tracking the status of CRs and maintaining the CR program implementing procedure. The Manager - Nuclear Safety & Assessment also schedules CRG/CARB (Condition Report Group/Corrective Action Review Board) meetings as applicable.

4.3.4 The Manager - Emergency Preparedness is responsible for developing and maintaining an Emergency Response Plan for River Bend Station that meets regulatory requirements for supporting the operating license application and for ensuring that this plan remains current. The Manager - Emergency Preparedness is responsible for the interface with local and state emergency response programs, the development of scenarios for site exercises and the training of site emergency preparedness personnel.

4.3.5 The Supervisor - Receipt Inspection and Commercial Grade Testing is responsible for maintaining CG Inspection Dedication test equipment, the operation and maintenance of the CG Inspection Dedication Testing Laboratory and for assisting the Director - Training in the development and maintenance of the required training and indoctrination program to ensure adequate training is provided to those personnel performing Receipt Inspection and CG Testing activities. The Supervisor - Receipt Inspection and Commercial Grade Testing is responsible for the development,

maintenance and implementation of station Receipt Inspection and Commercial Grade (CG) Inspection Dedication procedures and instructions.

- 4.3.6 The Coordinator - Nuclear Concerns is responsible for implementing the program for Nuclear Safety Concerns. This includes the development of procedure, conduct of interviews, evaluation of allegations, tracking, and follow-up as required.
- 4.4 The Director - Plant Projects and Support reports directly to the Vice President - Operations and is responsible for providing activities required for the safe, reliable, and efficient operation of River Bend Station. These support responsibilities include Plant Modifications and Construction; Purchasing and Contracts; Inventory Management including receipt, control and issue of materials, except for Nuclear Fuels; Operations Support; and Project Management. He negotiates all service contracts to meet user needs and technical and quality requirements. He is also responsible for the procedures processing activities throughout the procedures upgrade project and the Long Term Performance Improvement Plan at RBS.
- 4.5 The Manager - Training reports directly to the Vice President - Operations and is responsible for all training for River Bend Station. These responsibilities include development, implementation, and administration of the Training Program for candidates for both licensed and non-licensed positions, as well as the training program for the remainder of the RBS personnel. The Manager - Training is responsible for the River Bend Training Center, including a full scope, plant-referenced simulator used in training licensed Operators and other members of the Plant Operations, and the Field Administration Facility. The Manager - Training is responsible for providing QA indoctrination and discipline training of personnel who perform activities and services affecting safety-related and QA Program applicable structures, systems, and components.
- 4.6 The Manager - Site Business Services reports directly to the Vice President - Operations and is responsible for fiscal control and business matters at River Bend. The Manager - Site Business Services is responsible for developing, preparing, and monitoring the River Bend Station annual budget, comprehensive business plan, developing reports and procedures to assist management in controlling expenditures, site accounting activities and ensuring that they are in harmony with Corporate accounting procedures and guidelines. The Manager - Site Business Services is responsible for implementation and maintenance of budget programs and interfaces with Corporate Budgeting and Accounting. The Manager - Site Business Services provides expertise as required in financial analysis and cost benefit decisions. The Manager - Site Business Services is also responsible for site Accounting activities, serves as the focal point for capital expenditures determination, and provides required interfaces with Corporate Accounting. The Manager - Site Business Services is also responsible for the Performance Monitoring Program and coordinating rate case responses with the Corporate Rates Department. The Manager - Site Business Services is responsible for maintenance of Training Records, retention of plant records, control of documents, and procedure processing activities at River Bend Station.
- 4.7 The Director - Engineering reports administratively and functionally to the Vice President - Engineering and is responsible for the administration of activities in the areas of Engineering and Administration that meet the policies, goals, and objectives of this program. However, from a strategic planning standpoint, the Director -

Engineering reports to the Vice President - Operations. The Director - Engineering maintains awareness of the QA Program effectiveness through review of audit summaries and open item status reports submitted by the Director - Nuclear Safety, NRC inspection results, and independent management assessments/audits. The Director - Engineering is responsible for the design, system and configuration management of River Bend Station. The Director - Engineering is responsible for maintaining and expanding the identification and control system for safety-related material, parts, and components. The Director - Engineering is responsible for the identification, documentation, and maintenance of the plant design bases and design output, including review of procurement documents for incorporation of technical and quality requirements. The Director - Engineering is responsible for developing, approving and controlling changes to the design bases and design output in compliance with safety and regulatory requirements. The Director - Engineering is responsible for developing improvements and enhancements in the safety, performance and cost of River Bend Station through design modifications and technical support. The Director - Engineering is responsible for assuring the requirements of ASME B&PV Code, Section XI - Division 1, 10CFR50, Appendix B, 10CFR50.55a, Regulatory Guides, NUREGs, and Generic Letters are being implemented and documented at River Bend Station.

- 4.8 The Nuclear Review Board (NRB) reports to the Vice President - Operations and is responsible for independently reviewing designated operational phase activities in the area of nuclear safety. The NRB is responsible for engaging, at least annually, a qualified auditing organization, independent of the organization being reviewed to assess RBS safety-related activities and evaluate the scope, implementation, and effectiveness of the QA Program, as applied to operations to ensure that the program is adequate and complies with QA policies, goals, objectives, and 10CFR50, Appendix B criteria. The NRB reviews Reference 2.5 (10CFR50.59, "Changes, Tests and Experiments") safety evaluations associated with selected procedures, tests, and/or experiments; modifications; license amendments; technical specification changes; and other matters involving the safe operation of RBS. Results of the NRB reviews, recommendations, and proposed actions are documented and distributed to appropriate members of management. The NRB's scope, membership, meeting frequency, requirements, responsibility and records are delineated in Reference 2.11 (River Bend Station Technical Specifications, Section 6, "Administrative Controls") and in Chapter 13 of the RBS USAR.
- 4.9 The Facility Review Committee (FRC) reports to the General Manager Plant Operations and per Technical Specification 6.5.1.6 is responsible for:
- 4.9.1 Review of all plant general administrative procedures and changes thereto;
 - 4.9.2 Review of all proposed tests and experiments that affect nuclear safety;
 - 4.9.3 Review of all proposed changes to Appendix A Technical Specifications;
 - 4.9.4 Review of all proposed changes or modifications to structures, components, systems or equipment that affect nuclear safety;
 - 4.9.5 Investigation of all violations of the Technical Specifications, including the preparation and forwarding of reports covering evaluation and recommendations to prevent recurrence, to the Vice President - Operations and the NRB;

- 4.9.6 Review of all REPORTABLE EVENTS;
- 4.9.7 Review of unit operations to detect potential hazards to nuclear safety. Items that may be included in this review are NRC Inspection Reports that require written response, QA audits/surveillance findings of operating and maintenance activities, NRB audit results, and American Nuclear Insurer (ANI) inspection results;
- 4.9.8 Performance of special reviews, investigations, or analyses and reports thereon as requested by the General Manager Plant Operations or the NRB;
- 4.9.9 Review of initial start-up testing phase start-up procedures and revisions and;
- 4.9.10 Review of the Emergency Plan and implementation procedures at least once per 12 months and all proposed changes thereto.
- 4.9.11 The FRC scope, membership, meeting frequency, requirements, responsibility and records are delineated in Chapter 13 of the RBS USAR.
- 4.10 The Vice President, Operations Support reports directly to the Executive Vice President and Chief Operating Officer, and is responsible for:
 - 4.10.1 Administering support functions in the areas of Radiological Protection, : Radioactive Waste Management, Chemistry, Environmental Services, Operations, Maintenance, Outage Management, Security, Emergency Planning, Technology Transfer, and Central Licensing; providing oversight of site Health Physics and Chemistry activities; and managing the Plant Support and Assessment, Information Systems, Supplier QA, and Material, Purchasing and Contracts groups. It is the responsibility of the Vice President, Operations Support to assure that these functions performed for River Bend are performed in accordance with the requirements of the River Bend Quality Assurance Program; and
 - 4.10.2 Providing the direction and administration necessary relative to the following listed primary quality related responsibilities as they relate to the River Bend Quality Assurance Program:
 - 1. Evaluating Quality Assurance Programs and activities of River Bend suppliers and contractors of quality related items, spare parts, and services through reviews, surveillances, and audits;
 - 2. Conducting pre-award evaluations for quality requirements of vendors, suppliers, and contractors where applicable;
 - 3. Maintaining a Qualified Suppliers List (QSL) for use in procuring safety related items, spare parts, and services; and
 - 4. Performing design review and fuel fabrication audits as necessary to ensure that nuclear fuel procured for use by Entergy Operations is designed and fabricated in accordance with applicable codes, standards, and regulations;

5. Providing Auditor and Lead Auditor training courses for headquarters and site personnel.
- 4.11 The Vice President - Engineering reports directly to the Executive Vice President and Chief Operating Officer, and is responsible for providing the direction and administration necessary to the River Bend Station Design Engineering department and services including:
 - 4.11.1 Reactor physics analysis,
 - 4.11.2 Plant transient analysis,
 - 4.11.3 Thermal hydraulic analysis,
 - 4.11.4 Nondestructive analysis,
 - 4.11.5 Metallurgical evaluations,
 - 4.11.6 Fuel fabrication and related services, and
 - 4.11.7 Reactor Engineering and special nuclear material control and accountability.
 - 4.11.8 Administrative, programmatic and operational control of the Entergy Operations, Inc. (EOI) welding programs.

5.0

GENERAL

- 5.1 The RBS organizational structure for establishing, implementing, and assessing the QA Program is clearly defined. The lines of authority, responsibility, and communication extend from the highest management levels through intermediate levels. Included are the on-site operating organization and off-site organizations assigned responsibility for procurement, design, licensing, construction, technical, administrative support and Quality Assurance. These relationships are defined in the appropriate departmental administrative procedures and are updated when required.
- 5.2 The organizational structure and functional assignments are such that attainment of program objectives is accomplished by those who have been assigned responsibility for performing the work. Verification of conformance to established requirements is accomplished by qualified personnel who do not have responsibility for performing or directly supervising the work. Organizational structure and lines of authority, responsibility, and communication are depicted in Attachment 1.
- 5.3 The qualification requirements and experience levels of personnel are such as to assure competence commensurate with the responsibilities of the applicable position and are described in ANSI/ANS- 3.1-1978 as endorsed by RG 1.8 in Section 1.8 of the RBS USAR.
- 5.4 Differences of opinion involving Quality issues should be resolved at the working level, if possible. When necessary, these differences are escalated to the appropriate levels of management to ensure resolution.

6.0

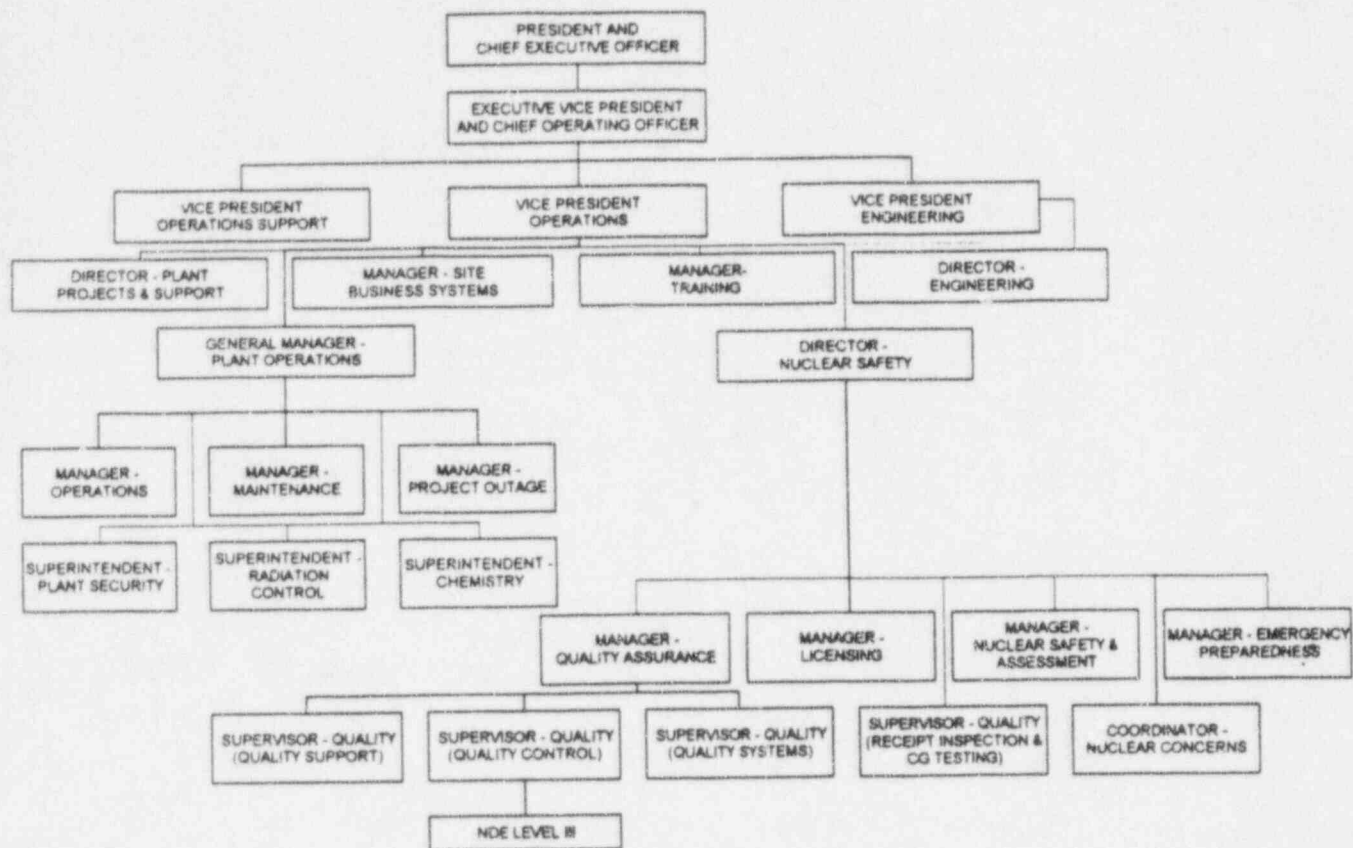
DIRECTIVE

Not applicable to this directive.

7.0

DOCUMENTATION

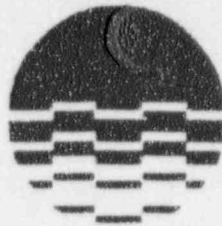
Not applicable to this directive.



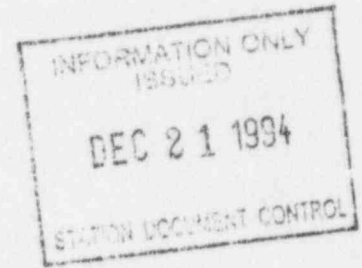
PROCEDURE CROSS-REFERENCE SHEET (PROCEDURES)

PROCEDURE NO. QAD-1

REVISION 12[illegible]



ENTERGY



RIVER BEND STATION
OPERATIONS QUALITY ASSURANCE MANUAL (OQAM)
*QUALITY ASSURANCE DIRECTIVE (QAD)

***QUALITY ASSURANCE PROGRAM**

DIRECTIVE NUMBER:

*QAD-2

REVISION NUMBER:

*11

Effective Date:

*05/27/94

D. P. Helbert / 0160 / 5/11/94

PREPARER

(Signature/KCN/Date)

RECEIVED

MAY 27 1994

SDC

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QUALITY ASSURANCE PROGRAM

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1.0

PURPOSE AND SCOPE

- 1.1 This directive describes the Quality Assurance Program (QA-Program) established for River Bend Station (RBS).
- 1.2 The requirements in this directive are to be applied based upon the effect of an activity on the quality or safety function of structures, systems, components, subcomponents or parts which are classified as Safety-Related or Quality Assurance Program Applicable (QAPA). Not all activities or parts associated with Safety-Related or QAPA structures, systems, components, or subcomponents are Safety-Related or QAPA.

2.0

REFERENCES

- 2.1 Title 10, Code of Federal Regulations, Part 20 (10CFR20), "Standards for Protection Against Radiation"
- 2.2 10CFR21, "Reporting of Defects and Nonconformances"
- 2.3 10CFR26, "Fitness For Duty Programs"
- 2.4 10CFR50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants"
- 2.5 10CFR71, Subpart H, "Quality Assurance"
- 2.6 10CFR100, "Reactor Site Criteria"
- 2.7 American National Standards (ANS)-3.2/18.7-1976, "Quality Assurance for the Operational Phase of Nuclear Power Plants"
- 2.8 American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code, Section III, 1974 Edition, "Subsection NCA -General Requirements for Division 1 and Division 2"
- 2.9 Nuclear Regulatory Commission (NRC) Regulatory Guide 1.8, "Selection, Qualification and Training of Personnel for Nuclear Power Plants"
- 2.10 NRC Regulatory Guide 1.17, "Protection of Nuclear Power Plants Against Industrial Sabotage"
- 2.11 NRC Regulatory Guide 1.23, "Onsite Meteorological Program"
- 2.12 NRC Regulatory Guide 1.33, Revision 2, "Quality Assurance Program Requirements (Operations)"
- 2.13 NRC Regulatory Guide 1.58, "Qualification of Nuclear Power Plant Inspection, Examination and Testing Personnel"
- 2.14 NRC Regulatory Guide 1.74, "Quality Assurance Terms and Definitions"
- 2.15 NRC Regulatory Guide 1.120, "Fire Protection Guidelines for Nuclear Power Plants" and Appendix "A" of Branch Technical Position (BTP), Auxiliary Power Conversion

Systems Branch (APCSB) 9.5-1. [An obsolete NRC acronym which has been replaced by Chemical Engineering Branch (CMEB)].

- 2.16 NRC Regulatory Guide 1.123, "Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants"
- 2.17 NRC Regulatory Guide 1.143, "Design Guidance for Radioactive Waste Management Systems, Structures, and Components Installed in Light-Water-Cooled Nuclear Power Plants"
- 2.18 NRC Regulatory Guide 4.15, "Quality Assurance for Radiological Monitoring Programs: Normal Operations - Effluent Streams and the Environment"
- 2.19 River Bend Station (RES) Updated Safety Analysis Report (USAR) Section 1.8, "Conformance to NRC Regulatory Guides"
- 2.20 USAR, Section 3.2, "Classification of Structures, Systems and Components", Table 3.2-1
- 2.21 USAR, Section 17.2, "Quality Assurance During the Operations Phase"
- 2.22 USAR, Chapter 13.3, River Bend Emergency Plan, Including Appendix A, B, C, D, E, F&G of Chapter 13.3
- 2.23 RBS Operating License NPF-47
- 2.24 RBS Operational Quality Assurance Program/Operations Quality Assurance Manual (OQAM), Corporate Policy Statement
- 2.25 OQAM Manual, Quality Assurance Directive (QAD)-1, "Organization"

3.0

DEFINITIONS

Not applicable to this directive.

4.0

RESPONSIBILITIES

- 4.1 Responsibilities are as described in Reference 2.25 (OQAM Manual, QAD-1, "Organization").

5.0

GENERAL

- 5.1 Policies, Goals and Objectives - The RBS Operating License (Reference 2.23) issued by the NRC requires a QA Program which is designed to meet the requirements of Reference 2.4 (10CFR50 Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants"). The Corporate Policy Statement further specifies that RBS will be designed, constructed, tested, and operated with the highest degree of quality and reliability necessary to avoid undue risk to the health and safety of employees and the general public. The Policy Statement makes it mandatory that individuals and organizations, who perform safety-related functions, are made aware of the QA Program objectives and requirements, and that they understand their responsibility to implement these requirements. The Policy Statement identifies the Operations Quality Assurance Manual (OQAM) as the

document which delineates the QA requirements for safety-related and QA Program Applicable activities during the operational phase.

- 5.2 The Operations Quality Assurance Manual generally describes the minimum requirements for assuring quality in these structures, systems, components, activities, and services. It requires that departmental procedures describe how these requirements are met. These procedures are controlled to meet the requirements of OQAM, QAD-6, "Document Control". This manual references regulatory guides that are included in Reference 2.19 (USAR Section 1.8, "Conformance to NRC Regulatory Guides"). Requirements of these guides, as applicable, are incorporated into the appropriate implementing procedures.
- 5.3 Every attempt has been made to include the pertinent requirements from external documents including the commitments in Reference 2.19 (USAR, Section 1.8, "Conformance to NRC Regulatory Guides"). Within these directives, no known conflicts exist between those QA commitments and these directives. If differences should arise during future reviews or implementation of the program, they must be brought to the attention of the Director - Nuclear Safety. The provisions delineated in the QA Program shall take precedence unless differing requirements are observed, in which case the more restrictive requirements shall be adhered to until proper evaluation and/or revisions have been made.
- 5.4 The definitions for Quality Class 1, 2, and 3 are described in Section 6.3 and are based on the Stone & Webster Engineering Corporation (SWEC) designations for QA Category I, II, and III, respectively. SWEC classifications were defined in their Engineering Assurance Procedure EAP 3.6, Revision 2, dated 09/01/78. Since the SWEC designations are still reflected in many RBS design documents, it is important to note that they are equivalent to the RBS Quality Classes. Certain design documents may also reflect GE safety classifications, which are cross-referenced to RBS QCLASS in Engineering Procedures EDP-EQ-10.

6.0 DIRECTIVE

- 6.1 The organizational structure, within which the QA Program is implemented, is defined in Reference 2.25 (OQAM Manual, QAD-1, "Organization") and appropriate departmental procedures.
- 6.2 The QA Program identifies the items, parts, components, and services to which it applies by means of a Q-List. Since items and services differ in regard to relative safety, reliability, and performance importance, various methods or levels of controls and verification are used.
- 6.3 All items shall be designated according to the following quality classes:
 - 6.3.1 Quality Class 1 (Safety-Related): Plant systems, portions of systems, structures and equipment whose failure or malfunction could cause a release of radioactivity in excess of those limits specified in Reference 2.6 (10CFR100, "Reactor Site Criteria"). Quality Class 1 includes equipment which is vital to a safe shutdown of the plant, the removal of decay and sensible heat, or equipment which is necessary to mitigate consequences to the public of a postulated accident. This class includes ASME Code Class 1, 2, & 3 items fabricated and installed under ASME Section III, "Subsection NCA - General Requirements for Division 1 and Division 2"

(Reference 2.8). Also included in this class are any activities or services that affect the safety function in the design, operation and maintenance of safety-related structures, systems or components. All items, services or activities in this class are subject to all applicable requirements of this program. Not all activities or parts associated with Safety-Related structures, systems, components, or subcomponents are Safety-Related.

- 6.3.2 "Quality Assurance Program Applicable" is a designation indicating that all or portions of the Operations Quality Assurance Program apply to specific items, services or activities. "Quality Assurance Program Applicable" is applied to items, services or activities described in NRC Regulatory Guides noted in Attachment 2 (Operational QA Program Applicability Matrix) as committed in Reference 2.19, (USAR, Section 1.8, "Conformance to NRC Regulatory Guides"). In accordance with this regulatory guidance, the following items, services and activities are designated "Quality Assurance Program Applicable". Not all activities or parts associated with QAPA items, services, and activities are QAPA.

NOTE

The applicability of each Quality Assurance Directive (QAD) to the noted items, services and activities is included in Attachment 1.

1. Fire Protection - The QA Program for fire protection satisfies the requirements of Reference 2.15 (NRC Regulatory Guide 1.120 and Appendix "A" of BTP APCS 9.5-1).
2. Radioactive Waste Management - The QA Program for Radioactive Waste Management satisfies the requirements of Reference 2.17, (NRC Regulatory Guide 1.143, "Design Guidance for Radioactive Waste Management Systems, Structures, and Components Installed in Light-Water-Cooled Nuclear Power Plants"), as committed to in Reference 2.19, (USAR Section 1.8, "Conformance to NRC Regulatory Guides").
3. Transport Packages for Radioactive Material - The QA Program for Transport Packages for Radioactive Material satisfies the requirements of Reference 2.5 (10CFR71, Subpart H) through the implementation of this program which meets the requirements of Reference 2.4 (10CFR50, Appendix B). The use of the previously approved program is in compliance with Reference 2.5 (10CFR71, Subpart H).
4. Post Accident Sampling System (PASS) - The PASS is required by Reference 2.20 (USAR, Table 3.2-1, "Classification of Structures, Systems and Components") to meet the requirements of this program.
5. Security and Visitor Control - The QA Program for Security and Visitor Control satisfies the requirements of Reference 2.10, (NRC Regulatory Guide 1.17, "Protection of Nuclear Power Plants Against Industrial Sabotage") and Reference 2.12 (NRC Regulatory Guide 1.33, "Quality Assurance Program Requirements - Operations") as committed to in Reference 2.19 (USAR, Section 1.8).

