BARBARA A. NICK
President and CEO

DAIRYLAND POWER
COOPERATIVE

November 17, 2015 10 CFR 50.54(a)(4)

In reply, please refer to LAC-14359

DOCKET NO. 50-409 and 72-046

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

SUBJECT: Dairyland Power Cooperative
La Crosse Boiling Water Reactor (LACBWR)
Possession-Only License DPR-45
Revision 29 of the LACBWR Quality Assurance Program Description (QAPD)

REFERENCES: 1) LACBWR Possession-Only License No. DPR-45
2) LACBWR Quality Assurance Program Description, Revision 28

The purpose of this letter is to submit Revision 29 of the LACBWR QAPD for USNRC approval prior to implementation. Dairyland Power Cooperative and LaCrosseSolutions, LLC have recently submitted an application to transfer the LACBWR Possession-Only License No. DPR-45 to LaCrosseSolutions, LLC. Revision 29 of the QAPD is reflective of that change and, with NRC approval, would be implemented at the time of the license transfer.

The proposed QAPD revision represents a reduction in commitment by replacing the Safety Review Committee with an Independent Management Assessment process and replacing the Operations Review Committee with a Qualified Technical Review system. Justification for this reduction in commitment is defined in the enclosed Summary of Changes and QAPD RG 7.10(r2) Compliance Matrix. This QAPD revision is also being submitted for your review and approval prior to its implementation to ensure compliance with the requirements of the NRC Confirmatory Order dated September 15, 1994.

If you have any questions concerning this submittal, please contact Cheryl Olson, LACBWR Plant/ISFSI Manager at (608) 689-4207.

Sincerely,

Barbara A. Nick, President and CEO

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NMSS

Enclosures: 1) LACBWR Quality Assurance Program Description, Revision 29
2) LACBWR QAPD, Revision 29, Summary of Changes

cc w/Enclosures: Marlayna Vaaler
Project Manager
U.S. Nuclear Regulatory Commission

Cynthia D. Pederson
Regional Administrator, Region III
U.S. Nuclear Regulatory Commission

STATE OF WISCONSIN)
)
COUNTY OF LA CROSSE)

Personally came before me this 20th day of November, 2015, the above named, Barbara A. Nick, to me known to be the person who executed the foregoing instrument and acknowledged the same.

Laurie A. Engen
Notary Public, La Crosse County Wisconsin

My commission expires 5-25-18

LAURIE A. ENGEN
Notary Public
State of Wisconsin

Enclosure 1

LACBWR Quality Assurance Program Description, Revision 29

LA CROSSE BOILING WATER REACTOR

QUALITY ASSURANCE PROGRAM DESCRIPTION

REVISION 29

La Crosse *Solutions*, LLC (SOLUTIONS):

Author: _____ 8/12/15
Anthony R. Bejma, Independent Consultant — Date

QA Approval: _____ 8/12/15
James E. Werner, SOLUTIONS QA Manager — Date

Manager Approval: _____ 8/12/15
Joe Nowak, SOLUTIONS Project Manager — Date

Corporate QA Approval: _____ Mike Nicol Aug 14 2015 9:35 PM
Mike Nicol, EnergySolutions Corporate Director, QA — Date

Dairyland Power Cooperative (DPC)

QA Approval: _____ 9-30-2015
Ed Martin, Manager, Quality Assurance — Date

Manager Approval: _____ 9/30/15
Lane S. Peters, Site Manager, Genoa — Date

LA CROSSE BOILING WATER REACTOR

STATEMENT OF QUALITY ASSURANCE POLICY

The Quality Assurance Program Description (QAPD) described herein has been developed by Dairyland Power Cooperative (DPC) and La Crosse Solutions, LLC (SOLUTIONS) to provide a consolidated overview of the quality program controls that govern the operation and maintenance of the La Crosse Boiling Water Reactor (LACBWR) Independent Spent Fuel Storage Installation (ISFSI), and the decommissioning of the LACBWR plant. The QAPD describes the quality assurance organizational structure, functional responsibilities, levels of authority and interfaces.

The QAPD applies to all activities associated with structures, systems, and components which are Important to Safety under 10 CFR 72. The QAPD also applies to transportation packages licensed by the NRC under 10 CFR 71. Requirements of the QAPD are performed in a graded approach commensurate with an item's or an activity's importance to safety. This graded approach is responsive to NRC Regulatory Guide 7.10. The applicability