6. Radiation Protection/Monitoring - The QA Program for Radiation Protection/Monitoring satisfies the requirements of Reference 2.12 (NRC Regulatory Guide 1.33, "Quality Assurance Program Requirements - Operations") and other 8.xx series Regulatory Guides as committed to in Reference 2.19 (USAR, Section 1.8, "Conformance to NRC Regulatory Guides").
 7. Training - The QA Program for Training satisfies the requirements of References 2.9 (NRC Regulatory Guide 1.8, "Selection, Qualification and Training of Personnel for Nuclear Power Plants"), 2.12 (NRC Regulatory Guide 1.33, "Quality Assurance Program Requirements - Operations") and 2.13 (NRC Regulatory Guide 1.58, "Qualification of Nuclear Power plant Inspection, Examination and Testing Personnel") as committed to in Reference 2.19 (USAR, Section 1.8, "Conformance to NRC Regulatory Guides").
 8. Meteorological Monitoring - The QA Program for Meteorological Monitoring satisfies the requirements of References 2.11, (NRC Regulatory Guide 1.23, "Onsite Meteorological Program") and 2.12 (NRC Regulatory Guide 1.33, "Quality Assurance Program Requirements - Operations") as committed in Reference 2.19 (USAR, Section 1.8, "Conformance to NRC Regulatory Guides").
 9. Radiological Environmental Monitoring Program (REMP) -The QA Program for the REMP satisfies the requirements of Reference 2.18 (NRC Regulatory Guide 4.15, "Quality Assurance for Radiological Monitoring Programs: Normal Operations - Effluent Streams and the Environments") as committed to in Reference 2.19 (USAR, Section 1.8, "Conformance to NRC Regulatory Guides").
 10. Fitness for Duty - The QA Program for Fitness for Duty satisfies the requirements of Reference 2.3 (10CFR26, "Fitness for Duty Programs").
 11. Emergency Planning - The QA Program for Emergency Planning satisfies the requirements of Reference 2.22 (USAR Chapter 13.3).
- 6.3.3 Quality Class 2 (Important to Reliability): Non safety-related plant systems, portions of systems, structures, and equipment essential for the reliable generation of electric power, but which are not essential for a safe shutdown. Failure of this equipment could result in a loss of power generation and/or challenge safety systems, but would not endanger public safety. Equipment and systems which contain radioactive materials, but whose failure could not release quantities sufficient to exceed limits specified in Reference 2.1 (10CFR20, "Standards for Protection Against Radiation"), are included in this category. The entire program or portions thereof may be applied to this class as determined by the Vice President - Operations RBS.

NOTE

The term "essential for the reliable generation of electric power" should be interpreted to mean structures, systems and components whose failure would result in the halt of electric power generation in a period of approximately eight hours or less.

- 6.3.4 Quality Class 3 (Non Safety-Related): Plant systems, portions of systems, structures, and equipment which are not essential for reliable generation of electric power and which do not contain radioactive material or whose failure could not result in the release of radioactive material. The entire program or portions thereof may be applied to this class as determined by the Vice President - Operations RBS.

NOTE

The term "not essential for the reliable generation of electric power" should be interpreted to mean structures, systems, and components whose failure would not result in the halt of electric power generation after approximately eight hours or more.

- 6.4 Indoctrination, training, and qualification programs are established for Entergy Operations personnel performing quality-related activities. These programs are implemented by appropriate training procedures which ensure that personnel involved are knowledgeable, and have the necessary proficiency to perform the tasks.
- 6.5 Entergy Operations management is responsible for assuring that personnel are properly trained to perform activities in a safe and effective manner. The Manager - Nuclear Training is responsible for providing professional, technical, and educational programs to support the indoctrination and training of River Bend Station employees and contractors to assure their safety and proficiency during the performance of those activities. These programs will assure that:
- 6.5.1 Personnel responsible for performing quality-related activities are instructed on the purpose, scope, and implementation of quality-related manuals, instructions, and procedures;
- 6.5.2 Personnel performing activities that affect quality are trained and qualified in the principals, techniques, and requirements of the activities being performed;
- 6.5.3 Proficiency and qualification of personnel performing or verifying activities are maintained by retraining, re-examination, and/or re-certifying on a periodic basis, as applicable;

- 6.5.4 Records of training and qualification are maintained which identifies the objectives, content, attendance, tests, acceptance criteria, and the functions personnel are qualified to perform.
- 6.6 Activities or services that are determined to be Safety-Related or QA Program Applicable are accomplished under suitably controlled conditions by qualified personnel. Controlled conditions include the use of appropriate equipment, suitable environmental conditions for accomplishing the activity, and assurance that prerequisites for the given activity have been satisfied. To assure that this requirement is met, the following is provided:
- 6.6.1 Procedures governing activities which require special equipment (i.e., procedures for maintenance, testing, modification, and nondestructive testing) shall specify what types of equipment are suitable.
- 6.6.2 Procedures governing activities with special environmental requirements include these requirements as prerequisites, either by listing the environmental conditions or by referencing the administrative procedure which covers adequate housekeeping and cleanliness.
- 6.6.3 QA/QC audits/surveillances/inspections of these activities are conducted in accordance with approved procedures/checklists which incorporate appropriate acceptance criteria and references.
- 6.6.4 Qualified personnel are those personnel who have the prerequisite education and experience, and are properly trained to perform the activity. When required by procedure, personnel shall be certified in writing to perform a given task. Procedures governing activities shall specify, as part of the prerequisites, that the activity be conducted by qualified personnel. A qualification matrix shall be maintained by the Section Supervisor to ensure that personnel assigned the activities are qualified.
- 6.6.5 Maintenance and repairs of safety-related equipment are performed under the direction of cognizant supervisors and in accordance with accepted procedures and work practices. Maintenance and repairs of safety-related equipment will be performed in accordance with written maintenance instructions, operating instructions, station and division orders, vendor technical manuals, and applicable codes and regulations. Except for emergencies, all maintenance work is pre-planned.
- 6.6.6 Activities which are QA Program Applicable are to be conducted in accordance with detailed written and approved procedures meeting the requirements of Reference 2.12 (NRC Regulatory Guide 1.33, Revision 2, "Quality Assurance Program Requirements -Operations") and Reference 2.7 (ANS-3.2/N18.7 - 1976, "Quality Assurance for the Operational Phase of Nuclear Power Plants"). These procedures cover the areas of material control, reactor engineering, plant engineering, instrument and controls, general maintenance, fire protection, etc.
- 6.7 Procedures for the conduct of safety-related and QA Program Applicable maintenance or modification shall take into account the need for special controls, processes, test equipment, tools, and skills as necessary to attain the required level of quality. To assure that the required level of quality is attained, the procedure requires a quality

verification by inspection, examination, or test, as determined by the preparing organization and the Quality Control organization.

- 6.8 Instructions and procedures for Fire Protection design, installation, inspection, test, maintenance, modification, and administrative controls are reviewed to ensure the proper inclusion of fire protection requirements. The installation or application of penetration seals and fire retardant coatings is performed by trained personnel using approved procedures. In addition to installation testing, periodic testing will be conducted to ensure that Fire Protection systems (including necessary communications and emergency lighting) will properly function and continue to meet design criteria.
- 6.9 Procedures shall describe the development, control, and use of computer codes that pertain to safety-related structures, systems, and components whether performed by organizations external to RBS or by RBS Engineering.
- 6.10 Organizations will evaluate identified problems and implement timely corrective action. Differences of opinion between organizations involving quality shall be resolved at the lowest organizational level possible. Where disagreements between organizations cannot be reached in a timely manner, prompt escalation to a higher level of management will occur. However, disagreements between QA and organizations which are not resolved at the Director - Nuclear Safety level shall be referred to the Vice President - Operations RBS for resolution.
- 6.11 The Manager - Quality Assurance assesses the status and adequacy of the QA Program on a regular basis and reports the results of these assessments to the Vice President - Operations RBS and other applicable management personnel. These requirements are further discussed in OQAM Manual, QAD-18, "Audits".
- 6.12 Outside agencies which perform functions such as design, manufacture, installation, inspection, or other technical services on safety-related and QA Program Applicable structures, systems, or components shall comply with the applicable portions of Reference 2.4 (10CFR50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants") and the RBS QA Program. Acceptance of the vendor is required prior to the issuance of a contract or purchase order for safety-related or QA Program Applicable material, components, and/or services to assure that the supplier's program meets those elements of Reference 2.4 (10CFR50 Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants") and Reference 2.16 (NRC Regulatory Guide 1.123, "Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants") which apply. Engineering determines the extent of the QAD applicability for QAPA items, services or activities as noted in Attachment 1, in order to assure compliance to the applicable portions of Appendix B and the RBS QA Program.
- 6.13 Since acceptance of the QA Program description by the NRC, changes to the program will be submitted as follows:
 - 6.13.1 Changes to the QA Program description that reduce the commitments must be submitted to the NRC and receive NRC approval before implementation.
 - 6.13.2 Changes that do not reduce the commitments in the program description shall be submitted annually.

- 6.13.3 Changes in the organizational elements will be submitted within 30 days after announcement (editorial changes or personnel reassignments of a nonsubstantive nature do not require NRC notification).

7.0

IMPLEMENTATION AND CONTROL

- 7.1 The Vice President - Operations RBS, the Nuclear Review Board, or the Director - Nuclear Safety shall authorize the performance of audits in accordance with OQAM, QAD-18, "Audits", to assess the implementation, status, and adequacy of the QA Program. These audits are conducted by personnel independent of the organization performing the activities. The results are provided to the appropriate levels of management for corrective action, review, and/or assessments.
- 7.2 In the event of an Emergency not covered by an approved procedure, the Shift Supervisor is responsible to assure action is taken to minimize personnel injury and damage to the facility and to protect the health and safety of the public. Such action shall be documented and dispositioned in accordance with station administrative procedures.
- 7.3 Stop Work Orders that would create a condition which would impair safe shutdown capability of the plant may be rescinded by the General Manager Plant Operations. Such action shall be immediately documented and reported to the Vice President - Operations RBS by the General Manager Plant Operations. The Vice President - Operations RBS shall contact the organizations involved and resolve the conditions addressed in Stop Work Orders in accordance with appropriate Quality Assurance Program requirements.

8.0

DOCUMENTATION

Not applicable to this directive.

ATTACHMENT - 1 (QA PROGRAM APPLICABLE QAD MATRIX)

QA PROGRAM APPLICABLE QAD MATRIX*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
FIRE PROTECTION	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		
RADIOACTIVE WASTE MANAGEMENT	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		
TRANSPORT PACKAGES FOR RADIOACTIVE MATERIAL				X			X						X						
POST ACCIDENT SAMPLING SYSTEM	X	X	X		X	X		X			X	X	X	X	X	X	X		
SECURITY AND VISITOR CONTROL	X	X		X	X								X	X		X	X		
RADIATION PROTECTION	X	X		X	X	X					X	X	X			X	X		
TRAINING	X	X		X	X	X	X									X	X		
WEATHEROLOGICAL MONITORING	X	X			X						X	X	X	X	X	X	X		
RADIATION ENVIRONMENTAL MONITORING PROGRAM	X	X			X	X	X				X	X	X	X		X	X		
10CFR26 FITNESS FOR DUTY	X	X		X	X								X	X		X	X		
EMERGENCY PLANNING	X	X			X	X						X			X	X	X		

*This matrix reflects the applicability of the QAD programmatic controls to QAPA activities at RBS. However, the determination of the extent of the QAD controls for the procurement of QAPA items, services or activities is made by Engineering in accordance with approved procedures, in order to assure compliance with the applicable portions of Appendix B and the RBS QA Program.

ATTACHMENT - 2 (OPERATIONAL QA PROGRAM APPLICABILITY MATRIX)

OPERATIONAL QA PROGRAM APPLICABILITY MATRIX*		
NRC DOCUMENT	ANSI STANDARD	TITLE
Regulatory Guide 1.8	3.1-1978	Personnel Selection and Training
Regulatory Guide 1.17	ANSI N18.17	Protection of Nuclear Power Plants Against Industrial Sabotage
Regulatory Guide 1.23		Onsite Meteorological Programs
Regulatory Guide 1.26		Quality Group Classifications and Standards for Water, Steam, And Radioactive-Waste Containing Components of Nuclear Power Plants
Regulatory Guide 1.28	N45.2-1977	QA Program Requirements (Design and Construction)
Regulatory Guide 1.29		Seismic Design Classification
Regulatory Guide 1.30	N45.2.4-1972	QA Requirements for the Installation, Inspection, and Testing of Instrumentation and Electric Equipment
Regulatory Guide 1.33	N18.7-1976	QA Program Requirements (Operation)
Regulatory Guide 1.37	N45.2.1-1973	QA Requirements for Cleaning of Fluid Systems and Associated Components of Water-Cooled Nuclear Power Plants
Regulatory Guide 1.38	N45.2.2-1972	QA Requirements for Packaging, Shipping, Receiving, Storage, and Handling of Items for Water-Cooled Nuclear Power Plants
Regulatory Guide 1.39	N45.2.3-1973	Housekeeping Requirements for Water-Cooled Nuclear Power Plants
Regulatory Guide 1.54	N101.4-1972	QA Requirements for Protective Coatings Applied to Water-Cooled Nuclear Power Plants
Regulatory Guide 1.58	N45.2.6-1978	Qualification of Nuclear Power Plant Inspection, Examination, and Testing Personnel
Regulatory Guide 1.64	N45.2.11-1974	QA Requirements for the Design of Nuclear Power Plants
Regulatory Guide 1.70		Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants
Regulatory Guide 1.74	N45.2.10-1973	QA Terms and Definitions
Regulatory Guide 1.88	N45.2.9-1974	Collection, Storage, and Maintenance of Nuclear Power Plant QA Records
Regulatory Guide 1.94	N45.2.5-1974	QA Requirements for Installation, Inspection, and Testing of Structural Concrete and Structural Steel During the Construction Phase of Nuclear Power Plants
Regulatory Guide 1.116	N45.2.8-1975	QA Requirements for Installation, Inspection, and Testing of Mechanical Equipment and Systems
Regulatory Guide 1.120		Fire Protection Guidelines for Nuclear Power Plants
Regulatory Guide 1.123	N45.2.13-1976	QA Requirements for Control of Procurement of Items and Services for Nuclear Power Plants
Regulatory Guide 1.143		Design Guidance for Radioactive Waste Management Systems, Structures, and Components Installed in Light-Water Cooled Nuclear Power Plants
Regulatory Guide 1.144	N45.2.12-1977	Auditing of QA Programs for Nuclear Power Plants
Regulatory Guide 1.146	N45.2.23-1978	Qualification of QA Program Audit Personnel for Nuclear Power Plants
Regulatory Guide 4.15		Quality Assurance for Radiological Monitoring Program (Normal Operations) - Effluent Streams and the Environment
10CFR26		Fitness for Duty Programs
Appendix B to 10CFR50		Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants
10CFR55		Operators' Licenses

*See Section 1.8 of USAR for RBS positions on Regulatory Guides.

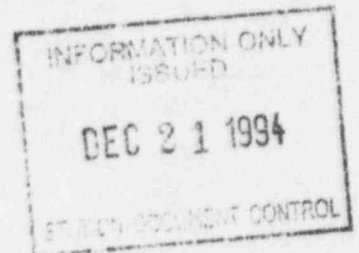
PROCEDURE CROSS-REFERENCE SHEET (PROCEDURES)

PROCEDURE NO. QAD-2REVISION 11

REFERENCE	PARAGRAPH	REMARKS
QAD-6	5.2	Document Control
QAD-18	6.11, 7.1	Audits
EDP-EQ-10	5.4	Control & Maintenance of RBS Q-List
LC 00197	6.6.5	Maintenance per procedure & directed by cognizant supervisors
LC 00198	6.6.5	Maintenance per written instruction, preplanned
LC 00335	6.6.6	I&C procedure meet RG 1.33
LC 00336	6.6.6	Q1 = written procedures
LC 00337	6.6.6	Material control = written procedures
LC 00338	6.6.6	Fire protection = written procedure per RG 1.33
LC 00339	6.6.6	Reactor Engineering procedures
LC 00340	6.6.6	Plant Engineering procedures
LC 00575	6.6.1	Special Process procedures
LC 00576	6.6.2	Special Environment Procedures
LC 00577	6.6.3	Scheduled QA surveillances & audits
LC 00578	5.1, 6.4, 6.5, & 6.6.4	Maintenance Qualification matrix/QA knowledge
LC 00587	6.3.2, 1&2	QA for FP & RW per RG 1.120 & 1.143
LC 00604	6.3.2, 1	FP for design per RG 1.120
LC 00617	6.3.2, 1	FP procedure and seals/coatings
LC 00648	6.3.2.1 & Att. 1	FP & RWMS tests, inspections & operating status
LC 00658	6.3.2.2 & Att. 1	RWMS nonconforming items
LC 05039	6.3.2, 3	QA program for 10CFR Part 71, Subpart H, transportation activities



ENTERGY



**RIVER BEND STATION
OPERATIONS QUALITY ASSURANCE MANUAL (OQAM)
*QUALITY ASSURANCE DIRECTIVE (QAD)**

***DESIGN CONTROL**

DIRECTIVE NUMBER: *QAD-3
REVISION NUMBER: *11
Effective Date: * SEP 12 1994

Handwritten: 7-29-94
PREPARER
(Signature/KCN/Date)

APPROVALS: Handwritten: 8/23/94

RECEIVED

SEP 12 1994

SDC

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VICE PRESIDENT - OPERATIONS
RIVER BEND STATION
(Signature/KCN/Date)

*INDEXING INFORMATION

DESIGN CONTROL

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1.0

PURPOSE AND SCOPE

- 1.1 This directive describes the measures and delineates the requirements established by River Bend Station (RBS) to assure that applicable regulatory requirements and design basis are correctly translated in a planned, controlled, and orderly manner into specifications, drawings, procedures, and instructions that affect safety-related structures, systems, and components.
- 1.2 The requirements of this directive also apply to "Quality Assurance Program Applicable" items, services and activities as described in Reference 2.7 (OQAM Manual, QAD-2, "Quality Assurance Program").
- 1.3 The requirements of this directive apply to all individuals and departments performing design (configuration management) functions at River Bend Station.

2.0

REFERENCES

- 2.1 Title 10, Code of Federal Regulations, Section 50.59 (10CFR50.59) "Changes, Tests, and Experiments"
- 2.2 10CFR50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants"
- 2.3 NRC Regulatory Guide 1.64, "Quality Assurance Requirements for the Design of Nuclear Power Plants"
- 2.4 Updated Safety Analysis Report (USAR)
- 2.5 River Bend Station (RBS) Technical Specifications
- 2.6 Operations Quality Assurance Manual (OQAM), Quality Assurance Directive (QAD)-1, "Organization"
- 2.7 Operations Quality Assurance Manual (OQAM), Quality Assurance Directive (QAD)-2, "Quality Assurance Program"

3.0

DEFINITIONS

Not applicable to this procedure.

4.0

RESPONSIBILITIES

Reference 2.6, (OQAM Manual, QAD-1 "Organization")

5.0

GENERAL

Not applicable to this procedure.

6.0

DIRECTIVE

- 6.1 The specific design responsibilities and organizational interfaces, both internal and external, shall be identified in appropriate administrative procedures.

- 6.2 Design activities shall be conducted in a planned, controlled, and orderly manner in accordance with approved, written procedures. The organizations having design responsibilities will develop these procedures consistent with the scope of their responsibilities to assure that applicable design inputs such as design basis, regulatory requirements, codes, and standards are identified and documented, and are correctly translated into design output documents (i.e., specifications, drawings, procedures, and instructions).
- 6.3 Procedures shall include provisions to assure the appropriate technical and quality standards, including accept/reject criteria, are specified and included or referenced in design documents. Deviations from approved quality standards will be controlled and approved by the design organization.
- 6.4 Procedures shall include provisions for the control of design analysis, such as reactor physics; criticality physics and radiation shielding for transport packages; seismic, stress, thermal, hydraulic, radiation, and accident analysis; compatibility of materials; associated computer programs; accessibility for inservice inspection, maintenance, and repair; and delineation of accept/reject criteria for inspection and test. Verified computer codes are certified and their use specified.
- 6.5 Procedures shall provide for selection and documented review for suitability of application of materials, parts, equipment, and processes (including standard off-the-shelf commercial and previously approved items) that are essential to the function of a structure, system or component.
- 6.6 Design analyses shall be legible and in a form suitable for microfilming, filing, and retrieving. Analyses will be sufficiently detailed and conform to the guidance in Reference 2.3 (NRC Regulatory Guide 1.64, "Quality Assurance Requirements for the Design of Nuclear Power Plants").
- 6.7 Procedures shall require the verification of design adequacy and design inputs. The extent of this verification will be a function of the importance to safety of the item, the complexity of the design, the degree of standardization, the state-of-the-art and the similarity with previously proven designs. Standardized or previously proven designs will be reviewed for applicability prior to use. The responsibilities of the qualified verifier; the areas, features and pertinent considerations to be verified; and the extent of documentation shall be identified in these procedures.
- 6.8 Design verification shall be accomplished by design review, alternate calculation, or qualification testing in accordance with approved procedures. If qualification testing is used, the test shall be identified, run under the most adverse design conditions and performed as early as possible prior to the installation of plant equipment, or prior to when installation becomes irreversible. Design verification, if other than by testing, shall be completed when practical, prior to release for procurement, manufacturing, construction, or to another organization for use in other design activities. In those cases where this requirement cannot be met, the design verification may be deferred, providing that the justification is documented and the unverified portion of the design document(s) and all other design documents including computer codes based on the unverified data, are identified and controlled. In this case, design verification shall be required prior to relying upon the structure, system or component to perform its function.

- 6.9 Individuals or groups responsible for design reviews or other verification activities shall be identified in the procedures and their responsibility and authority will be defined and controlled. Design verification shall be performed by any competent individuals, or groups other than those who performed the original design, but, who may be from the same organization. Regardless of the reviewers title, individuals performing design verification shall not:

- 6.9.1 Have direct responsibility for the adequacy of the design,
- 6.9.2 Have specified a singular design approach,
- 6.9.3 Have ruled out certain design considerations, or
- 6.9.4 Have established the design inputs for the particular design aspect being verified.

NOTE

Review by individual's immediate supervisor is encouraged, but it does not constitute the required independent design verification.

- 6.10 If, in an exceptional circumstance, the designer's immediate supervisor is the only technically qualified individual available in the organization to perform a design verification by design review, this review may be conducted by the supervisor providing that:
- 6.10.1 The justification is individually documented and approved in advance by the supervisor's management,
 - 6.10.2 Quality Assurance audits cover frequency and effectiveness of use of supervisors as design verifiers to guard against abuse, and
 - 6.10.3 Other provisions of Reference 2.3 (NRC Regulatory Guide 1.64, "Quality Assurance Requirements for the Design of Nuclear Power Plants"), are satisfied.
- 6.11 Design reviews shall be accomplished and documented in accordance with approved written procedures to assure that:
- 6.11.1 Design life, design interfaces, safety margins and adequate design criteria are met, as appropriate;
 - 6.11.2 Design characteristics can be controlled, inspected and tested as appropriate, and
 - 6.11.3 Inspection and test criteria are identified.

- 6.12 Approved procedures shall provide for evaluating the impact of design changes (including field changes) on plant operations, training and maintenance; provide for documenting required actions; and provide for transmitting information concerning the change to all affected organizations. The changes shall be justified and subjected to design control measures commensurate with those applied to the original design. Design changes shall be reviewed and approved by the organization that performed the original design, review, and approval, unless another qualified, responsible organization is specifically designated in writing.
- 6.13 For errors and deficiencies in the design process, procedures shall provide for determining the cause(s) of the deficiencies (or errors) and instituting appropriate corrective action to prevent similar types of deficiencies (or errors) from recurring.
- 6.14 The procedures controlling deficiencies (or errors) in the design processes shall also provide:
- 6.14.1 Provisions for reporting the deficiency (or error) to appropriate levels of supervision and management and implementation of corrective action.
 - 6.14.2 Follow-up actions to assure timely resolution and/or completion of corrective actions.
- 6.15 Proposed modifications or changes to equipment or systems which involve an unreviewed safety question (USQ) as defined in Reference 2.1 (10CFR50.59), "Changes, Tests and Experiments") or a change to Reference 2.4 (Updated Safety Analysis Report [USAR]) or 2.5 (Technical Specifications) shall be submitted to the NRB and Nuclear Licensing for review.
- 6.16 All design activities shall be documented and the records controlled and maintained.
- 6.17 Design work done by contractors is controlled by the procurement document and is implemented by written engineering procedures that are developed by the contractor and reviewed and approved by RBS. The RBS review ensures that the contractor's procedures meet or are equivalent to the requirements of the RBS QA Program.
- 6.18 Contractors who do design work are required to have a design verification program which meets the applicable requirements of ANSI N45.2.11. This requirement is included in the procurement documents for the design service, and its inclusion is verified by Quality Assurance during routine audits/surveillances.
- 6.19 When as-built drawings are utilized, they are incorporated along with associated documentation, into design changes in a timely manner to reflect actual plant design. As-built drawings/documentation are used for reconciliation with original design calculations. QA personnel ensure compliance to approved procedures in this area through periodic audits/surveillances of design documents in accordance with QA procedures.

7.0

DOCUMENTATION

Not applicable to this directive.

**RIVER BEND STATION
PROCEDURE CROSS DISCIPLINE REVIEW**

PART 1

PROCEDURE NO. QAD-3
PROCEDURE TITLE: DESIGN CONTROL

REV. NO. 11 DATE 1 / 12 / 94
FLP
09/12/94

REASON FOR PROCEDURE CHANGE:

- | | | |
|--|--|--|
| <input type="checkbox"/> Periodic Review | <input type="checkbox"/> Plant Modification (Specify) | <input type="checkbox"/> License Requirement |
| <input type="checkbox"/> New Procedure | <input type="checkbox"/> Commitment (Specify) | <input type="checkbox"/> Cancel Procedure |
| <input type="checkbox"/> Reportable Occurrence | <input checked="" type="checkbox"/> Procedure Revision | <input type="checkbox"/> Global Change |

SUMMARY OF CHANGES/JUSTIFICATION TO CANCEL:

MINOR REVISION to reflect organizational changes per LCN 13.1-29 and/or 17.2-42.

PART 2

CROSS DISCIPLINE REVIEWS REQUIRED

(List affected references adjacent to applicable department [Use continuation sheet if necessary]).

<input type="checkbox"/> ALARA <input type="checkbox"/> OPERATIONS <input type="checkbox"/> MAINTENANCE <input type="checkbox"/> SITE ENGINEERING <input type="checkbox"/> CHEMISTRY <input type="checkbox"/> IST COORDINATOR <input type="checkbox"/> QA <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> RADIATION PROTECTION <input type="checkbox"/> ASME ENGINEERING <input type="checkbox"/> RADWASTE <input type="checkbox"/> SYSTEM ENG <input type="checkbox"/> HPES COORDINATOR <input type="checkbox"/> TRAINING <input type="checkbox"/> PLANT MANAGER <input type="checkbox"/> FRC MEMBERSHIP <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
---	---

PART 3

- | | YES | NO | |
|------|-------------------------------------|-------------------------------------|--|
| 3.1 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Change Verification Form required? |
| 3.2 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Does the revision cause a change to the Technical Specification/STP Cross Reference Matrix? |
| 3.3 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Does this change (including cancellation) affect other procedures shown in the reference section or PCRS of this procedure? |
| 3.4 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | All procedures - Does this change reduce the commitments in the Quality Assurance Program description (See Chapter 17 of the RBS USAR and 10CFR50.54[a])? |
| 3.5 | <input type="checkbox"/> | <input type="checkbox"/> | Emergency Implementing Procedures Only - Does this change decrease the effectiveness of the Emergency Plan (see 10CFR50.54[q])? |
| 3.6 | <input type="checkbox"/> | <input type="checkbox"/> | Plant Security Procedures Only - Does this change reduce the commitments in the Plant Security Program Description previously accepted by the NRC (10CFR50.54[p])? |
| 3.7 | <input type="checkbox"/> | <input type="checkbox"/> | Environmental Services Procedures Only - Does this change affect the Radiological Environmental Monitoring Program (REMP)? |
| 3.8 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Does this revision change the intent of the procedure? |
| 3.9 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Have Licensee Commitments been verified? |
| 3.10 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Comments (Comment Control Forms) Resolved? |

PREPARED BY: FLP/2822 7/29/94
Signature/KCN/Date

SUPERVISOR: AB/5100 7/29/94
Signature/KCN/Date

FRC: N/A
Signature/KCN/Date

CANCELLATION: N/A
Signature/KCN/Date

PART 4

COMMENTS: ☐ YES ☐ NO RETURN TO PROCEDURE COORDINATION GROUP BY _____

OVERDUE COMMENTS MAY NOT BE CONSIDERED.

REVIEWED BY: _____
Signature/KCN/Date



(1) CHECKLIST APPLICABLE TO: QAD-3

Revision: #11

REASON FOR EVALUATION: (MR#, Procedure, etc.)

(See also P. 2 of this ISEE for a more detailed description of the changes requiring this evaluation.)

(2) **EVALUATION APPLICABILITY CHECKLIST:** The procedure, design change, modification, test or experiment to which this evaluation is applicable represents:

(The basis for "NO" responses shall be documented per Appendix 1)

2.1 A change to the plant as described in the SAR? YES () NO (x)

Explain: See P. 2 of this ISEE for discussion.

2.2 A change to procedure (or models) or test as described in the SAR? YES () NO (x)

Explain: See P. 2 of this ISEE for discussion.

2.3 A test or experiment not described in the SAR which could affect safety? YES () NO (x)

Explain: See P. 2 of this ISEE for discussion.

2.4 A new system, component, structure, procedure, test or experiment that should be documented in the SAR per NUREG-0800 or Reg. Guide 1.70? YES () NO (x)

Explain: See P. 2 of this ISEE for discussion.

2.5 A change to the Technical Specifications (Operating License Appendix A) or Operating License Condition? YES () NO (x)

Explain: See P. 2 of this ISEE for discussion.

2.6 A change to station design or operation, or a test or experiment, which may have a measurable non-radiological effect on the environment in an area(s) other than the on-site area(s) previously disturbed during site preparation and construction? YES () NO (x)

Explain: See P. 2 of this ISEE for discussion.

2.7 A change, test or experiment which may result in a decrease of the effectiveness of the Environmental Protection Plan to meet its objectives? YES () NO (x)

Explain: See P. 2 of this ISEE for discussion.

2.8 A change to the Environmental Protection Plan (Operating License Appendix B) or Operating License Conditions? YES () NO (x)

Explain: See P. 2 of this ISEE for discussion.

If the answer to question 2.1, 2.2, 2.3, or 2.4 is "YES", and 2.5 is "NO", complete Section 3 of a SAEE. If the answer to 2.5 is "YES", contact Licensing for NRC review/approval prior to implementation. If 2.6, 2.7, or 2.8 is "YES", complete Section 4 of a SAEE. If the answer to all of the above is "NO", a SAEE is not required.

(3) Temporary Acceptance () YES (x) NO If "YES", SDRD No. Impacted:

(4) FSAR, TECH SPECS, SRP and other Document(s) Reviewed: (including sections or pages)

(See P. 3 of this ISEE for a list of Documents Reviewed.)

(5) CONCLUSIONS: (See P. 3 of this ISEE.)

REV. NO.	TOT. PGS.	PREPARER (NAME/KCN)	DATE	REVIEWER (NAME/KCN) (Verify Qualification)	DATE
0		Floyd B. Rogers 2822	7/29/94	SPH/Chert (0162)	7/29/94
1					



(1) CHECKLIST APPLICABLE TO: QAD-3

Revision: 10/11

REASON FOR EVALUATION (continued from P. 1) *Additional description of changes which require this evaluation* 786 09/12/94

Discussion: Due to most recent Licensing changes, specifically LCN 13.1-29 and 17.2-42, the Operations Quality Assurance Manual (OQAM), Quality Assurance Directive (QAD)-1, "Organization", was brought in line to reflect management/supervisory personnel's responsibility, authority and line of communications. The purpose of this change is to add QAD-1 to the reference and responsibilities sections of this procedure in lieu of having the narratives repeated in the "Responsibility" section.

(2) EVALUATION APPLICABILITY CHECKLIST (continued from P. 1)

Explanations for the answers to the questions on Page 1 of this ISEE, where required by the procedure

(2.1) (continued from P. 1) *Change to the plant as described in the SAR?*

Discussion: This change is an administrative change only and as such does not constitute a change to the plant as described in the SAR.

(2.2) (continued from P. 1) *Change to procedure, (or models or test as described in the SAR?*

Discussion: This procedure change does not change any procedures or tests as described in the SAR. This change refers to the upper tier document (QAD-1) and as such is administrative only.

(2.3) (continued from P. 1) *Test or experiment not described in the SAR which could affect safety?*

Discussion: This is not a test procedure and, therefore, cannot impact any tests or experiments that could affect safety.

(2.4) (continued from P. 1) *New SSC, procedure, test or experiment which should be described in the SAR?*

Discussion: This procedures does not affect systems, components, structures, procedures, tests or experiments as described in the SAR. This change refers to the upper tier document (QAD-1) and as such is administrative only.

(2.5) (continued from P. 1) *Change to Tech. Specs or Operating License Conditions?*

Discussion: This change is administrative only and as such does not constitute a change to the Technical Specifications or operating license conditions. These inherent functions are described in QAD-1 and are not altered but are delineated in the "References" and "Responsibilities" sections of this procedure.

(2.6) (continued from P. 1) *Change may environmentally affect areas not disturbed by site preparation or construction?*

Discussion: This change is administrative only and therefore cannot have an affect on station design, operation, test or experiment which may have a measure non-radiological effect on the environment.

(2.7) (continued from P. 1) *Decrease in the effectiveness of the Environmental Protection Plan?*

Discussion: This change does not affect the effectiveness of the Environmental Protection Plan, since this change is administrative change only. The responsibilities, authorities and chain of communications remain unaltered and are outlined in the "References" and "Responsibilities" sections.

(2.8) (continued from P. 1) *Change to the Environmental Protection Plan or Operating License Conditions?*

Discussion: This is an administrative change only and hence does not affect the Environmental Protection Plan or Operating License.



(1) CHECKLIST APPLICABLE TO: QAD-3

Revision: ~~10~~ 11

726 09/12/94

(4) FSAR, Tech. Specs, SRP, and other Documents reviewed (continued from P. 1) *List including sections and/or pages*

USAR Chapter 17.2 in its entirety, LCN-17.2-42; Chapter 13; LCN-13.1-29; Tech Spec, Chapter 6

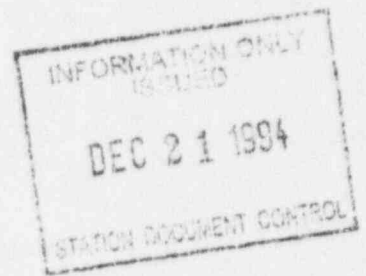
(5) CONCLUSIONS (continued from P. 1) *Additional discussion, where required*

Discussion: The purpose of this change is to add QAD-1 to the "Reference" and Responsibility" Sections of this procedure in lieu of having the narratives repeated in the "Responsibility" Section. Since no required activities have been deleted, the consequences of an accident previously evaluated are not increased.

END OF ISEE



ENTERGY



**RIVER BEND STATION
OPERATIONS QUALITY ASSURANCE MANUAL (OQAM)
*QUALITY ASSURANCE DIRECTIVE (QAD)**

***PROCUREMENT DOCUMENT CONTROL**

DIRECTIVE NUMBER:

***QAD-4**

REVISION NUMBER:

***12**

Effective Date:

*** SEP 12 1994**

Fluor Daniel 2822 2/29/94
PREPARER
(Signature/KCN/Date)

APPROVALS: 10/03/94/8-16-94

RECEIVED

SEP 12 1994

SDC

James J. Hinc 0099 8/23/94
DIRECTOR - NUCLEAR SAFETY
(Signature/KCN/Date)

J. R. McDaniel 0206 8/24/94
VICE PRESIDENT - OPERATIONS
RIVER BEND STATION
(Signature/KCN/Date)

PROCUREMENT DOCUMENT CONTROL

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ATTACHMENT 1 - PROCEDURE CROSS-REFERENCE SHEET (PROCEDURES) .	6

1.0

PURPOSE AND SCOPE

- 1.1 This directive describes the measures and delineates the requirements established by River Bend Station (RBS) for procurement document review, approval, and control to assure that applicable regulatory requirements, design bases and other requirements are included or suitably referenced in procurement documents for safety-related material, equipment and services. The requirements of this directive apply to all individuals and organizations participating in the generation, review, approval, and control of procurement documents at RBS.
- 1.2 The requirements of this directive also apply to "Quality Assurance Program Applicable" items, services and activities as described in Reference 2.6 (OQAM Manual, QAD-2, "Quality Assurance Program").

2.0

REFERENCES

- 2.1 Title 10, Code of Federal Regulations, Section 21 (10CFR21), "Reporting of Defects and Noncompliance"
- 2.2 10CFR50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants"
- 2.3 Nuclear Regulatory Commission (NRC) Regulatory Guide 1.33, Revision 2, "Quality Assurance Program Requirements - Operation"
- 2.4 NRC Regulatory Guide 1.123, Revision 1, "Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants"
- 2.5 Operations Quality Assurance Manual (OQAM), Quality Assurance Directive (QAD)-1, "Organization"
- 2.6 Operations Quality Assurance Manual (OQAM) Quality Assurance Directive (QAD) - 2 "Quality Assurance Program"

3.0

DEFINITIONS

Not applicable to this directive.

4.0

RESPONSIBILITIES

Reference 2.5, (OQAM Manual, QAD-1 "Organization")

5.0

GENERAL

Not applicable to this directive.

6.0

DIRECTIVE

- 6.1 RBS departments involved in the execution of procurement activities shall be identified and each organization's responsibilities shall be delineated in administrative procedures.

- 6.2 Departments involved in procurement activities shall develop and implement procedures, as appropriate, that clearly describe the interfaces and sequence of actions necessary to control the preparation, review, approval, and issuance of procurement documents for safety-related and QA Program Applicable items and services.
- 6.3 Procedures shall assure that issued procurement documents for safety-related and QA Program Applicable items and services include provisions for the following, as appropriate:
- 6.3.1 A statement of the scope of work to be performed by the supplier;
 - 6.3.2 Technical requirements, including, as appropriate, reference to specific drawings, specifications, codes, regulations, procedures, or instructions, including revisions thereto, that describe the items or services to be furnished;
 - 6.3.3 Identification or provision for later identification of test, inspection, and any special instructions and requirements for such activities as design, identification, fabrication, cleaning, erecting, packaging, handling, shipping, and extended storage;
 - 6.3.4 Identification of 10CFR50 Appendix "B" and other applicable requirements which must be complied with by the supplier as described in the Vendors QA Program;
 - 6.3.5 Inclusion of applicable QA Program requirements in subtier procurement documents, and verification of subtier supplier conformance through the supplier's audits, inspections, or testing.
 - 6.3.6 Stipulation when the provisions of Reference 2.1 (Title 10, Code of Federal Regulations, 10CFR21, "Reporting of Defects and Noncompliance") apply;
 - 6.3.7 Identification of the documentation to be submitted to RBS for review and concurrence. Documents include drawings, specifications, procedures, fabrication and inspection plans, inspection and test records, personnel and procedure qualifications, and material chemical and physical test results;
 - 6.3.8 Identification of the requirement for the storage, retention, control, maintenance and/or delivery of records to RBS prior to use or installation of the procured items;
 - 6.3.9 EOI's/RBS's right of access to the supplier's facilities and records, and all subtier suppliers, for inspection and audit, as appropriate;
 - 6.3.10 The reporting and disposition of nonconformances that deviate from procurement requirements, supplier nonconformances dispositioned as "Use-As-Is" (Accept-As-Is) and "Repair" shall be reported through RBS approved procedures addressing supplier deviations. The technical justification shall be submitted with the Nonconformance Report and submitted to RBS in accordance with applicable procurement documents.

- 6.3.11 RBS's right to stop shipment if procurement document requirements, including those for documentation, have not been fulfilled;
- 6.3.12 Technical and quality conformance to procurement documents such as inspection and test "notification points" or shipment release.
- 6.4 Procurement documents shall be subjected to technical and quality reviews by personnel who have been trained and qualified in accordance with the applicable procedures. Procurement documents will be approved by designated individuals prior to issuance. The review and approval will be documented.
 - 6.4.1 Engineering is responsible for ensuring the applicable technical and quality requirements have been included in procurement documents prior to release. Engineering is also responsible for independent and interdepartmental reviews and approvals.
 - 6.4.2 The Procurement Group is responsible for the commercial aspects, preparing, processing and issuing procurement documents for items and services.
- 6.5 Review of the quality requirements shall include verification that the requirements are correctly stated and enable subsequent inspection planning and receiving inspection; that there are adequate accept/reject criteria; and that the procurement documents have been prepared, reviewed, and approved in accordance with the requirements of this directive, and applicable procedures.

- 6.6 Charges or revisions to procurement documents shall be reviewed and approved by the same organization that performed the original review and approval unless the applicant designates another responsible organization and such review and approval shall be documented. Exceptions to this include changes in quantity, estimated price, cost codes, taxes, format or editorial changes that do not affect the quality of the item or service.
- 6.7 Prior to the award of a safety-related or QA program applicable purchase order/contract for a basic component, a pre-award evaluation of the supplier shall be required. This evaluation will be performed in accordance with established procedures and Reference 2.4 (NRC Regulatory Guide 1.123, "Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants").
- 6.8 Procurement documents for safety-related spare or replacement parts for structures, systems, or components shall be subject to controls at least equivalent to those required for purchase of the original equipment, or those specified by a properly reviewed and approved revision to the original requirements.
- 6.8.1 Where the spare or replacement parts are not available from the original manufacturer, or the parts cannot be purchased to the original requirements, the alternative parts and the requirements shall be reviewed, evaluated and approved in accordance with applicable procedures. This evaluation shall be documented and made part of or referenced in the procurement document.
- 6.9 Procurement documents for safety-related equipment shall address commitments made in response to NRC issued documents, such as Inspection & Enforcement (I&E) Bulletins, when applicable.
- 6.10 Contractors and suppliers of safety-related materials and services are responsible for imposing requirements at least equivalent to those of this directive on their internal operations and on vendors or contractors performing work within the scope of their activity as required by the procurement documents. Principal contractors are required to perform audits in order to verify and evaluate their subsuppliers' QA Programs, procedures, and activities as appropriate.

7.0

DOCUMENTATION

Not applicable to this directive.

**RIVER BEND STATION
PROCEDURE CROSS DISCIPLINE REVIEW**

PART 1

PROCEDURE NO. QAD-4 REV. NO. 12 DATE 7/29/94
PROCEDURE TITLE: PROCUREMENT DOCUMENT CONTROL 38P
09/12/94

REASON FOR PROCEDURE CHANGE:

- | | | |
|--|--|--|
| <input type="checkbox"/> Periodic Review | <input type="checkbox"/> Plant Modification (Specify) | <input type="checkbox"/> License Requirement |
| <input type="checkbox"/> New Procedure | <input type="checkbox"/> Commitment (Specify) | <input type="checkbox"/> Cancel Procedure |
| <input type="checkbox"/> Reportable Occurrence | <input checked="" type="checkbox"/> Procedure Revision | <input type="checkbox"/> Global Change |

SUMMARY OF CHANGES/JUSTIFICATION TO CANCEL:

MINOR REVISION to reflect organizational changes per LCN 13.1-29 and/or 17.2-42.

PART 2

CROSS DISCIPLINE REVIEWS REQUIRED

(List affected references adjacent to applicable department [Use continuation sheet if necessary]).

<input type="checkbox"/> ALARA <input type="checkbox"/> OPERATIONS <input type="checkbox"/> MAINTENANCE <input type="checkbox"/> SITE ENGINEERING <input type="checkbox"/> CHEMISTRY <input type="checkbox"/> IST COORDINATOR <input type="checkbox"/> QA <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> RADIATION PROTECTION <input type="checkbox"/> ASME ENGINEERING <input type="checkbox"/> RADWASTE <input type="checkbox"/> SYSTEM ENG <input type="checkbox"/> HPES COORDINATOR <input type="checkbox"/> TRAINING <input type="checkbox"/> PLANT MANAGER <input type="checkbox"/> FRC MEMBERSHIP <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
---	---

PART 3

- | | YES | NO | |
|------|-------------------------------------|-------------------------------------|--|
| 3.1 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Change Verification Form required? |
| 3.2 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Does the revision cause a change to the Technical Specification/STP Cross Reference Matrix? |
| 3.3 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Does this change (including cancellation) affect other procedures shown in the reference section or PCRS of this procedure? |
| 3.4 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | All procedures - Does this change reduce the commitments in the Quality Assurance Program description (See Chapter 17 of the RBS USAR and 10CFR50.54[a])? |
| 3.5 | <input type="checkbox"/> | <input type="checkbox"/> | Emergency Implementing Procedures Only - Does this change decrease the effectiveness of the Emergency Plan (see 10CFR50.54[q])? |
| 3.6 | <input type="checkbox"/> | <input type="checkbox"/> | Plant Security Procedures Only - Does this change reduce the commitments in the Plant Security Program Description previously accepted by the NRC (10CFR50.54[p])? |
| 3.7 | <input type="checkbox"/> | <input type="checkbox"/> | Environmental Services Procedures Only - Does this change affect the Radiological Environmental Monitoring Program (REMP)? |
| 3.8 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Does this revision change the intent of the procedure? |
| 3.9 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Have Licensee Commitments been verified? |
| 3.10 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Comments (Comment Control Forms) Resolved? |

PREPARED BY: Fluoy B Rogers 2822 7/29/94
Signature/KCN/Date
FRC: N/A
Signature/KCN/Date

SUPERVISOR: Anthony Chittley 1031 8-3-94
Signature/KCN/Date
CANCELLATION: N/A
Signature/KCN/Date

PART 4

COMMENTS: ☐ YES ☐ NO RETURN TO PROCEDURE COORDINATION GROUP BY _____

OVERDUE COMMENTS MAY NOT BE CONSIDERED.

REVIEWED BY: _____
Signature/KCN/Date



(1) CHECKLIST APPLICABLE TO QAD-4

Revision: 28/12

386
09/12/94REASON FOR EVALUATION (MR#, Procedure, etc.)

(See also P. 2 of this ISEE for a more detailed description of the changes requiring this evaluation.)

(2) EVALUATION APPLICABILITY CHECKLIST: The procedure, design change, modification, test or experiment to which this evaluation is applicable represents:

(The basis for "NO" responses shall be documented per Appendix 1)

2.1 A change to the plant as described in the SAR? YES () NO (x)

Explain: See P. 2 of this ISEE for discussion.

2.2 A change to procedure (or models) or test as described in the SAR? YES () NO (x)

Explain: See P. 2 of this ISEE for discussion.

2.3 A test or experiment not described in the SAR which could affect safety? YES () NO (x)

Explain: See P. 2 of this ISEE for discussion.

2.4 A new system, component, structure, procedure, test or experiment that should be documented in the SAR per NUREG-0800 or Reg. Guide 1.70? YES () NO (x)

Explain: See P. 2 of this ISEE for discussion.

2.5 A change to the Technical Specifications (Operating License Appendix A) or Operating License Condition? YES () NO (x)

Explain: See P. 2 of this ISEE for discussion.

2.6 A change to station design or operation, or a test or experiment, which may have a measurable non-radiological effect on the environment in an area(s) other than the on-site area(s) previously disturbed during site preparation and construction? YES () NO (x)

Explain: See P. 2 of this ISEE for discussion.

2.7 A change, test or experiment which may result in a decrease of the effectiveness of the Environmental Protection Plan to meet its objectives? YES () NO (x)

Explain: See P. 2 of this ISEE for discussion.

2.8 A change to the Environmental Protection Plan (Operating License Appendix B) or Operating License Conditions? YES () NO (x)

Explain: See P. 2 of this ISEE for discussion.

If the answer to question 2.1, 2.2, 2.3, or 2.4 is "YES", and 2.5 is "NO", complete Section 3 of a SAEE. If the answer to 2.5 is "YES", contact Licensing for NRC review/approval prior to implementation. If 2.6, 2.7, or 2.8 is "YES", complete Section 4 of a SAEE. If the answer to all of the above is "NO", a SAEE is not required.

(3) Temporary Acceptance () YES (x) NO If "YES", SDRD No. Impacted:

(4) FSAR, TECH SPECS, SRP and other Document(s) Reviewed: (including sections or pages)
(See P. 3 of this ISEE for a list of Documents Reviewed.)

(5) CONCLUSIONS: (See P. 3 of this ISEE.)

REV. NO.	TOT. PGS.	PREPARER (NAME/KCN)	DATE	REVIEWER (NAME/KCN) (Verify Qualification)	DATE
0		3640B Regis / 2832	7/29/94	DRH Hunt (0163)	7/29/94
1					



(1) CHECKLIST APPLICABLE TO: QAD-4

Revision: ~~1~~ 2REASON FOR EVALUATION (continued from P. 1) *Additional description of changes which require this evaluation* 09/29/94

Discussion: Due to most recent Licensing changes, specifically LCN 13.1-29 and 17.2-42, the Operations Quality Assurance Manual (OQAM), Quality Assurance Directive (QAD)-1, "Organization", was brought in line to reflect management/supervisory personnel's responsibility, authority and line of communications. The purpose of this change is to add QAD-1 to the reference and responsibilities sections of this procedure in lieu of having the narratives repeated in the "Responsibility" section.

(2) EVALUATION APPLICABILITY CHECKLIST (continued from P. 1)

Explanations for the answers to the questions on Page 1 of this ISEE, where required by the procedure(2.1) (continued from P. 1) *Change to the plant as described in the SAR?*

Discussion: This change is an administrative change only and as such does not constitute a change to the plant as described in the SAR.

(2.2) (continued from P. 1) *Change to procedure, (or models or test as described in the SAR?*

Discussion: This procedure change does not change any procedures or tests as described in the SAR. This change refers to the upper tier document (QAD-1) and as such is administrative only.

(2.3) (continued from P. 1) *Test or experiment not described in the SAR which could affect safety?*

Discussion: This is not a test procedure and, therefore, cannot impact any tests or experiments that could affect safety.

(2.4) (continued from P. 1) *New SSC, procedure, test or experiment which should be described in the SAR?*

Discussion: This procedures does not affect systems, components, structures, procedures, tests or experiments as described in the USAR. This change refers to the upper tier document (QAD-1) and as such is administrative only.

(2.5) (continued from P. 1) *Change to Tech. Specs or Operating License Conditions?*

Discussion: This change is administrative only and as such does not constitute a change to the Technical Specifications or operating license conditions. These inherent functions are described in QAD-1 and are not altered but are delineated in the "References" and "Responsibilities" sections of this procedure.

(2.6) (continued from P. 1) *Change may environmentally affect areas not disturbed by site preparation or construction?*

Discussion: This change is administrative only and therefore cannot have an affect on station design, operation, test or experiment which may have a measure non-radiological effect on the environment.

(2.7) (continued from P. 1) *Decrease in the effectiveness of the Environmental Protection Plan?*

Discussion: This change does not affect the effectiveness of the Environmental Protection Plan, since this change is administrative change only. The responsibilities, authorities and chain of communications remain unaltered and are outlined in the "References" and "Responsibilities" sections.

(2.8) (continued from P. 1) *Change to the Environmental Protection Plan or Operating License Conditions?*

Discussion: This is an administrative change only and hence does not affect the Environmental Protection Plan or Operating License.



(1) CHECKLIST APPLICABLE TO: QAD-4

Revision: ~~4~~ 12

7/6/09/2/20

(4) FSAR, Tech. Specs, SRP, and other Documents reviewed (continued from P. 1) *List including sections and/or pages*

USAR Chapter 17.2 in its entirety, LCN-17.2-42; Chapter 13; LCN-13.1-29; Tech Spec, Chapter 6

(5) CONCLUSIONS (continued from P. 1) *Additional discussion, where required*

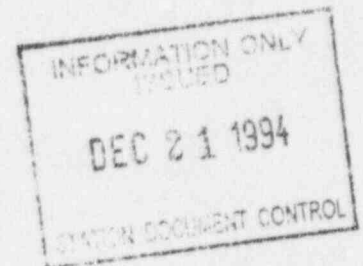
Discussion: The purpose of this change is to add QAD-1 to the "Reference" and "Responsibility" Sections of this procedure in lieu of having the narratives repeated in the "Responsibility" Section. Since no required activities have been deleted, the consequences of an accident previously evaluated are not increased.

END OF ISEE



ENTERGY

**RIVER BEND STATION
OPERATIONS QUALITY ASSURANCE MANUAL (OQAM)
*QUALITY ASSURANCE DIRECTIVE (QAD)**



***INSTRUCTIONS, PROCEDURES, AND DRAWINGS**

DIRECTIVE NUMBER:

***QAD-5**

REVISION NUMBER:

***10**

Effective Date:

*** SEP 12 1994**

3642822 7/29/94
PREPARER
(Signature/KCN/Date)

RECEIVED

SEP 12 1994

APPROVALS: 6/0306/4.17.94

SDC

James J. ... 0019 8/23/94
DIRECTOR - NUCLEAR SAFETY
(Signature/KCN/Date)

J. R. ... 0206 8/24/94
VICE PRESIDENT - OPERATIONS
RIVER BEND STATION
(Signature/KCN/Date)

INSTRUCTIONS, PROCEDURES, AND DRAWINGS

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1.0

PURPOSE AND SCOPE

- 1.1 This directive describes the measures and delineates requirements established by River Bend Station (RBS) to assure that activities affecting quality are prescribed and accomplished in accordance with approved written instructions, procedures and drawings. The requirements of this directive apply to all individuals and departments performing activities affecting safety-related structures, systems, and components at RBS.
- 1.2 The requirements of this directive also apply to "Quality Assurance Program Applicable" items, services and activities as described in Reference 2.7 (OQAM Manual, QAD-2, "Quality Assurance Program").

2.0

REFERENCES

- 2.1 Title 10, Code of Federal Regulations, Section 50 (10CFR50), Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants"
- 2.2 10CFR50.54, "Conditions of Licenses"
- 2.3 10CFR50.59, "Changes, Tests and Experiments"
- 2.4 NRC Regulatory Guide 1.33, Rev. 2, "Quality Assurance Program Requirements - Operation"
- 2.5 Technical Specifications, Section 6, "Administrative Controls"
- 2.6 Operations Quality Assurance Manual (OQAM), Quality Assurance Directive (QAD)-1, "Organization"
- 2.7 Operations Quality Assurance Manual (OQAM), Quality Assurance Directive (QAD-2), "Quality Assurance Program"
- 2.8 OQAM, QAD-3, "Design Control"

3.0

DEFINITIONS

Not applicable to this directive.

4.0

RESPONSIBILITIES

Reference 2.6, (OQAM Manual, QAD-1 "Organization")

5.0

GENERAL

Not applicable to this directive.

6.0

DIRECTIVE

- 6.1 Activities and services affecting safety-related structures, systems and components conducted by departments at or in support of RBS shall be accomplished using approved written instructions, procedures, and drawings that comply with the requirements of this Directive.

- 6.2 The responsible departments shall establish procedures which define responsibilities and clearly delineate the sequence of actions to be accomplished for the preparation, change, review, approval, and control of instructions, procedures, or drawings.
- 6.3 Procedures developed for use by the River Bend Station, shall comply with the guidance provided by Reference 2.4 (NRC Regulatory Guide 1.33, "Quality Assurance Program Requirements - Operation").
- 6.4 Instructions, procedures, and drawings shall include, appropriate quantitative and/or qualitative acceptance criteria for verifying that activities have been satisfactorily accomplished. Instructions, procedures and drawings shall include applicable special process controls, codes, standards and regulatory requirements.
- 6.5 Departments specifying quality assurance requirements in procurement documents shall specify, as applicable, that vendors have available and use approved written instructions, procedures, and drawings where work is to be performed.
- 6.6 The RBS QA Department shall perform a review of instructions and procedures, as specified in RBNP-001, "Development, Control and Use of RBS Procedures". Additionally, the Director - Nuclear Safety may request to review any departmental procedures, work instructions, or drawings during development to assure incorporation of program commitments. These procedures, work instructions, or drawings include, tests; calibration; special processes; maintenance; modification; repair; operation and refueling procedures; the inservice inspection program; spare parts program; specifications; emergency procedures; material handling; and changes thereto. The review will be performed by personnel with appropriate documented training and qualification.
- 6.7 The Facility Review Committee (FRC) shall review and concur with procedures, instructions or drawings as described in the Reference 2.5 (Technical Specifications, Section 6, "Administrative Controls").
- 6.8 The QA Department shall perform audits to assure that instructions, procedures, drawings, or other documents used for safety-related and QA Program Applicable activities are properly implemented and controlled to meet the requirements of this Directive, and Reference 2.1 (10CFR50, Appendix B)..
- 6.9 Procedure changes which do not require prior NRC approval in accordance with Reference 2.2 (10CFR50.54, "Conditions of Licenses") or Reference 2.3 (10CFR50.59, "Changes, Tests and Experiments") may be implemented following documentation of the reference reviews and internal approval. These changes shall be submitted to the NRC, as required by the above References, within the required time frame.
- 6.10 Procedure changes which require prior NRC approval in accordance with Reference 2.2 (10CFR50.54, "Conditions of Licenses") must be submitted and approved by NRC prior to implementation. This type of change shall be considered to be approved by the NRC upon receipt of a letter to this effect or 60 days after submittal, whichever is earliest.
- 6.11 Procedure changes which require prior NRC approval in accordance with Reference 2.3 (10CFR50.59, "Changes, Tests and Experiments") must be submitted for NRC approval prior to implementation.

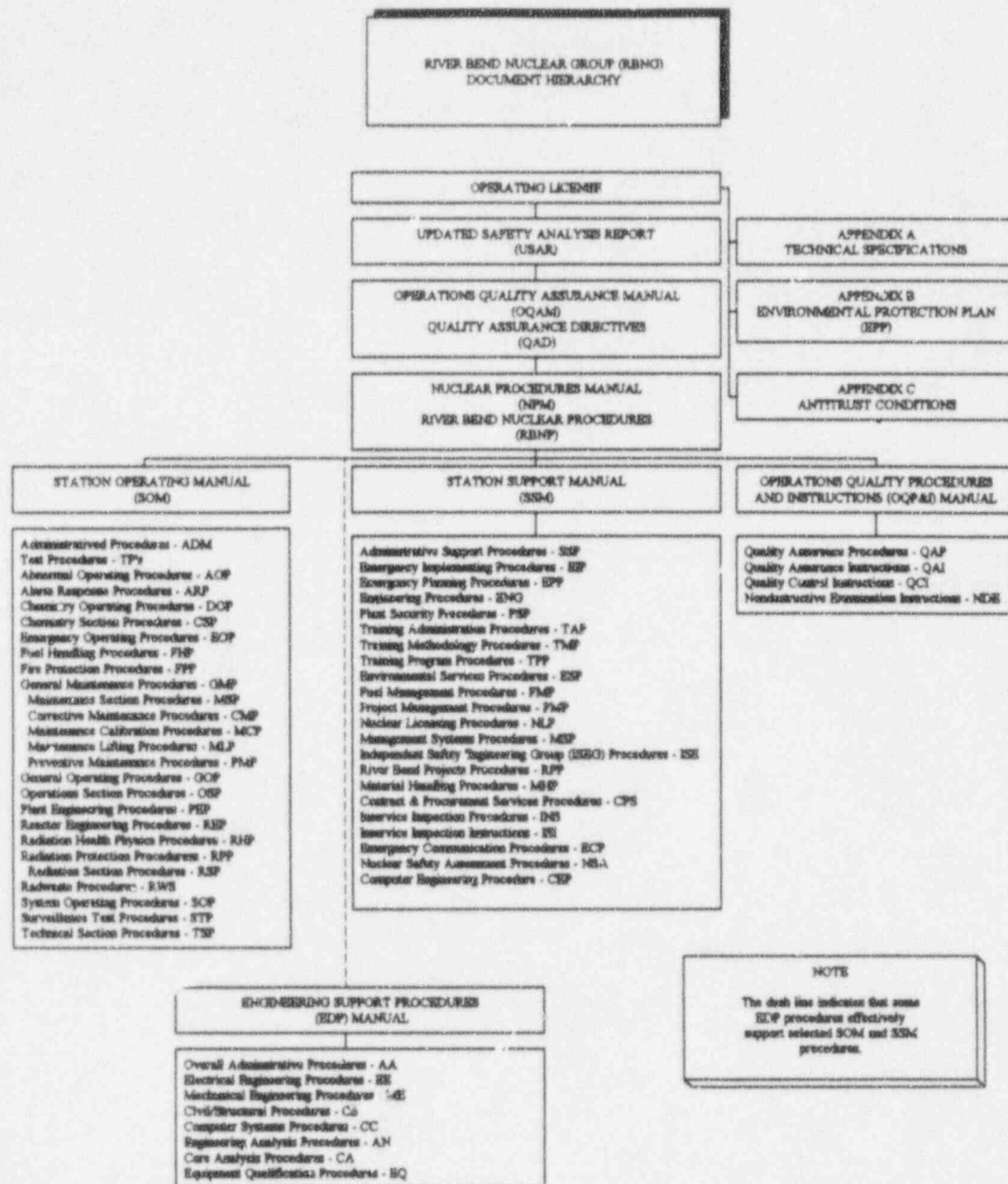
- 6.12 Following NRC approval of a procedure change which results in more restrictive requirements, affected implementing procedures shall be issued or revised prior to the effective date identified in the letter from the NRC
- 6.13 If the approved USAR changes are less restrictive, the more restrictive requirements shall be complied with until the procedures are changed, revised or new procedures issued.
- 6.14 Indoctrination and training programs for fire prevention and fire fighting are implemented in accordance with approved procedures.

7.0

DOCUMENTATION

Not applicable to this directive.

ATTACHMENT - 1 (RBS DOCUMENT HIERARCHY)



PROCEDURE CROSS-REFERENCE SHEET (PROCEDURES)

PROCEDURE NO. QAD-5

REVISION 10

[illegible]

**RIVER BEND STATION
PROCEDURE CROSS DISCIPLINE REVIEW**

PART 1

PROCEDURE NO. QAD-5 REV. NO. 10 DATE 1 / 12 / 94
PROCEDURE TITLE: INSTRUCTIONS, PROCEDURES, AND DRAWINGS HP
09/12/94

REASON FOR PROCEDURE CHANGE:

- | | | |
|--|--|--|
| <input type="checkbox"/> Periodic Review | <input type="checkbox"/> Plant Modification (Specify) | <input type="checkbox"/> License Requirement |
| <input type="checkbox"/> New Procedure | <input type="checkbox"/> Commitment (Specify) | <input type="checkbox"/> Cancel Procedure |
| <input type="checkbox"/> Reportable Occurrence | <input checked="" type="checkbox"/> Procedure Revision | <input type="checkbox"/> Global Change |

SUMMARY OF CHANGES/JUSTIFICATION TO CANCEL:

MINOR REVISION to reflect organizational changes per LCN 13.1-29 and/or 17.2-42.

PART 2

CROSS DISCIPLINE REVIEWS REQUIRED

(List affected references adjacent to applicable department [Use continuation sheet if necessary]).

<input type="checkbox"/> ALARA <input type="checkbox"/> OPERATIONS <input type="checkbox"/> MAINTENANCE <input type="checkbox"/> SITE ENGINEERING <input type="checkbox"/> CHEMISTRY <input type="checkbox"/> IST COORDINATOR <input type="checkbox"/> QA <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> RADIATION PROTECTION <input type="checkbox"/> ASME ENGINEERING <input type="checkbox"/> RADWASTE <input type="checkbox"/> SYSTEM ENG <input type="checkbox"/> HPES COORDINATOR <input type="checkbox"/> TRAINING <input type="checkbox"/> PLANT MANAGER <input type="checkbox"/> FRC MEMBERSHIP <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
---	---

PART 3

- | | YES | NO | |
|------|-------------------------------------|-------------------------------------|--|
| 3.1 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Change Verification Form required? |
| 3.2 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Does the revision cause a change to the Technical Specification/STP Cross Reference Matrix? |
| 3.3 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Does this change (including cancellation) affect other procedures shown in the reference section or PCRS of this procedure? |
| 3.4 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | All procedures - Does this change reduce the commitments in the Quality Assurance Program description (See Chapter 17 of the RBS USAR and 10CFR50.54[a])? |
| 3.5 | <input type="checkbox"/> | <input type="checkbox"/> | Emergency Implementing Procedures Only - Does this change decrease the effectiveness of the Emergency Plan (see 10CFR50.54[q])? |
| 3.6 | <input type="checkbox"/> | <input type="checkbox"/> | Plant Security Procedures Only - Does this change reduce the commitments in the Plant Security Program Description previously accepted by the NRC (10CFR50.54[p])? |
| 3.7 | <input type="checkbox"/> | <input type="checkbox"/> | Environmental Services Procedures Only - Does this change affect the Radiological Environmental Monitoring Program (REMP)? |
| 3.8 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Does this revision change the intent of the procedure? |
| 3.9 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Have Licensee Commitments been verified? |
| 3.10 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Comments (Comment Control Forms) Resolved? |

PREPARED BY: Flynn J. Rogers 2822 7/29/94
Signature/KCN/Date

SUPERVISOR: RL Dyer 5100 KCN 7/29/94
Signature/KCN/Date

FRC: N/A
Signature/KCN/Date

CANCELLATION: N/A
Signature/KCN/Date

PART 4

COMMENTS: ☐ YES ☐ NO RETURN TO PROCEDURE COORDINATION GROUP BY _____

OVERDUE COMMENTS MAY NOT BE CONSIDERED.

REVIEWED BY: _____
Signature/KCN/Date



(1) CHECKLIST APPLICABLE TO: QAD-5

Revision: #10

REASON FOR EVALUATION: (MR#, Procedure, etc.)

(See also P. 2 of this ISEE for a more detailed description of the changes requiring this evaluation.)

JSC
09/12/94(2) EVALUATION APPLICABILITY CHECKLIST: The procedure, design change, modification, test or experiment to which this evaluation is applicable represents:

(The basis for "NO" responses shall be documented per Appendix 1)

2.1 A change to the plant as described in the SAR? YES () NO (x)

Explain: See P. 2 of this ISEE for discussion.

2.2 A change to procedure (or models) or test as described in the SAR? YES () NO (x)

Explain: See P. 2 of this ISEE for discussion.

2.3 A test or experiment not described in the SAR which could affect safety? YES () NO (x)

Explain: See P. 2 of this ISEE for discussion.

2.4 A new system, component, structure, procedure, test or experiment that should be documented in the SAR per NUREG-0800 or Reg. Guide 1.70? YES () NO (x)

Explain: See P. 2 of this ISEE for discussion.

2.5 A change to the Technical Specifications (Operating License Appendix A) or Operating License Condition? YES () NO (x)

Explain: See P. 2 of this ISEE for discussion.

2.6 A change to station design or operation, or a test or experiment, which may have a measurable non-radiological effect on the environment in an area(s) other than the on-site area(s) previously disturbed during site preparation and construction? YES () NO (x)

Explain: See P. 2 of this ISEE for discussion.

2.7 A change, test or experiment which may result in a decrease of the effectiveness of the Environmental Protection Plan to meet its objectives? YES () NO (x)

Explain: See P. 2 of this ISEE for discussion.

2.8 A change to the Environmental Protection Plan (Operating License Appendix B) or Operating License Conditions? YES () NO (x)

Explain: See P. 2 of this ISEE for discussion.

If the answer to question 2.1, 2.2, 2.3, or 2.4 is "YES", and 2.5 is "NO", complete Section 3 of a SAEE. If the answer to 2.5 is "YES", contact Licensing for NRC review/approval prior to implementation. If 2.6, 2.7, or 2.8 is "YES", complete Section 4 of a SAEE. If the answer to all of the above is "NO", a SAEE is not required.

(3) Temporary Acceptance () YES (x) NO If "YES", SDRD No. Impacted:

(4) FSAR, TECH SPECS, SRP and other Document(s) Reviewed: (including sections or pages)
(See P. 3 of this ISEE for a list of Documents Reviewed.)(5) CONCLUSIONS: (See P. 3 of this ISEE.)

REV. NO.	TOT. PGS.	PREPARER (NAME/KCN)	DATE	REVIEWER (NAME/KCN) (Verify Qualification)	DATE
0		Floyd B. Rogers	7/29/94	DR Schert (0162)	7/29/94
1					



(1) CHECKLIST APPLICABLE TO: QAD-5

Revision: 10

REASON FOR EVALUATION (continued from P. 1) *Additional description of changes which require this evaluation*

Discussion: Due to most recent Licensing changes, specifically LCN 13.1-29 and 17.2-42, the Operations Quality Assurance Manual (OQAM), Quality Assurance Directive (QAD)-1, "Organization", was brought in line to reflect management/supervisory personnel's responsibility, authority and line of communications. The purpose of this change is to add QAD-1 to the reference and responsibilities sections of this procedure in lieu of having the narratives repeated in the "Responsibility" section.

(2) EVALUATION APPLICABILITY CHECKLIST (continued from P. 1)

Explanations for the answers to the questions on Page 1 of this ISEE, where required by the procedure

(2.1) (continued from P. 1) *Change to the plant as described in the SAR?*

Discussion: This change is an administrative change only and as such does not constitute a change to the plant as described in the SAR.

(2.2) (continued from P. 1) *Change to procedure, (or models or test as described in the SAR?*

Discussion: This procedure change does not change any procedures or tests as described in the SAR. This change refers to the upper tier document (QAD-1) and as such is administrative only.

(2.3) (continued from P. 1) *Test or experiment not described in the SAR which could affect safety?*

Discussion: This is not a test procedure and, therefore, cannot impact any tests or experiments that could affect safety.

(2.4) (continued from P. 1) *New SSC, procedure, test or experiment which should be described in the SAR?*

Discussion: This procedures does not affect systems, components, structures, procedures, tests or experiments as described in the USAR. This change refers to the upper tier document (QAD-1) and as such is administrative only.

(2.5) (continued from P. 1) *Change to Tech. Specs or Operating License Conditions?*

Discussion: This change is administrative only and as such does not constitute a change to the Technical Specifications or operating license conditions. These inherent functions are described in QAD-1 and are not altered but are delineated in the "References" and "Responsibilities" sections of this procedure.

(2.6) (continued from P. 1) *Change may environmentally affect areas not disturbed by site preparation or construction?*

Discussion: This change is administrative only and therefore cannot have an affect on station design, operation, test or experiment which may have a measure non-radiological effect on the environment.

(2.7) (continued from P. 1) *Decrease in the effectiveness of the Environmental Protection Plan?*

Discussion: This change does not affect the effectiveness of the Environmental Protection Plan, since this change is administrative change only. The responsibilities, authorities and chain of communications remain unaltered and are outlined in the "References" and "Responsibilities" sections.

(2.8) (continued from P. 1) *Change to the Environmental Protection Plan or Operating License Conditions?*

Discussion: This is an administrative change only and hence does not affect the Environmental Protection Plan or Operating License.



(1) CHECKLIST APPLICABLE TO: QAD-5

Revision: #10

LC 09/12/94

- (4) FSAR, Tech. Specs, SRP, and other Documents reviewed (continued from P. 1) *List including sections and/or pages*
- USAR Chapter 17.2 in its entirety, LCN-17.2-42; Chapter 13; LCN-13.1-29; Tech Spec, Chapter 6

- (5) CONCLUSIONS (continued from P. 1) *Additional discussion, where required*

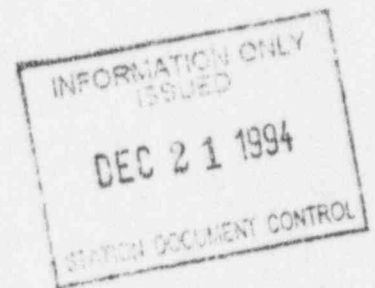
Discussion: The purpose of this change is to add QAD-1 to the "Reference" and Responsibility" Sections of this procedure in lieu of having the narratives repeated in the "Responsibility" Section. Since no required activities have been deleted, the consequences of an accident previously evaluated are not increased.

END OF ISEE



ENTERGY

**RIVER BEND STATION
OPERATIONS QUALITY ASSURANCE MANUAL (OQAM)
*QUALITY ASSURANCE DIRECTIVE (QAD)**



***DOCUMENT CONTROL**

DIRECTIVE NUMBER:

*QAD-6

REVISION NUMBER:

*12

Effective Date:

* OCT 01 1994

Flora Brown 2822 7/29/94
PREPARER
(Signature/KCN/Date)

RECEIVED

OCT 01 1994

SDC

APPROVALS: ✓ 10/09/94 8-17-94

James J. Fairclough 0099 8/23/94
DIRECTOR - NUCLEAR SAFETY
(Signature/KCN/Date)

R. McI. Sch 0206 8/24/94
VICE PRESIDENT - OPERATIONS
RIVER BEND STATION
(Signature/KCN/Date)

DOCUMENT CONTROL

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1.0 PURPOSE AND SCOPE

- 1.1 This directive describes the measures and delineates the requirements established by River Bend Station (RBS) for the review, issue and control of documents, and changes to these documents, which prescribe activities affecting safety-related or Quality Assurance (QA) Program Applicable structures, systems and components.
- 1.2 The requirements of this directive also apply to "Quality Assurance Program Applicable" items, services, and activities as described in Reference 2.5 (OQAM Manual, QAD-2, "Quality Assurance Program").
- 1.3 The requirements of this directive apply to all individuals and departments performing these activities at or in support of River Bend Station.

2.0 REFERENCES

- 2.1 10CFR50, Appendix B, "Quality Assurance Criteria For Nuclear Power Plants and Fuel Reprocessing Plants"
- 2.2 Nuclear Regulatory Commission (NRC) Regulatory Guide 1.33, "Quality Assurance Program Requirements - Operations"
- 2.3 Technical Specifications, Section 6
- 2.4 Operations Quality Assurance Manual (OQAM), Quality Assurance Directive (QAD-1), "Organization"
- 2.5 OQAM Manual, QAD-2, "Quality Assurance Program"

3.0 DEFINITIONS

Not applicable to this directive.

4.0 RESPONSIBILITIES

Reference 2.4, (OQAM Manual, QAD-1, "Organization")

5.0 GENERAL

Not applicable to this procedure

6.0 DIRECTIVE

- 6.1 Procedures shall be established and implemented to control the coordination and issue of documents, including interface documents and changes thereto, which prescribe activities or services affecting safety-related structures, systems and components. Attachment 1 delineates the types of documents

to be controlled, and the implementing procedures which describe minimum required reviews and approvals.

- 6.2 Administrative procedures will identify the documents to be controlled. They shall include the USAR; Operational QA Manual; QA/Quality Control (QC) Procedures and Instructions; design specifications; design, construction, and installation procedures; instructions and drawings (including computer codes and "as-built" drawings); procurement documents; plant operating procedures; start-up and test procedures; operating and special orders; maintenance and modification procedures; equipment and material control procedures; refueling procedures; inspection, and test procedures; design change documents; Quality (Q)-List; special process procedures and test equipment calibration procedures.
- 6.3 Individuals or departments responsible for the preparation, review, approval, issue and control of documents, and revisions thereto, will be specified in appropriate procedures.
- 6.4 Reviews shall be performed by knowledgeable personnel other than the originator, and shall be documented. Reviewers shall have access to pertinent background information and have adequate understanding of the requirements and intent of the document.
- 6.5 Documents shall be approved for issue by authorized personnel prior to release, and shall be distributed in accordance with current, approved distribution lists developed from an approved request and maintained by the issuing authority.
- 6.6 Approval of documents and subsequent revisions shall be documented to provide evidence of compliance with this directive.
- 6.7 Controlled document status lists (e.g., indexes) or equivalent shall be established, maintained and controlled to identify the current revision of documents. These lists will be available to responsible personnel to preclude the use of obsolete documents.
- 6.8 Documents required to perform activities affecting safety-related structures, systems and components shall be available at controlling stations or work locations prior to beginning the activity.
- 6.9 Changes to documents shall be reviewed and approved as described in administrative procedures. Revision to documents will be identified. Temporary changes to procedures shall be controlled in accordance with applicable station procedures and the Technical Specifications.
- 6.10 Procedures shall be reviewed and approved prior to initial use. Safety-related procedures will be reviewed/revised as required by the programmatic control stimuli such as: licensee commitments, industry events, vendor technical input, corrective action programs, user feedback, plant modification program,

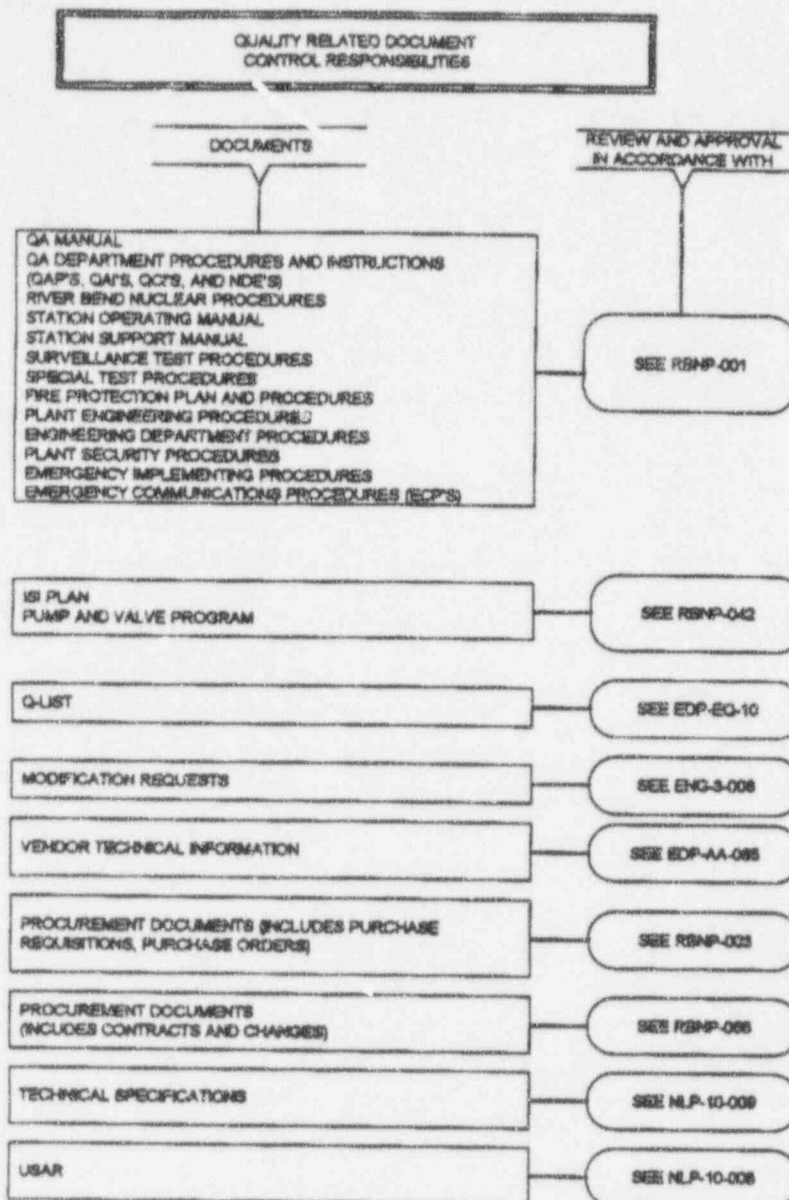
plant trending program, station events or training experiences, and Quality Assurance/NSAG input. The reviews of frequently used procedures are accomplished during the revision /update process as a result of the aforementioned stimuli. During routine audits, the QA organization will verify the revision/update mechanisms to prove their continuing function. Infrequently used procedures are to be reviewed prior to use to determine their adequacy. (Infrequently is defined as a procedure of a routine nature that has not been used in the previous two year period). Biennially during audits, QA will verify that the procedure review program is being implemented effectively. A sampling plan which provides a 95% confidence factor with no more than 5% nonconformance in the population shall be used. The sampling plan will be based upon the Acceptable Quality Level (AQL).

- 6.11 Applicable procedures shall be reviewed following a reportable incident including but not limited to accidents, unexpected transients, significant operator errors or equipment malfunctions. Such reviews shall be documented.
- 6.12 Prior to returning modified systems to service, applicable procedures shall be reviewed and revised as necessary. This review shall be documented.

7.0 DOCUMENTATION

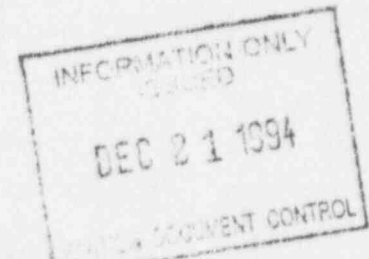
Not applicable to this directive.

ATTACHMENT - 1 (QUALITY-RELATED DOCUMENT CONTROL RESPONSIBILITY)





ENTERGY



**RIVER BEND STATION
OPERATIONS QUALITY ASSURANCE MANUAL (OQAM)
*QUALITY ASSURANCE DIRECTIVE (QAD)**

***CONTROL OF PURCHASED MATERIAL,
EQUIPMENT, AND SERVICES**

DIRECTIVE NUMBER:

***QAD-7**

REVISION NUMBER:

***11**

Effective Date:

*** SEP 09 1994**

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SEP 09 1994

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CONTROL OF PURCHASED MATERIAL, EQUIPMENT AND SERVICES

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1.0

PURPOSE

- 1.1 This directive describes the measures and delineates the requirements to ensure that safety related material, equipment and services, procured either directly or through contractors, conform to the procurement document requirements.
- 1.2 The requirements of this directive also apply to items, services and activities designated as "Quality Assurance Program Applicable". Controls may include, but are not limited to Quality Control (QC) inspection activities and supplier audits/surveillance. Engineering shall identify or establish controls necessary to assure program implementation as described in Reference 2.8 (OQAM Manual, QAD-2, "Quality Assurance Program").
- 1.3 This directive applies to all individuals and departments participating in safety-related or QA Program Applicable procurement activities for River Bend Station (RBS). [See Updated Safety Analysis Report (USAR) commitment per Reference 2.5 for application to purchases from General Electric Nuclear Steam Supply System (NSSS) supplier.]

2.0

REFERENCES

- 2.1 Title 10, Code of Federal Regulations Section 50 (10CFR50), Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants"
- 2.2 10CFR21, "Reporting of Defects and Noncompliance"
- 2.3 American Society of Mechanical Engineers (ASME), Boiler and Pressure Vessel Code (B&PVC), Section III, Division 1, Article NA-8000, "Certificates of Authorization, Nameplates, Stamping, and Reports"
- 2.4 NRC Regulatory Guide 1.33, "Quality Assurance Program Requirements -Operation"
- 2.5 NRC Regulatory Guide 1.123, "Quality Assurance Requirements for Control Procurement of Items and Services for Nuclear Power Plants"
- 2.6 ANSI/ASME NQA-1-1986, "Quality Assurance Program Requirements for Nuclear Power Plants"
- 2.7 Operations Quality Assurance Manual (OQAM), Quality Assurance Directive (QAD)-1, "Organization"
- 2.8 OQAM Manual, QAD-2, "Quality Assurance Program"

3.0

DEFINITIONS

Not applicable to this directive.

4.0

RESPONSIBILITIES

Reference 2.7, (OQAM Manual, QAD-1, "Organization")

5.0

GENERAL

Not applicable to this directive.

6.0

DIRECTIVE

- 6.1 Approved, written procedures shall be established and implemented by the appropriate departments, consistent with the scope of their activities, to assure that purchased items and services, whether purchased directly or through contractors, comply with the provisions, as appropriate, for source evaluation, selection, objective evidence of quality furnished by the supplier, inspection and audit at the source, handling of nonconformances, and examination of items upon delivery.
- 6.2 Procedures shall be established to evaluate a supplier's ability to comply with the applicable QA Program requirements of Reference 2.1, (10CFR50 Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants") and to provide items or services in accordance with the requirements of the procurement documents. Responsibility for performing the evaluations, both technical and quality; the evaluation method; and the criteria for supplier acceptance shall be defined.
- 6.3 For Quality Assurance Program Applicable (QAPA) items and services, Engineering shall define the extent and the nature of applicability required to meet 10CFR50, Appendix "B" and RBS commitments.
- 6.4 The evaluation of suppliers is based on the suppliers' ability to comply with the quality requirements of 10CFR50, Appendix "B", which are applicable to the type of material, equipment, or service being procured, as determined by one or more of the following:
 - 6.4.1 A review of the records and performance of suppliers who have provided similar items/services of the type being procured.
 - 6.4.2 An audit of the supplier's facilities and QA Program to determine his capability to supply a product which meets the design, manufacturing, and quality requirements, or to provide a specified service. Results of supplier evaluations are documented and retained in accordance with applicable records management procedures.
 - 6.4.3 Vendors that hold valid ASME accreditation and Certificates of Authorization can be qualified to supply code items initially. These type vendors must hold a valid "N" type certificate that clearly identifies the scope of procurement authorized and the vendor address where the activity takes place. Also, the vendor must be audited early in the procurement process to verify programmatic implementation of the QA Program.
 - 6.4.4 Vendors holding valid ASME Quality Systems Certificates (QSCs) can be considered qualified to supply materials as a material supplier or material manufacturer provided an audit/review of third party audit is performed prior to acceptance of ordered material.
 - 6.4.5 Vendors are considered qualified to supply safety-related materials/services or commercial grade materials/services based on satisfactory audits/surveys

performed by other organizations such as utilities, or Nuclear Procurement Issues Committee (NUPIC) provided the audit results are satisfactory and they meet the requirements of the materials/services being procured.

- 6.4.6 Vendors are considered qualified to supply materials/services based on satisfactory audits performed by Entergy Operations. The audit results must be satisfactory and meet the requirements for the materials/services being procured.
- 6.5 Supplier evaluation results shall be documented and retained as a QA record. Any identified deficiency that impacts procurement activities shall be resolved early to prevent the deficiency from affecting the procured items' quality.
- 6.6 Vendors listed on the QSL are to be selected for procurement of material, equipment or services excepted as noted in 6.6.1 and 6.6.2.
 - 6.6.1 Suppliers infrequently used or used for one time procurements are not required to appear on the "Approved" Qualified Suppliers List (QSL) if the method of acceptance is by source verification and/or dedication of item by independent test (EPRI Method 1).
 - 6.6.2 Services by contractors which provide only technical guidance/support or which require work activities to be performed under the scope of River Bend's QA program may be furnished by contractors not listed on the QSL. The contractors work activities and personnel are controlled in accordance with approved procedures to assure that the contractor conforms to the procurement documents.
- 6.7 When source surveillance activities are performed, a vendor surveillance plan shall be developed in accordance with applicable QA procedures. The vendor surveillance plan shall identify the specific program controls (i.e., design, manufacturing, inspection, test, etc.) to be verified at the vendor's facility. The plan shall also identify characteristics and/or process to be witnessed and verified to support acceptance of the item. The plan shall include the method of surveillance, documentation required, and those responsible for implementing the plan.
- 6.8 Vendor source surveillances may be requested by the originator of the procurement documents, Procurement Engineering, or Supplier Quality Assurance if a need is identified (e.g., verification of quality characteristics cannot be accomplished at time of receipt inspection activities).
- 6.9 Source inspections or audits shall be performed as necessary to assure quality of an item. Source inspections or audits may not be necessary when the quality of the item can be verified by review of test reports, receipt inspection, or other approved means.
- 6.10 The effectiveness of the supplier's QA Program shall be assessed at a frequency consistent with the importance, complexity, quality of the item or service, and the quality performance of the supplier in accordance with Reference 2.5 (NRC Regulatory Guide 1.123, "Quality Assurance Requirements for Control Procurement of Items and Services for Nuclear Power Plants").

- 6.11 Spare or replacement parts/items shall have requirements established which ensure those properties or attributes important to the item are assured for the item. The requirements are established based on the intended applications of the item being procured to ensure that it is suitable for its intended application.
- 6.12 In cases where (during the Engineering evaluation) the original item or part is found to be commercial grade, as defined in Reference 2.6 (ANSI/ASME NQA-1-1986, "Quality Assurance Program Requirements for Nuclear Power Plants"), the spare and/or replacement part may be procured as commercial grade. The evaluation shall address dedication (the point a commercial grade item is accepted for use in a safety-related function) and deficiency reporting per Reference 2.2, (10CFR21, "Reporting of Defects and Noncompliance") becomes the responsibility of the party accepting the item) of the item or part. The guidance given in EPRI NP-5652 (as endorsed by the NRC in Generic Letter 89-02) is used to establish the method(s) applied in the dedication of the item.
- 6.13 Receipt inspection of the safety-related and QA Program Applicable (when required) supplier furnished items shall be performed in accordance with approved written procedures to assure the acceptability of the items prior to installation or use.
- 6.14 Records required to be furnished by the supplier shall be specified in the procurement documents. These records shall be available at the plant prior to installation or use of the item and shall be reviewed and accepted by Quality Control (QC) personnel.
- 6.15 When requested, suppliers shall furnish the following records to RBS.
- 6.15.1 Documentation certifying that the purchased material or equipment meets the specific procurement requirements (e.g., codes, standards, specifications); and,
 - 6.15.2 Supplier deviations that identify any procurement requirements which have not been met, together with a description of those nonconformances dispositioned "accept as is" or "repair".
- 6.16 Supplier's certificates of conformance, stating that specified requirements have been met by the item, shall be periodically evaluated, as appropriate, by audits, independent inspections and/or tests to assure they are valid.
- 6.17 Final acceptance of items by post installation test may be combined with other acceptance criteria (noted above) provided that:
- 6.17.1 It is difficult to verify the quality characteristics of the item without it being installed and in use; or
 - 6.17.2 The item requires an integrated system checkout or test with other items to verify its quality characteristics; or
 - 6.17.3 The item cannot demonstrate its ability to perform its intended function except when in use.

7.0

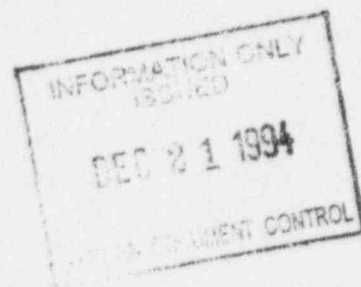
DOCUMENTATION

Not applicable to this directive.



ENTERGY

**RIVER BEND STATION
OPERATIONS QUALITY ASSURANCE MANUAL (OQAM)
*QUALITY ASSURANCE DIRECTIVE (QAD)**



***IDENTIFICATION AND CONTROL
OF MATERIALS AND ITEMS**

DIRECTIVE NUMBER:

***QAD-8**

REVISION NUMBER:

***10**

Effective Date:

*** SEP 09 1994**

7/20/88 Original 2822 7/29/94
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SEP 09 1994

SDC

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IDENTIFICATION AND CONTROL OF MATERIALS AND ITEMS

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1.0

PURPOSE AND SCOPE

- 1.1 This directive describes the measures and delineates the requirements established by River Bend Station (RBS) for the identification and control of safety-related material, parts, and components. This directive applies to all individuals and departments participating in the design, procurement, fabrication, receipt, storage, installation, operation, modification, and repair of safety-related items at RBS.
- 1.2 The requirements of this directive also apply to "Quality Assurance Program Applicable" items, services, and activities as described in Reference 2.4 (OQAM Manual, QAD-2, "Quality Assurance").

2.0

REFERENCES

- 2.1 Title 10, Code of Federal Regulations, Part 50 (10CFR50), Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants"
- 2.2 Nuclear Regulatory Commission (NRC) Regulatory Guide 1.33, "Quality Assurance Program Requirements - Operation"
- 2.3 Operations Quality Assurance Manual (OQAM), Quality Assurance Directive (QAD)-1, "Organization"
- 2.4 OQAM Manual, (QAD-2, "Quality Assurance Program")

3.0

DEFINITIONS

Not applicable to this directive.

4.0

RESPONSIBILITIES

Reference 2.3 (OQAM Manual, QAD-1, "Organization")

5.0

GENERAL

Not applicable to this directive.

6.0

DIRECTIVE

- 6.1 Procedures shall be established and implemented to provide for identification and control of safety-related materials, parts, and components, including piping sub-assemblies, to assure that only correct and accepted items are used and installed, and to assure identification is compatible with established programs of identification such as the Preliminary Service Inspection/Inservice Inspection Program.
- 6.2 The procedures developed shall address the various stages from design, procurement of the item through fabrication, shipping, receipt, storage, installation, operation, replacement, or repair.
- 6.3 The identification system established during the design and construction phases shall be maintained and expanded as necessary during the operational phase. The identification of items shall be maintained by part number, serial number, heat number, drawing identification number, or other appropriate means.

- 6.4 Physical identification shall be used to the maximum extent practical. Where physical identification is either impractical or insufficient, physical separation, procedural control or other appropriate means shall be employed.
- 6.5 Where identification marking is employed, the marking shall be clear, unambiguous and indeleible. The marking shall be applied in such a manner as not to affect the function or quality of the item.
- 6.6 Procedures shall assure that markings are transferred to each part of an item when subdivided and are not obliterated or hidden by surface treatment or coatings unless other approved means of identification are substituted.
- 6.7 When specified by codes, standards, procurement documents, or other requirements, identification shall provide traceability to appropriate documentation such as specifications, drawings, purchase orders, manufacturing and inspection documents, nonconformance reports, and certified mill test reports. The identification may be either on the item or on records directly and readily traceable to the item
- 6.8 Procedures shall provide, when necessary, for verification of identification at appropriate stages throughout fabrication, assembly, shipping, installation and use. This verification shall be accomplished, as applicable, and documented, prior to release for any of the above activities. Items may be conditionally released, under adequate procedural control, but shall not be relied upon to fulfill their safety-related function until verification and documentation is available. The Director - Nuclear Safety, or designee, will review and concur with conditional releases prior to final release.
- 6.9 Suppliers of safety-related material, parts and components are responsible for establishing a system of identification and control as required by the purchasing document which addresses the above outlined requirements.

7.0

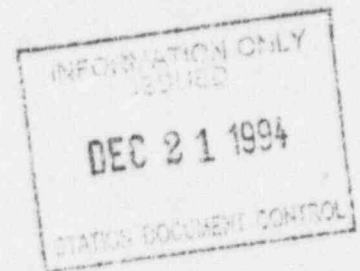
DOCUMENTATION

Not applicable to this directive.



ENTERGY

**RIVER BEND STATION
OPERATIONS QUALITY ASSURANCE MANUAL (OQAM)
*QUALITY ASSURANCE DIRECTIVE (QAD)**



***CONTROL OF SPECIAL PROCESSES**

DIRECTIVE NUMBER:

***QAD-9**

REVISION NUMBER:

***8**

Effective Date:

*** SEP 09 1994**

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SEP 09 1994

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CONTROL OF SPECIAL PROCESSES

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1.0

PURPOSE AND SCOPE

- 1.1 This directive describes the measures and delineates the requirements established by River Bend Station (RBS) for the control of special processes, including but not limited to, unique production or fabrication processes, inspection and test processes, welding (including brazing), soldering, heat treating, nondestructive examination, solidification of Radwaste and chemical cleaning. The requirements of this directive apply to all individuals and departments performing special processes on safety related structures, systems and components, either on or off site, for RBS.
- 1.2 The requirements of this directive also apply to "Quality Assurance Program Applicable" items, services and activities as described in Reference 2.4 (QAD-2).

2.0

REFERENCES

- 2.1 Title 10, Code of Federal Regulations Section 50 (10CFR50), Appendix B, Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants"
- 2.2 Nuclear Regulatory Commission (NRC) Regulatory Guide 1.33, "Quality Assurance Program Requirements"
- 2.3 Operations Quality Assurance Manual (OQAM) Quality Assurance Directive (QAD)-1, "Organization"
- 2.4 OQAM Manual, QAD-2, "Quality Assurance Program"

3.0

DEFINITIONS

Not applicable to this directive.

4.0

RESPONSIBILITIES

Reference 2.3 (OQAM Manual, QAD-1, "Organization")

5.0

GENERAL

Not applicable to this directive.

6.0

DIRECTIVE

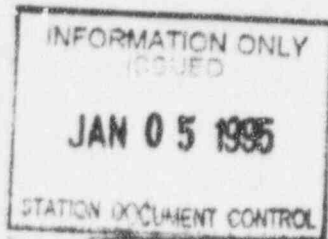
- 6.1 Any process that requires interim inprocess controls, in addition to final inspection, to assure quality shall be considered a special process. Special processes include, but are not limited to welding, brazing, heat treating, chemical cleaning, and nondestructive examination.
- 6.2 Procedures shall be developed and implemented by the responsible departments to assure control of special processes.
- 6.3 Special processes shall be accomplished under controlled conditions in accordance with applicable codes, standards, specifications, or other special requirements.

- 6.4 Special processes shall be performed by personnel, equipment, and procedures that have been qualified and certified in accordance with applicable codes, standards, specifications, approved QA Program or other special requirements.
- 6.5 Special process procedures shall provide for the documentation of special process activities.
- 6.6 Special process procedures and qualification records shall be established, filed, maintained, and available for verification.
- 6.7 For special processes not covered by existing codes or standards, or where the item's quality requirements exceed the requirements of established codes or standards, the necessary qualifications of personnel, procedures, and equipment shall be defined and documented.
- 6.8 Departments specifying quality requirements in procurement documents for items or services involving special processes shall specify the applicable requirements of this directive on the vendor and any subtier supplier.
- 6.9 Special process control procedures shall be submitted by suppliers for RBS review and concurrence, as specified in the procurement documents.

7.0

DOCUMENTATION

Not applicable to this directive.



RIVER BEND STATION
OPERATIONS QUALITY ASSURANCE MANUAL (OQAM)
*QUALITY ASSURANCE DIRECTIVE (QAD)

***INSPECTION PROGRAM**

DIRECTIVE NUMBER:

*QAD-10

REVISION NUMBER:

*12

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* 1/04/1995

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JAN 05 1995

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INSPECTION PROGRAM

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1.0

PURPOSE AND SCOPE

- 1.1 This directive describes the measures and delineates the requirements established by River Bend Station (RBS) for the development and implementation of a program for inspection activities. This program verifies conformance with documented instructions, procedures, and drawings for accomplishing activities affecting the quality of safety-related structures, systems and components.
- 1.2 The requirements of this directive also apply to "Quality Assurance Program Applicable" items, services and activities as described in Reference 2.7 (OQAM Manual, QAD-2, "Quality Assurance Program").

2.0

REFERENCES

- 2.1 Title 10 of the Code of Federal Regulations, Part 50 (10CFR50), Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants"
- 2.2 American Society of Mechanical Engineers (ASME) Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components"
- 2.3 NRC Regulatory Guide 1.33, "Quality Assurance Program Requirements -Operation"
- 2.4 NRC Regulatory Guide 1.58, "Qualification of Nuclear Power Plant Inspection, Examination, and Testing Personnel"
- 2.5 RBS Updated Safety Analysis Report (USAR)
- 2.6 Operations Quality Assurance Manual (OQAM) Quality Assurance Directive (QAD)-1, "Organization"
- 2.7 OQAM Manual, QAD-2, "Quality Assurance Program"

3.0

DEFINITIONS

- 3.1 Hold points - Those designated points that work shall not progress beyond until released by the designated authority.
- 3.2 Witness points - Those designated points that shall allow work to progress beyond provided notification has been given.
- 3.3 Notification points - Those points or steps in a procedure, activity or process, which require some type of inspection verification action. Notification points must be acknowledged by the designated authority. Hold points and witness points are notification points, and will be referred to as notification points.

4.0

RESPONSIBILITIES

Reference 2.6, OQAM Manual, QAD-1, "Organization"

5.0

GENERAL

Not applicable to this directive.

REQUIREMENTS

- 6.1 Inspection requirements shall be included, as appropriate, in specifications, drawings, procedures, instructions, or other documents which prescribe and control activities affecting safety-related structures, systems, components and QA Program Applicable Systems.
 - 6.1.1 Inspection requirements shall be specified by the responsible departments in accordance with approved written procedures, which verify that the activities are accomplished in accordance with the specifications, drawings, procedures, or instructions.
- 6.2 Procedures provided for identification of items which have satisfactorily passed required inspections. In cases where required documentary evidence that inspections have been satisfactorily completed is not available, the associated equipment or material is considered nonconforming. When documentary evidence is not available, the affected systems shall be considered to be inoperable and reliance shall not be placed on such systems to fulfill their intended safety functions.
- 6.3 The Supervisor - Quality (Quality Control) has the authority to initiate Stop Work Actions through designated channels and control further processing, delivery or installation of nonconforming materials and components identified through the inspection process. This authority is described in department procedures.
- 6.4 Inspection procedures, instructions, and/or checklists shall be prepared, for inspection activities. When required by applicable codes, standards and design documentation, inspection requirements for maintenance, design modification, and testing activities affecting a safety-related structure, system, or component, shall be prepared either as a separate document or as an integral part of a work instruction. These procedures, instructions and checklists shall be available for use, along with the necessary drawings and specifications, prior to performing the inspection, and shall include the following:
 - 6.4.1 Approval of Inspection Plan or Checklist;
 - 6.4.2 Identification of characteristics and activities to be inspected;
 - 6.4.3 A description of the method of inspection;
 - 6.4.4 Identification of hold/notification/witness points;
 - 6.4.5 Accept/reject criteria;
 - 6.4.6 Identification of applicable procedures, drawings, specifications, and revisions thereto;
 - 6.4.7 The identity of the inspector, data recorder and person approving inspection results including the results of the inspection operations shall be recorded;
 - 6.4.8 Necessary measuring and test equipment, including range and accuracy requirements; and,

- 6.4.9 A method of identifying, reporting, segregating, and disposing of a nonconforming item when found.
- 6.5 Inspections shall be performed by trained and qualified personnel who are independent of those individuals who performed or directly supervised the activity being inspected.
- 6.5.1 Inspections of operating activities, may be conducted by second-line supervisory personnel or by other qualified personnel not assigned first-line supervisory responsibility for conduct of the work. When the inspector is within the same group as the individual performing the work, the following controls shall be met:
1. The activity is routine maintenance, normal plant operation and selected technical services. This does not include modifications and nonroutine maintenance; and
 2. The quality of the work can be demonstrated by a functional test when the activity involves breaching a pressure retaining boundary.
 3. Inspection procedures, training, qualification, and certification criteria for inspection personnel are reviewed and found acceptable by the Manager - Quality Assurance.
 4. Independence of inspection personnel performing inspection of "in-line" functions is reviewed and found acceptable by the Manager - Quality Assurance prior to initiation of the inspection process.
- 6.6 Personnel qualifications and certifications shall comply with the applicable codes, standards, or licensing requirements, and they shall be documented, filed, retained, and updated. Personnel performing inspections which require specialized qualifications or skills shall be qualified in accordance with the applicable codes, standards, or licensing requirements. This qualification shall be documented and updated in accordance with procedure requirements. Inspectors shall be qualified through experience, education and RBS approved vendor training programs. (Reference 2.4, Regulatory Guide 1.58 [ANSI N45.2.6-1978]).
- 6.7 When direct inspection of processed material or products is impossible, indirect control by monitoring processing methods, equipment, and personnel shall be used. Where necessary, inspection and process monitoring shall be used if control is inadequate without both.
- 6.8 Modifications, repairs, rework and replacements shall be inspected in accordance with the original design and inspection requirements or a documented engineering approved alternative.
- 6.9 For components which are addressed in the ASME B&PV Code, Section XI - Division 1, inspection requirements are identified in the Inservice Inspection (ISI) Plan. Implementation of these inspection requirements are addressed using detailed procedures and instructions.

- 6.9.1 The ISI Plan shall set forth the guidelines of inservice inspections and identify the following:
1. Components that fall under the jurisdiction of ASME B&PV Code, Section XI - Division 1.
 2. Methods of examination being performed.
 3. Time of inspection (Refueling Outage).
 4. Procedures being utilized for inspections.
 5. Provisions for assuring quality work, examinations, and tests.
 6. Supplemental equipment (i.e., ultrasonic testing calibration blocks) that is used for inservice inspections, as determined by the responsible NDE Level III.
 7. Requirements for repairs and replacements of ASME XI components.
 8. Requests for Relief, where inservice inspections are impractical or cannot be obtained.
- 6.9.2 Inservice inspection requirements may be altered or changed by documentation (i.e., Regulatory Guides, NUREGs, Generic Letters) issued by the governing authority having jurisdiction at River Bend Station.
- 6.10 Notification points shall be specified, as appropriate, in drawings, specifications, procurement documents, procedures, or instructions. Basis for establishment of notification points shall include, but not be limited to:
- 6.10.1 Whether an item is impossible or very difficult to verify after a process is completed,
 - 6.10.2 When a test or process can or should not be repeated due to possible undesirable effects, or
 - 6.10.3 When the activity is required to be verified by QC and/or Authorized Nuclear Inservice Inspector (ANII) in accordance with applicable codes.
- 6.11 Plant procedures and instructions addressing maintenance, modification, repairs, rework, or replacements shall be reviewed by qualified personnel, other than the preparer, who have the knowledge required to determine the need for inspection. The review also determines that the necessary inspection requirement methods and acceptance criteria have been identified.
- 6.12 Inspection data and results shall be evaluated by personnel responsible for the inspection activity to verify:
- 6.12.1 Completeness of results;
 - 6.12.2 Achievement of inspection objectives;

- 6.12.3 Operational proficiency of equipment and systems;
 - 6.12.4 Identification of additional inspections required;
 - 6.12.5 Identification of necessary changes to installation or inspection procedures;
 - 6.12.6 That deviations and nonconformances, their cause and any corrective actions completed or planned are documented.
- 6.13 Inspection records shall be identified as such and shall be retrievable. All inspection documentation shall be kept in sufficient detail to provide adequate confirmation of the inspection program.

7.0

DOCUMENTATION

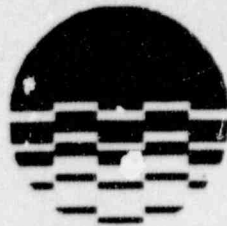
Not applicable to this directive.

ATTACHMENT - 1 (PROCEDURE CROSS-REFERENCE SHEET [PROCEDURES])

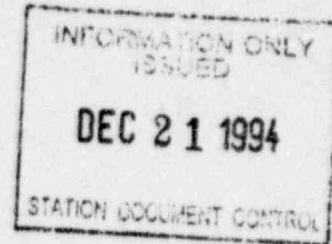
PROCEDURE CROSS-REFERENCE SHEET (PROCEDURES)

PROCEDURE NO. QAD-10

REVISION 12[illegible]



ENTERGY



**RIVER BEND STATION
OPERATIONS QUALITY ASSURANCE MANUAL (OQAM)
*QUALITY ASSURANCE DIRECTIVE (QAD)**

***TEST CONTROL**

DIRECTIVE NUMBER:

***QAD-11**

REVISION NUMBER:

***12**

Effective Date:

*** SEP 09 1994**

7/29/94 2822

PREPARER

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VICE PRESIDENT - OPERATIONS

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(Signature/KCN/Date)

RECEIVED

SEP 09 1994

TEST CONTROL

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1.0

PURPOSE AND SCOPE

- 1.1 This directive describes the measures and delineates the requirements established by River Bend Station (RBS) for development and implementation of a test program to demonstrate that safety-related structures, systems, and components will perform satisfactorily in service. This directive applies to all individuals and departments performing safety-related testing activities associated with RBS.
- 1.2 The requirements of this directive also apply to "Quality Assurance Program Applicable" items, services and activities as described in Reference 2.6 (OQAM Manual, QAD-2, "Quality Assurance Program").

2.0

REFERENCES

- 2.1 Title 10, Code of Federal Regulations, Section 50 (10CFR50), Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants"
- 2.2 10CFR50.59, "Changes, Tests and Experiments"
- 2.3 NRC Regulatory Guide 1.33-Rev. 2, "Quality Assurance Program Requirements - Operation"
- 2.4 River Bend Station (RBS) Technical Specifications, Section 1 through 6
- 2.5 Operations Quality Assurance Manual (OQAM), Quality Assurance Directive (QAD)-1, "Organization"
- 2.6 OQAM Manual, (QAD)-2, "Quality Assurance Program"

3.0

DEFINITIONS

Not applicable to this directive.

4.0

RESPONSIBILITIES

Reference 2.5, (OQAM Manual, QAD-1, "Organization")

5.0

GENERAL

Not applicable to this procedure.

6.0

DIRECTIVE

- 6.1 A test program shall be established and implemented to demonstrate that structures, systems and components will perform satisfactorily in service. The testing shall be performed in accordance with approved written test procedures which incorporate or reference the requirements and acceptance limits contained in applicable design documents.
- 6.2 The responsible departments shall implement all required testing, including as appropriate, prototype qualification tests, commercial grade dedication verification tests, proof tests prior to installation, surveillance tests, refueling startup tests, and tests following maintenance and modifications.

- 6.3 Surveillance testing during the operational phase shall be performed to provide assurance that failures or substandard performance do not remain undetected and that the required operability of safety-related systems and equipment is maintained. A master surveillance testing schedule shall be established to reflect the status of all planned in-plant surveillance tests and inspections. Frequency of surveillance tests and inspections shall meet requirements of Reference 2.4 (RBS Technical Specifications)
- 6.4 Tests performed following plant modifications, repairs, or replacement shall be conducted in accordance with the original design and testing requirements, or a documented engineering approved alternative. Testing shall be sufficient to demonstrate the acceptability of the modification or change and that the safety of operations is not reduced.
- 6.5 Written test procedures shall incorporate or reference the following as appropriate:
- 6.5.1 The requirements and acceptance limits contained in applicable design and procurement documents;
 - 6.5.2 Instructions for performing the test;
 - 6.5.3 A description of test objectives;
 - 6.5.4 Test prerequisites, such as calibrated instrumentation, adequate and appropriate test equipment including range and accuracy, completeness of the item to be tested, suitable and controlled environmental conditions, and provisions for data collection and storage.
 - 6.5.5 Inspection hold/notification points for witness by designated personnel (RBS, Contractor and/or Authorized Nuclear Inservice Inspector);
 - 6.5.6 Limiting conditions and any conditions to be used to simulate normal or abnormal operating conditions;
 - 6.5.7 Accept/reject criteria ;
 - 6.5.8 Methods of documenting or recording test data and results;
 - 6.5.9 Qualification requirements of personnel performing tests.
- 6.6 Test procedures which involve an unreviewed safety question shall be reviewed by the FRC to assure compliance with these requirements.
- 6.7 The NRB shall review the safety evaluations for tests or experiments completed under the provisions of 10CFR50.59 to verify that such actions did not constitute an unreviewed safety question. All proposed tests and experiments which involve an unreviewed safety question shall also be reviewed by the NRB.
- 6.8 Test procedures shall provide for the test director/test engineer to sign the procedure indicating that applicable prerequisites have been satisfied.

- 6.9 Test results shall be documented, evaluated, and their acceptability determined by a qualified individual or group to assure compliance with design and performance requirements. The evaluation shall determine the following:
- 6.9.1 Recorded data reveals the adequacy of the equipment or system to meet the specified requirements in the acceptance criteria; and
 - 6.9.2 Any nonconforming or unsatisfactory conditions are reported, properly dispositioned, and corrected.
- 6.10 Data report forms completed during the test shall provide for identification of the person responsible for conducting the test, identification of the data recorder, and the date or period when the test was conducted.

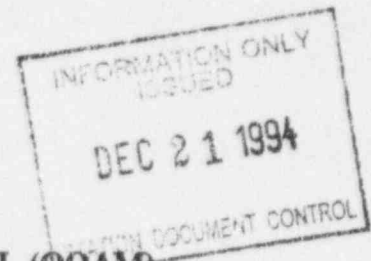
7.0 **DOCUMENTATION**

Not applicable to this directive.



ENTERGY

RIVER BEND STATION
OPERATIONS QUALITY ASSURANCE MANUAL (OQAM)
*QUALITY ASSURANCE DIRECTIVE (QAD)



***CONTROL OF MEASURING AND TEST EQUIPMENT**

DIRECTIVE NUMBER:

*QAD-12

REVISION NUMBER:

*9

Effective Date:

* SEP 09 1994

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PREPARER
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MEASURING AND TEST EQUIPMENT

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1.0

PURPOSE AND SCOPE

- 1.1 This directive describes the measures and delineates the requirements established by RBS to control calibration and maintenance of Measuring and Test Equipment (M&TE) used in activities affecting safety-related structures, systems and components to assure the required accuracy of such equipment. This directive applies to all M&TE which is used to calibrate, measure, gauge, test, inspect, or control.
- 1.2 The requirements of this directive also apply to "Quality Assurance Program Applicable" items, services and activities as described in Reference 2.4 (QAD-2, "Quality Assurance Program").
- 1.3 M&TE includes instruments, calibrated tools, gauges, fixtures, reference standards and nondestructive test equipment, as applicable. M&TE does not include permanently installed operating equipment or test equipment used for preliminary checks where accuracy is not required (e.g., continuity checking instruments). Permanently installed plant equipment requiring calibration shall be calibrated in accordance with approved written procedures using controlled M&TE.
- 1.4 Personal tools, gauges, and instruments, if used for acceptance testing, will be controlled in accordance with this program.

2.0

REFERENCES

- 2.1 10CFR50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants"
- 2.2 NRC Regulatory Guide 1.33, "Quality Assurance Program Requirements - Operation"
- 2.3 Operations Quality Assurance Manual (OQAM), Quality Assurance Directive (QAD)-1, "Organization"
- 2.4 OQAM Manual, QAD-2, "Quality Assurance Program"

3.0

DEFINITIONS

Not applicable to this directive.

4.0

RESPONSIBILITIES

Reference 2.3, (OQAM Manual, QAD-1, "Organization")

5.0

GENERAL

Not applicable to this directive.

6.0

DIRECTIVE

- 6.1 Departments performing activities which require the use of M&TE (such as instruments, control devices, gauges, calibrated tools, fixtures, calibration standards, and nondestructive testing equipment) shall establish and implement procedures to control the calibration, maintenance, storage and use of such equipment.

- 6.2 Approved, written procedures shall assure that the M&TE used for measurements, tests, or calibrations is on the proper range and type and is controlled, calibrated, adjusted, and maintained at specific intervals, or prior to use, to assure necessary accuracy.
- 6.3 The method and interval of calibration shall be established for each item of M&TE, and shall be based on the type of equipment, its stability, reliability characteristics, required accuracy and other conditions affecting calibration.
- 6.4 The method and interval of calibration of permanently installed plant equipment requiring calibration shall be established. Equipment shall be labeled, tagged or otherwise controlled in accordance with approved, written procedures to assure that calibration intervals are not exceeded.
- 6.5 Procedures shall establish methods for the positive identification of all M&TE included in the calibration program; documentation of calibration status; and traceability to documented calibration test data.
- 6.6 Calibration procedures shall include, as a minimum:
 - 6.6.1 The identity of the item to be calibrated including calibration frequency;
 - 6.6.2 The identity of the technician conducting the calibration;
 - 6.6.3 Calibration equipment and reference standards to be used;
 - 6.6.4 Checks, tests, measurements, and acceptance tolerances;
 - 6.6.5 Sequence of operation;
 - 6.6.6 Special instructions, when necessary;
 - 6.6.7 Means for traceability between test equipment and calibration test data; and,
 - 6.6.8 The type of data that is to be recorded, and when it is to be recorded.
- 6.7 M&TE requiring calibration shall be labeled, tagged, or otherwise controlled in accordance with approved written procedures to assure that approved calibration intervals are not exceeded. Labels shall indicate the date of last calibration, by whom it was calibrated, and when the next calibration is due. When labeling is not practical, an identifying code shall be used. If neither method is practical, procedures shall provide for monitoring of records to assure control.
- 6.8 Calibration of M&TE shall be accomplished using calibration standards which have an accuracy of at least four times the required accuracy of the equipment being calibrated. A greater uncertainty may be used when limited by the "state-of-the-art". Where it is impractical to comply with the above requirement, a calibration standard of lesser accuracy shall be allowed provided that the basis and justification are documented and authorized by responsible management; it can be shown to be within tolerance; and it is adequate for the requirements of the equipment being calibrated.
- 6.9 Calibration standards should have greater accuracy than other standards being calibrated. The accuracy ratio between RBS Calibration Standards may be on a 1:1

basis for calibrations performed (1) in the RBS Standards Laboratory, or (2) between laboratory standards and like standards of an approved laboratory or vendor or (3) the National Institute of Standards Technology. Calibration standards with the same accuracy may be used if it can be shown to be adequate for the requirements and the basis of acceptance is documented and authorized by the Measuring and Test Equipment (M&TE) Supervisor.

- 6.10 Standards utilized to calibrate M&TE or other standards shall be traceable to nationally recognized standards or accepted values of natural physical constants. If no national standards exist, the basis for calibration shall be documented.
- 6.11 M&TE and standards found to be out of calibration shall be identified as out-of-tolerance and removed from service. Equipment tested or calibrated by the out-of-tolerance M&TE or standards since the last calibration shall be identified and a documented investigation performed to either re-establish the acceptability of the equipment or to confirm they are nonconforming. The results of such investigations are approved by the responsible supervisor.
- 6.12 M&TE and standards which have been subjected to possible damage shall be identified as out-of-tolerance and removed from service until corrective measures are taken.
- 6.13 M&TE and standards repeatedly found to be out of calibration shall be identified out-of-tolerance, removed from service, and repaired or replaced.
- 6.14 M&TE and standards shall be controlled to assure consistent results of acceptable accuracy. Control shall include, as appropriate:
 - 6.14.1 Environmental and handling controls;
 - 6.14.2 Training and qualification of personnel;
 - 6.14.3 Checking calibration status before use;
 - 6.14.4 Documenting and recalibrating damaged M&TE and reference standards;
 - 6.14.5 Limiting use to authorized personnel; and,
 - 6.14.6 Accept/reject criteria.
- 6.15 The status of items under the calibration program shall be recorded. Records shall be maintained to show that established schedules and procedures for calibration of M&TE and reference standards have been followed. The records shall contain a history of calibration or others means of control for each item, showing the calibration interval, date of last calibration, and the conformance or nonconformance to required tolerance prior to and following adjustments.
- 6.16 Records shall identify the equipment or reference standard to which the records apply, the procedure or instruction followed in performing the calibration, the identity of the person performing the calibration, and the calibration date.
- 6.17 Procedures, calibration records, personnel qualifications, and nonconformance reports shall be retained and maintained as required by codes, standards, and specifications.

7.0

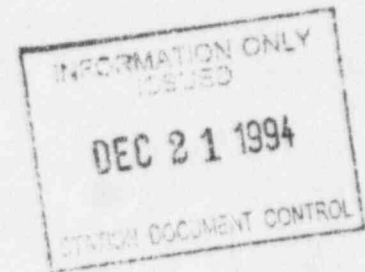
DOCUMENTATION

Not applicable to this directive.

*G12.1.3
(JOB BOOK NO.)



ENTERGY



**RIVER BEND STATION
OPERATIONS QUALITY ASSURANCE MANUAL (OQAM)
*QUALITY ASSURANCE DIRECTIVE (QAD)**

****HANDLING, STORAGE, SHIPPING
AND PRESERVATION***

DIRECTIVE NUMBER:

***QAD-13**

REVISION NUMBER:

***11**

Effective Date:

*** SEP 09 1994**

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APPROVALS: 6/0309/8-19-94

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RECEIVED
SEP 09 1994

***INDEXING INFORMATION**

HANDLING, STORAGE, SHIPPING AND PRESERVATION

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1.0

PURPOSE

- 1.1 This directive describes the measures and delineates the requirements for handling, storage and shipping (including cleaning, packaging and preservation) of safety-related items to prevent damage or deterioration. This directive applies to all individuals and departments performing cleaning, handling, packaging, preservation, shipping and storage activities for safety-related structures, systems, and components.
- 1.2 The requirements of this directive apply to off-site handling, storage and shipping of safety related items which are conducted under the auspices of the River Bend Station (RBS) QA Program and to on-site activities at RBS.
- 1.3 The requirements of this directive also apply to "Quality Assurance Program Applicable" items, services and activities as described in Reference 2.5 (OQAM Manual, QAD-2, "Quality Assurance Program").

2.0

REFERENCES

- 2.1 Title 10, Code of Federal Regulations, Section 50 (10CFR50), Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants"
- 2.2 NRC Regulatory Guide 1.33, Rev. 2 "Quality Assurance Program Requirements - Operation"
- 2.3 NRC Regulatory Guide 1.38, Rev. 2 "Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage and Handling of Items for Water Cooled Nuclear Power Plants"
- 2.4 Operations Quality Assurance Manual (OQAM), Quality Assurance Directive (QAD)-1 "Organization".
- 2.5 OQAM Manual, QAD-2 "Quality Assurance Program"

3.0

DEFINITIONS

Not applicable to this directive.

4.0

RESPONSIBILITY

Reference 2.4, (OQAM Manual, QAD-1, "Organization")

5.0

GENERAL

Not applicable to this directive.

6.0

DIRECTIVE

- 6.1 Procedures shall be established to control handling, storage, receiving and shipping, including cleaning, packaging and preservation of safety-related materials and QA Program Applicable components and systems in accordance with the RBS position on Reg. Guide 1.38 (Reference 2.3), by appropriately trained personnel. The procedures may be developed to cover generic classifications of items which require equivalent levels of protection and control during handling, storage and shipping.

- 6.2 Material control and storage procedures shall establish a classification system based on levels of control. The levels established shall be based on protective measures required to prevent damage, deterioration, or contamination of the item. These procedures shall address the applicable design and specification requirements, the applicable codes and standards, regulatory requirements and the manufacturer's recommendations as approved by the Director - Engineering or designee. Surveillance or inspection activities necessary to verify compliance with the established criteria shall be included in the QA/QC department procedures. Documentation of the verification activities shall be required.
- 6.3 When required, by design specifications, codes, standards or procurement documents, procedures for material control and storage developed by the appropriate departments shall cover the various stages of the equipment, component, or part from fabrication to incorporation into the plant.
- 6.4 Packaging and preservation procedures shall provide assurance of adequate protection against corrosion, contamination, physical damage, or any effect which would degrade the material, equipment, component or part, or cause it to deteriorate during shipping, handling, or storage. Special protective environments, special coverings, inert gas atmosphere, coatings, seals, segregation, allowable moisture content and temperature shall be specified, as appropriate, and their existence verified and documented.
- 6.5 Procedures shall provide assurance that necessary cleaning operations are performed prior to packaging, storage, and installation. The level of cleanliness required and verification and documentation requirements shall be specified in the procedure.
- 6.6 Procedures shall be provided to assure that proper marking and labeling of items and containers is accomplished to provide identification, indication of the presence of special environments, or the need for special controls during packaging, shipment, and storage.
- 6.7 Handling procedures shall be provided prior to the time of need for items that require special handling. Special handling tools and equipment shall be provided and controlled to ensure safe, adequate handling. These tools and equipment shall be maintained, inspected and tested in accordance with approved written procedures at established intervals to ensure their reliability and availability.
- 6.8 Storage procedures shall provide for methods of storage and the control of items in storage which shall minimize the possibility of damage or deterioration. Special storage requirements for chemicals, reagents, lubricants, flammables, hazardous materials and other consumables shall be specified in accordance with manufacturers recommendations and regulatory requirements. Periodic inspections of storage areas shall be performed and documented to verify compliance with storage procedures.
- 6.9 These program requirements are applicable to fabrication, manufacturing, and installation. Suppliers are responsible for imposing the applicable requirements, as specified in the procurement documents, on their internal operations and on vendors and contractors performing work within the scope of their activities. The supplier ensures program implementation through audits or surveillances.

- 6.10 Procedures shall provide for the controlled release of safety-related and QA Program Applicable items from storage for shipment or installation, and the verification and documentation thereof.

7.0

DOCUMENTATION

Not applicable to this directive.

PROCEDURE CROSS-REFERENCE SHEET (PROCEDURES)

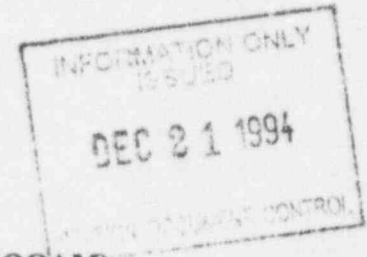
PROCEDURE NO. QAD-13

REVISION 11[illegible]



ENTERGY

**RIVER BEND STATION
OPERATIONS QUALITY ASSURANCE MANUAL (OQAM)
*QUALITY ASSURANCE DIRECTIVE (QAD)**



***INSPECTION, TEST AND OPERATING STATUS**

DIRECTIVE NUMBER:

***QAD-14**

REVISION NUMBER:

***12**

Effective Date:

*** SEP 09 1994**

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APPROVALS: 6/0304/8-18-94

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INSPECTION, TEST AND OPERATING STATUS

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1.0

PURPOSE AND SCOPE

- 1.1 This directive describes the measures and delineates the requirements for identifying and controlling the inspection, test, and operating status of safety-related structures, systems, and components to assure that required inspections and tests are satisfactorily performed to prevent inadvertent use or operation of items which have not passed required inspections and test. The requirements of this directive apply to all individuals and departments performing activities affecting these structures, systems and components at River Bend Station.
- 1.2 The requirements of this directive also apply to "Quality Assurance Program Applicable" items, services and activities as described in Reference 2.4 (OQAM Manual, QAD-2, "Quality Assurance Program").

2.0

REFERENCES

- 2.1 Title 10, Code of Federal Regulations, Part 50 (10CFR50) Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants".
- 2.2 NRC Regulatory Guide 1.33, "Quality Assurance Program Requirements -Operation"
- 2.3 Operations Quality Assurance Manual (OQAM) Quality Assurance Directive (QAD)-1, "Organization"
- 2.4 OQAM Manual, QAD-2, "Quality Assurance Program"
- 2.5 OQAM Manual, QAD-15, "Nonconforming Materials or Items"
- 2.6 RBS Technical Specifications

3.0

DEFINITIONS

Not applicable to this directive.

4.0

RESPONSIBILITIES

Reference 2.3, (OQAM Manual, QAD-1, "Organization")

5.0

GENERAL

Not applicable to this directive.

6.0

DIRECTIVE

- 6.1 RBS departments responsible for fabrication, storage, installation, test and operation of safety-related and QA Program Applicable structures, systems and components shall establish and implement procedures to assure that the inspection, test and operating status of such items are identified, controlled and made known to the affected departments.
- 6.2 Administrative and/or section procedures shall require that the status of inspections and tests be indicated by the use of markings, such as stamps, tags, labels, routing

cards or other suitable means. "Suitable means" include identification numbers which are traceable to records of the inspections and tests.

- 6.3 Procedures shall identify status indicators to be used and provide for control, including responsibility and authority for application and removal.
- 6.4 Bypassing of required inspections, tests or other critical operations shall generally not be permitted. To assure control in those situations where bypassing required inspections, tests, or other critical operations may be required, engineering and plant administrative procedures shall be developed to describe the process. This process shall include review and concurrence by the Director - Nuclear Safety, or designee, of the bypass justification prior to implementation. When prior review is not possible the review will be performed after the fact and any deficiencies identified and corrected in accordance with the appropriate procedures. Where necessary to preclude inadvertent bypassing of required inspections and tests, the procedures shall provide for the identification of items which require inspections or tests.
- 6.5 Procedures shall be provided for evaluating and documenting the impact of the performance of operational or test activities that are performed out of sequence to ensure system integrity is not compromised.
- 6.6 In those cases where documentation is not available to confirm that an item has passed required inspections and tests or has been properly bypassed, the item must be considered nonconforming and identified as such, until the discrepancy is resolved. Affected systems shall be considered inoperable and measures required to return the system to an operable status shall be in accordance with Reference 2.6 (RBS Technical Specifications).
- 6.7 Administrative and/or section procedures shall provide for identification of the operating status of equipment to maintain personnel and reactor safety and to prevent inadvertent or unauthorized operation. These procedures shall require control measures such as locking or tagging to secure and identify equipment in a controlled status. These procedures shall require independent verifications, where appropriate, to ensure that necessary measures, such as equipment tagging, have been implemented correctly.
- 6.8 Temporary modifications, such as temporary bypass lines, electrical jumpers, lifted electrical leads, and temporary trip point settings, shall be controlled by approved written procedures, which shall include requirements for documented independent verification. A log shall be maintained of the current status of such temporary modifications.
- 6.9 Nonconforming items or services shall be identified and controlled in accordance with Reference 2.5 (OQAM Manual, QAD-15, "Nonconforming Materials or Items").

7.0

DOCUMENTATION

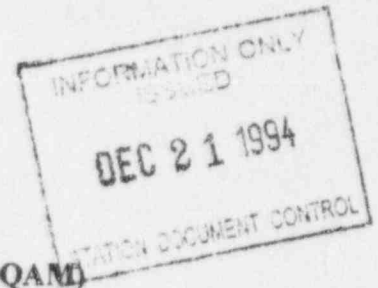
Not applicable to this directive.

REVISION 12[illegible]



ENTERGY

**RIVER BEND STATION
OPERATIONS QUALITY ASSURANCE MANUAL (OQAM)
*QUALITY ASSURANCE DIRECTIVE (QAD)**



***NONCONFORMING MATERIALS OR ITEMS**

DIRECTIVE NUMBER:

***QAD-15**

REVISION NUMBER:

***14**

Effective Date:

*** SEP 09 1994**

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SEP 09 1994

NONCONFORMING MATERIALS OR ITEMS

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1.0

PURPOSE AND SCOPE

- 1.1 This directive describes the measures and delineates the responsibilities established by River Bend Station (RBS) to control items, services, and activities which do not conform to specified requirements. The requirements of this directive apply to all individuals and departments performing activities which affect safety-related structures, systems, and components at RBS.
- 1.2 The requirements of this directive also apply to "Quality Assurance Program Applicable" items, services and activities as described in Reference 2.5 (OQAM, Manual, QAD-2, "Quality Assurance Program").

2.0

REFERENCES

- 2.1 Title 10, Code of Federal Regulations, Section 21 (10CFR21), "Reporting of Defects and Noncompliance"
- 2.2 10CFR50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants"
- 2.3 Nuclear Regulatory Commission (NRC) Regulatory Guide 1.33, "Quality Assurance Program Requirements - Operation", Revision 2
- 2.4 Operations Quality Assurance Manual (OQAM), Quality Assurance Directive (QAD)-1, "Organization"
- 2.5 OQAM Manual, QAD-2, "Quality Assurance Program"

3.0

DEFINITIONS

Not applicable to this directive.

4.0

RESPONSIBILITIES

Reference 2.3, (OQAM Manual, QAD-1, "Organization")

5.0

GENERAL

Not applicable to this directive.

6.0

DIRECTIVE

- 6.1 The responsible departments shall establish and implement procedures to control nonconforming safety-related and QA Program Applicable items (including computer codes), services, and activities. These procedures shall provide for identification, documentation, review, segregation if practical, disposition, and notification to affected departments.
- 6.2 Procedures shall provide for the designation of the individuals or departments responsible for the disposition and approval of nonconforming items, services, or activities, including review.

- 6.3 Procedures shall require that nonconforming items, services and activities be documented, and that such documentation include a clear identification of the nonconformance, the appropriate disposition including the approval signature, and the applicable corrective action requirements. Dispositions of nonconforming items shall be approved by Engineering.
- 6.4 Procedures shall provide for the control of further processing, delivery or installation of a nonconforming item or suspension of a nonconforming service or activity, pending a decision on its disposition.
- 6.5 To prevent inadvertent use or installation, a nonconforming item shall be identified by marking or tagging and segregated, where practicable. If physical segregation is not practicable, identification by marking or tagging shall be acceptable. Where marking or tagging is not feasible, nonconforming items may be controlled by the use of appropriate documentation that is traceable to the item. Markings or tags shall be removed after resolution of the nonconforming condition. Authority to remove nonconforming identification tags, etc., is assigned to the Director - Nuclear Safety, or designee, and shall be described in the nonconformance program procedures.
- 6.6 Nonconforming items, other than consumables, may be conditionally released for installation and testing. Point of use traceability for conditionally released items will be controlled by Quality Control through utilization of a Conditional Release process. In no case will the Conditionally Released Item be relied upon to perform its safety-related function. If the nonconformance cannot be resolved, the item shall be removed and replaced. Controls in departmental procedures will address this conditional release process, and will assure that applicable procedural and administrative aspects of the Quality Assurance Program are fulfilled.
- 6.7 Nonconforming items shall be reviewed and dispositioned in accordance with approved written administrative procedures. Items may be dispositioned in the following ways: Use-as-is, reject, rework or repair. Rejectable items may be scrapped, reclassified or returned to the supplier.
- 6.8 The acceptability of a "repaired" or "reworked" nonconforming item shall be verified by reinspection or retest. The reinspection or retest shall be in accordance with the original inspection or test requirements or by an approved method which is equivalent to the original method. Inspection, testing, rework, and repair shall be documented.
- 6.9 For items dispositioned "use-as-is" or "repair", a description of the change, waiver, or deviation, including the technical justification, shall be documented by Engineering in accordance with the applicable nonconformance program procedure. Documentation verifying the acceptability and approval of such items shall be required. Nonconformance reports dispositioned "use-as-is" or "repair" shall be traceable to the required inspection records.
- 6.10 Supplier deviations for nonconformances with "use-as-is" or "repair" dispositions shall be submitted by contractors or suppliers and shall be reviewed and concurred with in accordance with the appropriate station administrative procedure. QA Department and Engineering concurrence of the disposition is required.
- 6.11 Nonconformance reports shall be periodically analyzed by the Nuclear Safety Department in accordance with their procedures to determine the existence of quality

trends. Trends shall be reported to the appropriate RBS Management (including the FRC and the NRB) for review, assessment, and corrective action in accordance with the nonconformance program procedures.

- 6.12 In cases where required documentary evidence is not available for providing assurance that required inspections and tests have been performed, the associated equipment or material shall be considered nonconforming and shall be controlled in accordance with appropriate nonconformance program procedures.

NOTE

Until suitable documentary evidence is available to show the equipment or material is in conformance, affected systems shall be considered to be inoperable and reliance shall not be placed on such systems to fulfill their intended safety functions.

7.0

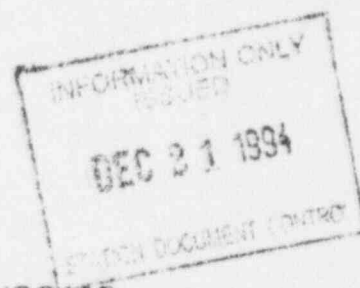
DOCUMENTATION

Not applicable to this directive.



ENTERGY

**RIVER BEND STATION
OPERATIONS QUALITY ASSURANCE MANUAL (OQAM)
*QUALITY ASSURANCE DIRECTIVE (QAD)**



***CORRECTIVE ACTION**

DIRECTIVE NUMBER:

***QAD-16**

REVISION NUMBER:

***11**

Effective Date:

*** SEP 09 1994**

Fluor Daniel 2822 7/29/94
PREPARER
(Signature/KCN/Date)

RECEIVED

SEP 09 1994

SDC

APPROVALS: 6/0309/4-18-94

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CORRECTIVE ACTION

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1.0

PURPOSE AND SCOPE

- 1.1 This directive describes the measures and delineates the requirements established by RBS to provide for identifying, documenting, reporting, and correcting conditions adverse to the quality (nuclear safety) of safety-related structures, systems and components, including determination of cause and corrective action(s) taken to prevent recurrence of significant conditions.
- 1.2 The requirements of this directive also apply to "Quality Assurance Program Applicable" items, services and activities as described in Reference 2.7 (OQAM Manual, QAD-2, "Quality Assurance Program").
- 1.3 The requirements of this directive apply to all individuals and departments performing activities which affect safety-related structures, systems and components at River Bend Station.

2.0

REFERENCES

- 2.1 Title 10, Code of Federal Regulations, Section 21 (10CFR21), "Reporting of Defects and Noncompliance"
- 2.2 10CFR50, Appendix B, "Quality Assurance Criteria For Nuclear Power Plants and Fuel Reprocessing Plants"
- 2.3 NRC Regulatory Guide 1.33, "Quality Assurance Program Requirements -Operation"
- 2.4 Updated Safety Analysis Report (USAR)
- 2.5 Technical Specifications, Section 6, "Administrative Controls"
- 2.6 Operations Quality Assurance Manual (OQAM), Quality Assurance Directive (QAD)-1, "Organization"
- 2.7 OQAM Manual, QAD-2, "Quality Assurance Program"

3.0

DEFINITIONS

Not applicable to this directive.

4.0

RESPONSIBILITIES

Reference 2.6, (OQAM Manual, QAD-1, "Organization")

5.0

GENERAL

Not applicable to this directive.

6.0

DIRECTIVE

- 6.1 River Bend Station departments shall establish implementing procedures, consistent with the scope of their activities, which provide for prompt identification, documentation, reporting, and correction of conditions adverse to quality.

- 6.2 Procedures shall provide for evaluation of conditions such as nonconformances, failures, malfunctions, deficiencies, deviations, abnormal occurrences, violations, reportable events, 10CFR21 items, defective material, equipment, and services to determine the need for corrective action and to identify possible adverse quality trends.
- 6.3 Procedures shall require that corrective action be promptly initiated and adequately documented by the department responsible for correcting the significant condition and to determine if action is necessary to preclude its recurrence.
- 6.4 Procedures shall specify the documentation to be used to report conditions adverse to quality, request corrective action, and the appropriate distribution and control of this documentation.
- 6.5 Procedures shall provide for timely follow-up reviews by the appropriate department to verify that specified corrective action has been properly implemented and corrective action documentation has been closed out.
- 6.6 For significant conditions adverse to quality, the cause of the condition, the immediate corrective action taken and the action taken to prevent recurrence shall be documented and reported to appropriate levels of management. Violations of Technical Specifications and events which require reporting to the NRC shall be submitted to the FRC and NRB by licensing for review. The results of investigations made and the recommendations to prevent or reduce the probability of recurrence of the event resulting from such investigations shall also be submitted to the FRC and NRB.

7.0

DOCUMENTATION

Not applicable to this directive.

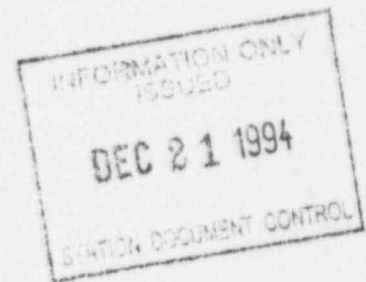
PROCEDURE CROSS-REFERENCE SHEET (PROCEDURES)

PROCEDURE NO. QAD-16

REVISION 11[illegible]



ENTERGY



**RIVER BEND STATION
OPERATIONS QUALITY ASSURANCE MANUAL (OQAM)
*QUALITY ASSURANCE DIRECTIVE (QAD)**

***QUALITY ASSURANCE RECORDS**

DIRECTIVE NUMBER:

***QAD-17**

REVISION NUMBER:

***10**

Effective Date:

*** SEP 09 1994**

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SEP 09 1994

QUALITY ASSURANCE RECORDS

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1.0

PURPOSE AND SCOPE

- 1.1 This directive describes the measures and delineates the requirements established by River Bend Station (RBS) for the development and implementation of a records management system that provides for identification, collection, storage, maintenance and retrieval of quality assurance records. The requirements of this directive apply to all individuals and departments participating in the collection, storage, and maintenance of quality assurance records associated with RBS.

2.0

REFERENCES

- 2.1 Title 10, Code of Federal Regulations Section 50 (10CFR50) Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants"
- 2.2 NRC Regulatory Guide 1.33 "Quality Assurance Program Requirements -Operation"
- 2.3 NRC Regulatory Guide 1.88 "Collection, Storage, and Maintenance of Nuclear Power Plant Quality Assurance Records"
- 2.4 Technical Specifications (Section 6 "Administrative Controls")
- 2.5 Operations Quality Assurance Manual (OQAM), Quality Assurance Directive (QAD)-1, "Organization"
- 2.6 OQAM Manual, QAD-2, "Quality Assurance Program"

3.0

DEFINITIONS

Not applicable to this directive.

4.0

RESPONSIBILITIES

Reference 2.5, (OQAM Manual, QAD-1, "Organization")

5.0

GENERAL

Not applicable to this directive.

6.0

DIRECTIVE

- 6.1 The records management system established during the design and construction phase shall continue and be expanded during the operational phase in accordance with Reference 2.3 (NRC Regulatory Guide 1.88, "Collection, Storage, and Maintenance of Nuclear Power Plant Quality Assurance Records").
- 6.2 Procedures that describe the records management measures within the respective departments, shall be developed and implemented by those department heads conducting activities affecting the following items:
- 6.2.1 Safety-related structures, systems and components and seismic components

- 6.2.2 "Quality Assurance (QA) Program Applicable" items, services and activities as described in Reference 2.6, (GQAM Manual, QAD-2, "Quality Assurance Program").
- 6.3 Procedures shall specify the requirements and responsibilities for records classification, indexing, transmittal, retention, retrievability, storage and maintenance subsequent to the completion of a work activity consistent with the applicable codes, standards, procedures and procurement documents. The procedures shall establish measures to assure that required records are received and are acceptable. Required record types shall be listed and the list shall be available prior to receipt of the records.
- 6.4 Quality Assurance records include, but are not limited to: results of selected reviews, inspections, tests, audits and material analysis; qualification of personnel, procedures and equipment; design records, such as specifications, calculations, drawings, etc.; procurement documents; operating logs; maintenance and modification documentation; reportable occurrences; nonconformance reports; calibration records and reports; corrective action reports; and other records required by the Technical Specifications (Reference 2.4, Technical Specifications, [Section 6, "Administrative Controls"]).
- 6.5 Inspection and test records shall contain the following where applicable:
- 6.5.1 A description of the type of observation,
 - 6.5.2 Evidence of completing and verifying a manufacturing, inspection or test operation,
 - 6.5.3 The date and results of the inspection or test,
 - 6.5.4 Information related to conditions adverse to quality,
 - 6.5.5 Inspector or data recorder identification,
 - 6.5.6 Evidence as to the acceptability of the results,
 - 6.5.7 Action taken to resolve discrepancies noted, and,
 - 6.5.8 Listing of test equipment used, by identification number.
- 6.6 Procedures shall require that records be identifiable and retrievable without undue delay. Retention periods of sufficient duration to assure the ability to reconstruct significant events and satisfy regulatory requirements shall be specified by the department responsible for the records.
- 6.7 Records storage shall be accomplished in accordance with approved written procedures. Storage facilities shall be constructed, located, secured and maintained to prevent destruction of the records by fire, flood, theft and deterioration by environmental conditions, such as temperature or humidity. While in interim storage, records shall be maintained, in one hour fire rated filing cabinets in facilities which have suitable fire protection. In some cases, records may be maintained in dual storage. In this case, records can be copied and maintained in two separate locations

without benefit of fire protection. Interim storage is addressed in approved plant procedures.

- 6.8 Procedures shall require that records be indexed. The indexing system shall include, as a minimum, the location of the records. Retention periods for quality assurance records are identified in a records type list.
- 6.9 Records may be corrected or supplemented in accordance with approved procedures. The procedures shall provide for appropriate review and approval by the originating department. The correction or supplement shall include the date and identification of the person authorized to issue the correction or supplement.
- 6.10 The department responsible for the receipt of quality assurance records for final storage shall designate a person(s) responsible for receiving the records. A list shall be generated and controlled designating those personnel who shall have access to files in temporary or permanent storage.
- 6.11 Records pertaining to the fabrication of transport packages for radioactive material must be retained for the life of the package to which they apply.
- 6.12 Records pertaining to the use of a package for shipment of radioactive material must be retained for a period of two years after the shipment.

7.0

DOCUMENTATION

Not applicable to this directive.

A. LIFETIME QUALITY ASSURANCE RECORDS - Lifetime records are those which meet one or more of the following criteria:

1. Those which would be of significant value in demonstrating capability for safe operation.
2. Those which would be of significant value in maintaining, reworking, repairing, replacing, or modifying the item.
3. Those which would be of significant value in determining the cause of an accident or malfunction of an item.
4. Those which provide required baseline data for inservice inspection.

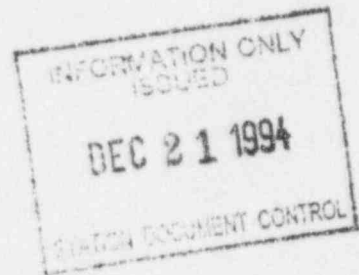
Lifetime quality assurance records are required to be maintained by or for the plant owner for the life of the particular item while it is installed in the plant or stored for future use.

B. NONPERMANENT QUALITY ASSURANCE RECORDS - Nonpermanent records are those which meet all of the following criteria:

1. Those of no significant value in demonstrating capability for safe operation.
2. Those of no significant value in maintaining, reworking, repairing, replacing, or modifying the item.
3. Those of no significant value in determining the cause of an accident or malfunction of an item.
4. Those which do not provide baseline data for inservice inspection.

Nonpermanent records are required to show evidence that an activity was performed in accordance with the applicable requirements but need not be retained for the life of the item.

PROCEDURE NO. QAD-17REVISION 10[illegible]



RIVER BEND STATION
(OPERATIONS QUALITY ASSURANCE MANUAL (OQAM)
*QUALITY ASSURANCE DIRECTIVE (QAD)

***AUDITS**

DIRECTIVE NUMBER:

*QAD-18

REVISION NUMBER:

*11

Effective Date:

* SEP 09 1994

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(Signature/KCN/Date)

AUDITS

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1.0

PURPOSE AND SCOPE

- 1.1 This directive describes the measures and specifies the requirements established by River Bend Station (RBS) for the development and implementation of a comprehensive program of planned and periodic audits to verify compliance with, and assess the effective implementation of, the Quality Assurance (QA) Program, Reference 2.7 (OQAM Manual, QAD-2 "Quality Assurance Program"). The requirements of this directive apply to all Quality Assurance audits, performed by or for RBS. The audit program satisfies the requirements of Reg. Guide 1.144 (Ref. 2.3) and Reg. Guide 1.146 (Ref. 2.4) as delineated in Section 1.8 of the RBS USAR.

2.0

REFERENCES

- 2.1 Title 10, Code of Federal Regulations, Part 50 (10CFR50), Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants"
- 2.2 NRC Regulatory Guide 1.33, "Quality Assurance Program Requirements - Operation"
- 2.3 NRC Regulatory Guide 1.144, "Auditing Quality Assurance Programs for Nuclear Power Plants"
- 2.4 NRC Regulatory Guide 1.146, "Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants"
- 2.5 River Bend Station (RBS) Updated Safety Analysis Report (USAR)
- 2.6 Operations Quality Assurance Manual (OQAM), Quality Assurance Directive (QAD)-1, "Organization"
- 2.7 OQAM Manual, QAD-2, "Quality Assurance Program"
- 2.8 OQAM Manual , QAD-6, "Document Control"

3.0

DEFINITIONS

Not applicable to this directive.

4.0

RESPONSIBILITIES

Reference 2.6 (OQAM Manual, QAD-1, "Organization")

5.0

GENERAL

Not applicable to this directive.

6.0

DIRECTIVE

6.1 Audit Program

- 6.1.1 A comprehensive program of planned and periodic audits shall be established and implemented by the QA Department to verify compliance with the QA Program in accordance with the requirements of Appendix B to

10CFR50. The audit program shall be accomplished in accordance with approved written procedures.

- 6.1.2 The audit program shall include audits of departments performing activities affecting safety-related structures, systems, and components. Audits shall be performed to verify compliance with QA Program requirements, approved QA Department procedures, technical specifications, administrative controls, and regulatory requirements.
- 6.1.3 Audits shall include the objective evaluation of work areas, activities, processes and items; the review of documents and records, safety-related practices, procedures, and instructions; the effectiveness of their implementation; and conformance with policy directives.
- 6.1.4 Audits shall be performed in accordance with approved written procedures and checklists. Unresolved items from previous audits shall be reviewed prior to reaudit and shall be reaudited, as appropriate. The checklists are used as guides to the auditor. Audit performance includes a pre-audit and post-audit conference with applicable management personnel.
- 6.1.5 In certain areas, such as review of procurement documents, design documents, and the procedure review program, QA will use a sampling plan which provides a 95% confidence factor with no more than 5% nonconformance in the population. The sampling plan will be based upon Acceptable Quality Level (AQL).

6.2 Regularly Scheduled Audits

- 6.2.1 An audit schedule, approved by the Manager - Quality Assurance, or designee, shall be developed, maintained, reviewed, updated as necessary, and published annually. The audit schedule shall be based on the following minimum requirements:
 - 1. Auditing shall be initiated as early as possible in the life of an activity to ensure timely implementation of QA Program requirements.
 - 2. Audits shall be conducted to predetermined schedules.
 - 3. Audits shall be scheduled with a frequency commensurate with the activity's safety significance and status.
 - 4. Audits of selected aspects shall be performed in a manner to ensure that an audit of all safety-related functions is completed within a period of two years.
 - 5. Results of actions taken to correct deficiencies that affect nuclear safety and occur in facility equipment, structures, systems, or method of operation shall be audited at least once per six months.
 - 6. Those applicable elements of the QA Program in which quality-related activities are more intensive and impact daily operations shall be audited at least annually.

7. The conformance of facility operation to the Technical Specifications and applicable license conditions shall be audited at least once per 12 months.
8. The performance, training, and qualification of the unit staff shall be audited at least once per 12 months.
9. Performance of activities required by the Operational Quality Assurance Program to meet the criteria of Appendix B, 10CFR50, at least once per 24 months.
10. Emergency Plan and implementing procedures at least once per 12 months.
11. Security Plan and implementing procedures at least once per 12 months.
12. The fire protection programmatic controls including the implementing procedures at least once per 24 months by qualified licensee QA personnel.
13. The fire protection equipment and program implementation at least once per 12 months utilizing either qualified offsite licensee personnel or an outside independent fire protection consultant. An outside independent fire protection consultant is utilized at least every third year.
14. The Radiological Environmental Monitoring Program and the results thereof at least once per 12 months.
15. The Offsite Dose Calculation Manual and implementing procedures at least once per 24 months.
16. The Process Control Program and implementing procedures at least once per 24 months.
17. The performance of activities required by the Quality Assurance Program for effluent and environmental monitoring at least once per 12 months.
18. Any other area of unit operation considered appropriate by the NRB, Vice President - Operations, or General Manager Plant Operations.

6.2.2 Areas that shall be audited include, but are not limited to:

1. Conduct of Operations
2. Training and Qualifications
3. Corrective Action Program
4. Fire Protection Program/Equipment
5. Computer Software QA Program

6. Emergency Plan
7. Station Security Plan/Fitness-For-Duty
8. Offsite Dose Calculation Manual
9. Radiological Effluent Monitoring
10. Process Control/Radwaste Program
11. Safety Review Program
12. Surveillance Test/Technical Specifications
13. Chemistry/Radiochemistry Program
14. Maintenance Programs
15. Licensing/Reporting Programs
16. Document Control/Records Management
17. Radiation Protection Programs
18. M&TE Control Program
19. Procurement/Material Control
20. Operating Experience Review Program
21. Design Control Program
22. Inservice Inspection Program
23. Procedure Revision Process
24. Inspection/NDE Programs
25. QA Internal Audit Programs

6.2.3 Audits shall be performed by personnel who are independent of the activity being audited. Auditors/Lead Auditors may be members of the audited organization, but they shall not audit activities for which they have immediate responsibility. Qualification and training requirements for Auditors/Lead Auditors shall be established and documented, and records of auditor qualifications shall be maintained and updated as required. Auditors/Lead Auditors shall have experience or training commensurate with the scope, complexity, or special nature of the activities to be audited. RBS QA Auditors/Lead Auditors may be assisted by consultants and/or technical specialists.

6.3 Supplemental Audits

Regularly scheduled audits shall be supplemented by additional audits for one or more of the following conditions:

- 6.3.1 When significant changes are made in functional areas of the Quality Assurance Program, such as significant reorganization or procedure revisions.
- 6.3.2 When it is suspected that the quality of the item is in jeopardy due to deficiencies in the Quality Assurance Program.
- 6.3.3 When a systematic, independent assessment of program effectiveness is considered necessary.
- 6.3.4 When necessary to verify implementation of required corrective action.
- 6.4 Audit results, including deficiencies detected during the audit, shall be documented and reviewed with the supervisor or manager having area responsibility. Distribution includes management of the audited department, appropriate levels of management, and the NRB/FRC for audits of plant operations.
- 6.5 The management of the audited department is responsible for corrective action. They shall ensure that corrective action is scheduled, accomplished, and documented; and that the corrective action taken is adequate to prevent recurrence of significant conditions adverse to quality.
- 6.6 When the corrective action response states a planned action that will not be completed within 30 calendar days of the issuance of the finding, a follow-up report shall be required. This follow-up report shall state the corrective action taken and the date it was completed.
- 6.7 Audit deficiencies shall be analyzed in accordance with NPM Procedure, RBNP-052, "River Bend Station Trending Program" for indications of quality trends in order to determine the effectiveness of the QA Program.
- 6.8 Results of these analyses which indicate adverse quality trends shall be reported to appropriate RBS management for review and assessment.
- 6.9 Records shall be generated and retained for all audits. These records include: audit schedules, audit checklists, audit plans, audit reports, written responses and corrective action reports.

7.0

DOCUMENTATION

Not applicable to this directive

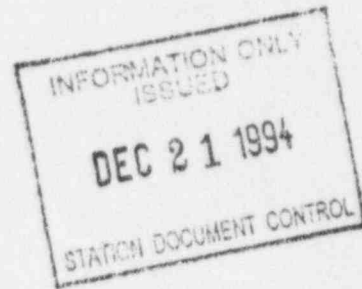
PROCEDURE CROSS-REFERENCE SHEET (PROCEDURES)

PROCEDURE NO. QAD-18

REVISION 11[illegible]



ENTERGY



RIVER BEND STATION
OPERATIONS QUALITY ASSURANCE MANUAL (OQAM)
*QUALITY ASSURANCE DIRECTIVE (QAD)

ASME PROGRAM: SECTION III AND SECTION XI

RECEIVED

JAN 22 1994

DIRECTIVE NUMBER:

*QAD-19

REVISION NUMBER:

*9

SDC

Effective Date:

* 01/22/94

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(Signature/KCN/Date)

*INDEXING INFORMATION

ASME PROGRAM: SECTION III AND SECTION XI

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1.0

PURPOSE AND SCOPE

1.1 ASME Section XI

- 1.1.1 This Quality Assurance Directive (QAD) establishes the means by which River Bend Station (RBS) will implement the requirements of Reference 2.6 (ASME Boiler and Pressure Vessel Code, Section XI - Division 1 "Rules for Inservice Inspection of Nuclear Power Plant Components"), for Preservice Inspection/Inservice Inspection (PSI/ISI), Pump and Valve Testing (P/V), and Repair/Replacement (R/R) activities during the operations phase of the plant.
- 1.1.2 This directive applies to the PSI/ISI, P/V, and R/R functions of ASME "N" - stamped components and their supports, including appurtenances, subassemblies, and parts of a component and core support structures which fall under the jurisdiction of RBS's ASME Section XI program as defined in the River Bend PSI/ISI Plans and the P/V Program.
- 1.1.3 This directive does not apply to the fabrication or installation of a complete new system.
- 1.1.4 In the case of conflicts between the Code and this directive, the provisions of the Code shall govern. The Manager - Safety Assessment and Quality Verification, Assistant Plant Manager - System Engineering, or designee, shall be notified to resolve such conflicts.

1.2 ASME Section III

In the event, new systems are required in the future, this directive will be revised to incorporate requirements for handling N-5 Forms in addition to the Owner's Data Report Form N-3.

2.0

REFERENCES

- 2.1 Title 10, Code of Federal Regulations, Part 50, Section 50.55(a) (10CFR50.55(a)), "Codes and Standards"
- 2.2 10CFR50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants"
- 2.3 American National Standards Institute (ANSI) - ASME NQA-1, "Quality Assurance Program Requirements for Nuclear Facilities"
- 2.4 American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code, Section III, "Rules for Construction of Nuclear Power Plant Components"
- 2.5 ASME B&PV, Section IX, "Qualification Standard for Welding and Brazing Procedures, Welders, Brazers and Welding and Brazing Operations"
- 2.6 ASME B&PV Code, Section XI - Division 1, "Rules for Inservice Inspection of Nuclear Power Plant Components"

- 2.7 Nuclear Regulatory Commission (NRC) Regulatory Guide 1.26, "Quality Group Classifications and Standards for Water, Steam, and Radioactive Waste Containing Components of Nuclear Power Plants"
- 2.8 NRC Regulatory Guide 1.33, "QA Program Requirements (Operation)"
- 2.9 Operations Quality Assurance Manual (OQAM), Quality Assurance Directive (QAD)-3, "Design Control"
- 2.10 OQAM, QAD-7, "Control of Purchased Material, Equipment and Services"
- 2.11 OQAM, QAD-8, "Identification and Control of Materials and Items"
- 2.12 OQAM, QAD-9, "Control of Special Processes"
- 2.13 OQAM, QAD-10, "Inspection Program"
- 2.14 OQAM, QAD-11, "Test Control"
- 2.15 OQAM, QAD-12, "Control of Measuring and Test Equipment"
- 2.16 OQAM, QAD-15, "Nonconforming Materials or Items"
- 2.17 OQAM, QAD-17, "Quality Assurance Records"

3.0

DEFINITIONS

Not applicable to this directive.

4.0

RESPONSIBILITIES

The listed positions are not limited to the responsibilities addressed in this section of the directive. If the position addressed is not available for performing the assigned responsible functions, a designee (appointed by the position) may assume the responsibilities of that position.

- 4.1 The Manager - Safety Assessment and Quality Verification is responsible for providing verification on functions related to ASME Boiler and Pressure Vessel (B&PV) Code, Section III and XI as delineated by the Vice President - Operations. He is assisted by the Director - Quality Assurance.
- 4.2 The Director - Quality Assurance (QA) is responsible for the following:
 - 4.2.1 Performing audits on PSI/ISI examinations and work supporting these examinations as required by ASME B&PV Code, Section XI - Division 1 (including ISI Program, Pump & Valve Program, and Repair/Replacement Program).
 - 4.2.2 Performing surveillances of ISI activities as work is performed and reviewing documentation of examinations related to the ISI Program, Pump and Valve Program, and the Repair/Replacement Program.

- 4.2.3 Reviewing the personnel, procedures, and equipment qualifications for PSI/ISI examinations.
- 4.2.4 Performing reviews of ISI Plan, procedures, examination results, and summary reports.
- 4.3 The Manager - Site Support is responsible for procuring materials and services for ASME Section III and XI work activities relating to the ISI Program, the Pump and Valve Program, and the Repair/Replacement Program and storage of ASME materials prior to installation. He is also assisted by the Director - Procurement Services and Materials.
- 4.4 The Manager - Engineering is responsible for providing the personnel and procedures for performing design analysis and reviews that are a result of ASME Section XI functions and ensuring ISI access requirements are enforced on design documents.
- 4.5 The Director - Plant Engineering is responsible for the following:
 - 4.5.1 Performing design analysis and providing engineering input to design drawings and specifications related to ASME B&PV Code, Sections III and XI.
 - 4.5.2 Preparing and issuing design specifications that are associated with ASME B&PV Code, Sections III and XI.
 - 4.5.3 Providing technical reviews and approving work performed by an outside engineering firm for ASME B&PV Code, Sections III and XI related activities, as appropriate.
 - 4.5.4 Reviewing and approving drawings and approving design specifications related to ASME B&PV Code, Sections III and XI.
 - 4.5.5 Providing engineering personnel and procedures, when requested, to support ASME Section XI work activities.
 - 4.5.6 Ensuring ISI accessibility requirements are incorporated into design documents.
- 4.6 The Plant Manager is responsible for developing and implementing the ASME Section XI, Pump and Valve Program and the Repair/Replacement Program as delegated by the Vice President - Operations. The Plant Manager is also responsible for supplying plant staff to assist with ASME Section XI work activities.
- 4.7 The Assistant Plant Manager - Maintenance (APM-M) is responsible for the following:
 - 4.7.1 Providing maintenance personnel (including qualified welders), procedures, and equipment, when requested, to support ASME Section XI work activities.

- 4.8 The Assistant Plant Manager - System Engineering (APM-SE) is responsible for the following:
- 4.8.1 Providing the personnel and procedures required for establishing the documents needed to identify and perform the requirements of the Pump and Valve Program work activities related to ASME B&PV Code, Section XI - Division 1.
 - 4.8.2 Providing the personnel, procedures, and equipment required for implementing the requirements of the Pump and Valve Program related to ASME B&PV Code, Section XI - Division 1.
 - 4.8.3 Providing the personnel and procedures required for establishing and updating the Preservice Inspection (PSI) and Inservice Inspection (ISI) Plans that identify the requirements of ASME B&PV Code, Section XI - Division 1.
 - 4.8.4 Providing the personnel, procedures, and equipment required for performing PSI/ISI examinations related to ASME B&PV Code, Section XI - Division 1 and work activities associated with the examinations.
 - 4.8.5 Providing the personnel and procedures required for documenting PSI/ISI examination results and evaluations related to the Inservice Inspection (ISI) Program.
 - 4.8.6 Implementing Licensee Commitments which are associated with ASME B&PV Code, Section XI - Division 1 work with respect to PSI/ISI activities.
 - 4.8.7 Preparing and updating drawings, sketches, and charts that are associated with the development and implementation of the ISI Program.
 - 4.8.8 Reviewing design documents for ISI applications and accessibility.
 - 4.8.9 Reviewing and approving RBS and contractors' PSI/ISI examination procedures.
 - 4.8.10 Providing the specifications necessary to establish contracts with PSI/ISI examination contractors, along with reviewing and maintaining the contracts.
 - 4.8.11 Preparing, evaluating, reviewing, approving, and maintaining PSI/ISI examination and test results related to ASME B&PV Code, Section XI - Division 1.
 - 4.8.12 Reviewing the personnel, procedures, and equipment qualifications for PSI/ISI examinations.
 - 4.8.13 Designing, maintaining, and controlling ultrasonic testing calibration blocks.
 - 4.8.14 Informing the Authorized Nuclear Inservice Inspector (ANII) of PSI/ISI examinations being performed that are related to ASME B&PV Code, Section XI - Division 1.

- 4.8.15 Providing Code interpretations with respect to PSI/ISI work activities.
- 4.8.16 Developing the NIS-1 Owner's Data Report and the ISI Summary Report
- 4.8.17 Submitting the ISI Summary Report to the regulatory and enforcement authority having jurisdiction at RBS within 90 calendar days of refueling outage completion.
- 4.8.18 Evaluating unsatisfactory conditions that result from PSI/ISI examinations.
- 4.8.19 Verifying that the PSI/ISI examinations being performed at River Bend Station related to ASME B&PV Code, Sections III and XI are in compliance with this directive.
- 4.9 The Assistant Plant Manager - Operations (APM-O) is responsible for providing plant staff and procedures to assist with ASME Section XI work activities.
- 4.10 The Assistant Plant Manager - Outage Management (APM-OM) is responsible for scheduling all ISI, P/V, and R/R tests and inspections.

5.0

GENERAL

Not applicable to this directive.

6.0

REQUIREMENTS

6.1 River Bend Station (RBS) Preservice/Inservice Inspection Program

- 6.1.1 The PSI/ISI of selected welds, components, and supports at RBS shall be developed and implemented by utilizing guidelines set forth in documents referenced in Section 2.0 of this directive.
- 6.1.2 The selection of welds, components, and supports for PSI/ISI examinations are subject to review by the regulatory and enforcement authority having jurisdiction at RBS (i.e., NRC).

6.2 Preservice Inspection

The PSI Program was developed and implemented to address the examinations to take place prior to the initial startup of RBS. Since this event has taken place, there is no longer any need to have a PSI Program at RBS. Any base-line establishments due to the Repair/Replacement Program or installation of a complete system shall be addressed in the ISI Program.

6.3 Inservice Inspection

- 6.3.1 Weld, component, and support selections along with system pressure testing shall be performed in accordance with ASME B&PV Code, Section XI - Division 1 and documented in the ISI Plan.
- 6.3.2 The ISI Plan shall be submitted to the regulatory and enforcement authority having jurisdiction at RBS (i.e., NRC) for review and approval.

NOTE

Approval of the ISI Plan by the regulatory and enforcement authority having jurisdiction at RBS shall be addressed in a Safety Evaluation Report (SER) and submitted to RBS.

- 6.3.3 Testing requirements and acceptance criteria shall be established for ISI pressure testing.
- 6.3.4 Weld, component, and support examinations and tests shall be performed during scheduled outages, unscheduled outages, and during plant operation.
- 6.3.5 All ISI examination results shall be compared and evaluated against PSI baseline data.
- 6.3.6 All repair and replacement activities (refer to Subsection 5.4 of this directive) shall be baselined and documented with a NIS-2 Form.
- 6.3.7 New welds, components, and supports (applicable to ISI examination) shall be added to the total of examinations for ISI selection percentage.
- 6.3.8 Results of ISI examinations shall be documented utilizing an inspection report.
- 6.3.9 All ISI documentation shall be presented to the Authorized Inspection Agency (AIA) for review to verify compliance with the documents referenced in Section 2.0 of this directive.
- 6.3.10 Any inspection results that are found to be unsatisfactory shall be evaluated to determine if the component is acceptable. The evaluation, if found to be unacceptable, shall provide the measures that need to be taken to correct the deficiency.
- 6.3.11 All ISI related documents shall be stored and distributed in accordance with guidelines set forth in documents referenced in Section 2.0 of this directive.
- 6.3.12 Upon completion of each refueling outage, all ISI examinations and evaluations documentation shall be assembled into a data package, accompanied by a NIS-1 Form serving as a cover sheet.
- 6.3.13 NIS-1 Form Data packages shall be signed by the Owner/designee to verify all ISI requirements were completed and certified by the AIA to show that compliance with the documents referenced in Section 2.0 of this directive has been met.
- 6.3.14 To complete documentation related to ISI and Repair/Replacement activities between plant refueling outages and during refueling outages, a summary report shall be prepared and transmitted to the regulatory and enforcement authority having jurisdiction at RBS (i.e., NRC).
- 6.3.15 Surveillance of all ISI activities shall be conducted in accordance with an approved Quality Assurance Program, provided by the Owner, RBS Agents,

and AIA, in compliance with documents referenced in Section 2.0 of this directive.

6.4 Pump and Valve Testing Program

- 6.4.1 Selection of pumps and valves to be functionally tested shall be in accordance with ASME B&PV Code, Section XI - Division 1 and documented in the Pump and Valve Program Plan.
- 6.4.2 The Pump and Valve Program Plan and Requests for Relief from ASME XI requirements shall be submitted to the regulatory and enforcement authority having jurisdiction at RBS (i.e., NRC) for review and approval.

NOTE

Approval of the Pump and Valve Program Plan by the regulatory and enforcement authority having jurisdiction at RBS shall be addressed in a Safety Evaluation Report (SER) and submitted to RBS.

- 6.4.3 Pump and valve functional testing shall be performed during scheduled outages, unscheduled outages, and plant operation. Tech Spec 4.0.5 is applicable.
- 6.4.4 Performance of tests and examinations on pumps and valves shall utilize calibrated equipment.
- 6.4.5 All Pump and Valve Program documents shall be stored and distributed in accordance with guidelines set forth in Reference 2.17 (OQAM, QAD-17, "Quality Assurance Records").

6.5 Repair/Replacement Program

- 6.5.1 Repairs and replacements of completed components as defined herein (including piping system), shall be performed in accordance with the requirements of ASME B&PV Code, Section XI - Division 1 (year and addenda specified in the Inservice Inspection Plan) using procedures and/or specifications approved by RBS. Completed components, as used in this section, are components under the jurisdiction of ASME B&PV Code, Section XI - Division 1 of the regulatory and enforcement authority having jurisdiction at RBS and as specified in the ISI Plan, which have met all the requirements of ASME B&PV Code, Section III. ASME B&PV Code, Section XI - Division 1 applies to all components, as defined above upon certification of the appropriate data report or commercial operation.
- 6.5.2 Replacements, as defined by ASME B&PV Code, Section XI - Division 1 and this directive, are spare/renewal components, appurtenances, subassemblies or parts of a component or system. All modifications to existing "N" - stamped systems or components shall be considered replacements, including the installation of new items to existing systems where there is no pre-existing part. ASME B&PV Code, Section XI - Division 1 does not provide rules for the addition of complete new systems. New systems are considered to be systems added which provide a new or

redundant function in the plant which did not previously exist. New systems cannot be designated as replacements and are required to be constructed to the rules of the latest approved edition of ASME B&PV Code, Section III as specified by RBS per Subsection NCA 1140 of ASME B&PV Code, Section III.

- 6.5.3 Repair, as used by ASME B&PV Code, Section XI - Division 1 and this directive, is defined as the process of restoring pressure retaining components and their supports, including appurtenances, subassemblies, parts of a component, and core support structures by machining, grinding, welding, heat treating, plating, and gluing, etc., without the addition of new base metal, to a condition which complies with the original design specification or Construction Code.
- 6.5.4 All repair and/or replacement activities shall be controlled by an ASME Section XI repair/replacement plan. The repair/replacement plan may be a part of a Modification Request, Condition Report, or as a separate document. It shall contain the applicable items as denoted in Articles IWA-4000 and IWA-7000 of ASME B&PV Code, Section XI - Division 1.
- 6.5.5 Design changes shall be controlled in accordance with Reference 2.9 (OQAM Manual, QAD-3, "Design Control").
- 6.5.6 Welding activities, heat treatment activities, inspection activities, and nondestructive examination (NDE) shall be in accordance with Reference 2.12 (OQAM Manual, QAD-9, "Control of Special Processes"), Reference 2.13 (OQAM Manual, QAD-10, "Inspection Program"), and Reference 2.10 (OQAM Manual, QAD-11, "Test Control").
- 6.5.7 Control of nonconformances including corrective action activities and control of measuring and test equipment shall be in accordance with Reference 2.15 (OQAM Manual, QAD-12, "Control of Measuring and Test Equipment") and Reference 2.14 (OQAM Manual, QAD-15, "Nonconforming Materials or Items"). Additionally, dispositions specifying repair/replacement activities under the jurisdiction of ASME B&PV Code, Section XI - Division 1 shall be acceptable to the Authorized Nuclear Inservice Inspector (ANII).
- 6.5.8 An Owner's Report for repair or replacements, (ASME Form NIS-2) shall be completed for each repair and replacement activity. This form shall be completed in accordance with Reference 2.17 (OQAM Manual, QAD-17, "Quality Assurance Records").
- 6.5.9 Completed records and reports for repair/replacements shall be filed in accordance with approved written procedures, which will ensure that the applicable manufacturer's data report clearly identifies the repair and that the N-5 data package identifies the component/system repaired, replaced, or altered.
- 6.5.10 RBS shall retain those records and reports identified in ASME B&PV Code, Section XI - Division 1 for repairs and replacements. The records and reports shall be filed and maintained in a manner which will allow the ANII access. RBS shall provide suitable protection from deterioration and damage

for all records and reports, in accordance with Reference 2.17 (OQAM Manual, QAD-17, "Quality Assurance Records").

- 6.5.11 Records and reports for repair or replacement activities shall be either the original or a reproduced, legible copy. Radiographs shall not be microfilmed.

6.6 Repairs

- 6.6.1 Repairs shall be performed in accordance with the original Design Specification and Construction Code of the component or system. Later editions of the Construction Code and ASME B&PV Code, Section III, either in the entirety or portions thereof may be used. If repair welding cannot be performed in accordance with these requirements, then the appropriate articles of ASME B&PV Code, Section XI - Division 1 may be used.
- 6.6.2 The services of the Authorized Inspection Agency (AIA) shall be utilized as appropriate when performing a repair activity. The AIA shall be notified prior to starting the activity and informed of the progress of the activity so that necessary inspections may be performed.
- 6.6.3 Materials used for the repair activity shall conform to the requirements of either the original design specification or ASME B&PV Code, Section III except as allowed by Paragraph 6.5.1 of this directive.
 - 1. Procurement of items for repair work including subcontracted services shall be in accordance with Reference 2.10 (OQAM Manual, QAD-7, "Control of Purchased Material, Equipment and Services") and the corresponding repair plan.
 - 2. Receipt inspection, storage, and material control activities for items procured by RBS or a repair organization shall be in accordance with Reference 2.11 (OQAM Manual, QAD-8, "Identification and Control of Materials and Items") and the corresponding repair plan. Materials shall be traceable to the point of installation.
- 6.6.4 All welding shall be performed in accordance with welding procedures/specifications which have been qualified by RBS or the repair organization in accordance with the requirements of ASME B&PV Code, Section III, ASME B&PV Code, Section IX, and ASME B&PV Code, Section XI - Division 1.
- 6.6.5 All welders shall be qualified by the repair organization in accordance with the requirements of ASME B&PV Code, Section IX and the additional requirements of ASME B&PV Code, Sections III and XI - Division 1.

6.7 Replacements

- 6.7.1 RBS shall be responsible for providing the specification requirements for design, fabrication, and examination as applicable for replacements. This shall include specifying the applicable edition of the Construction Code as

required by Subarticle IWA-7200 of ASME B&PV Code, Section XI - Division 1.

- 6.7.2 Replacements shall meet the requirements of the edition of the Construction Code to which the original component or part was constructed, unless the alternatives identified in Subsubarticle IWA-7210(c) of ASME B&PV code, Section XI - Division 1 are adopted. When the alternatives of Subsubarticle IWA-7210(c) in ASME B&PV Code, Section XI - Division 1 are adopted, the reconciliation with original design specification and Construction Code shall be performed and documented in accordance with approved written procedures.
- 6.7.3 The Assistant Plant Manager - System Engineering (or designee) prior to authorizing the installation of a replacement shall conduct an evaluation of the suitability of the replacement in accordance with Subsubarticle IWA-7220 of ASME B&PV Code, Section XI - Division 1.
- 6.7.4 Items procured as replacements shall be Code stamped in accordance with the requirements of the Construction Code of the original item, unless a later edition of the Code is used which exempts stamping. When the replacement plan or the Construction code requires that materials be supplied in accordance with ASME B&PV Code, Section III, the replacement manufacturer, materials supplier, or material manufacturer shall be in possession of the appropriate ASME Certificate of Authorization or Quality Systems Certificate (Materials) unless alternate measures have been approved by the regulatory and enforcement authority having jurisdiction at RBS and the AIA.
- 6.7.5 All procedures for installation of replacements by welding shall be in accordance with Subsection 6.6 of this directive, as applicable.
- 6.7.6 Prior to return of the plant to service, a preservice inspection shall be performed in accordance with ASME B&PV Code, Section XI - Division 1 for the component or part replaced, as applicable, including the joints that connect the replaced component or part to the system. The preservice inspection shall be performed in accordance with an approved written procedure and the corresponding replacement plan.

6.8 Design

This procedure does not apply to the fabrication or installation of complete new systems.

- 6.8.1 The Manager - Engineering (or designee) shall prepare, review, and approve Design Specifications and their revisions. Design Specifications and revisions may be prepared by a qualified subcontractor, but shall be reviewed and approved by RBS prior to use.
- 6.8.2 The Manager - Engineering (or designee) shall perform Code designs with respect to ASME B&PV Code, Section XI - Division 1 access requirements. The Design Organization may be RBS or a design subcontractor competent in the applicable field of design.

6.8.3 Using the Design Specification and the Code, the Design Organization shall:

1. Perform the stress analysis to show that the allowable limits have not been exceeded for the loads specified.
2. Prepare design documents, drawings, and specifications (which include quality standards) and identifies the material, appurtenances, parts, tests, and processes that are essential to the construction of the component.
3. Perform the stress analysis to show that the allowable limits have not been exceeded for the loads specified.
4. Prepare design documents, drawings, and specifications (which include quality standards) and identifies the material, appurtenances, parts, tests, and processes that are essential to the construction of the component.
5. Prepare a Design Report for each component and support except as provided in Paragraph 6.8.1 of this directive. The Design Report includes stress analysis, calculations, or both to show that the allowable limits have not been exceeded for loadings specified in the Design Specifications. The drawing numbers and revisions used for design and construction are listed in the Design Report. The Design Report shall be certified by a Registered Professional Engineer for Class 1 components and component supports, Class CS core support structures, Class MC component supports, Class 2 Vessels designed to NC-3200 of ASME B&PV Code, Section III, and/or Class 2 or Class 3 components designed to Service Loadings greater than Design Loadings.
6. Review the Design Report (including the design documents) for design adequacy and compliance with the Code. These reviews are performed by the Design Organization, by individuals or groups, other than those who performed the original design.
7. Assure that changes to the design documents are reconciled with the Design Report. Required changes are documented and certified by the Design Organization to indicate on what basis the change has been made. A revision or addenda to the Design Report shall be prepared and, if required by Paragraph 6.8.3.3. of this directive, certified by a Registered Professional Engineer. A copy of the change is filed with the completed Design Report.
 - a. A Load Capacity Data Sheet may be used when component supports are designed by Load Rating. The Load Capacity Data Sheet states the load capacity of the component support and identifies the tests and calculations used to establish the load capacity. The Load Capacity Data Sheet for supports of Class 1 components and Class 2 vessels designed to NC-3200 of ASME B&PV Code, Section III shall be certified by a Registered Professional Engineer.
 - b. The Registered Professional Engineer who certifies the Design Report or Load Capacity Data Sheet shall be competent in the applicable field of design.

- 6.8.4 The Manager - Engineering (or designee) shall review and approve design documents prepared by design subcontractors.
- 6.8.5 The Manager - Engineering (or designee) shall perform the Owner's review and acceptance of the Design Report. Documentation of the review is attached to the Design Report and is made available to the AIA.
- 6.8.6 The Manager - Engineering (or designee) shall perform the review and reconciliation of the as-built drawings with the Design Report.

7.0

DOCUMENTATION

7.1 Records and Reports

Records and reports shall be maintained for the service lifetime of the component or system.

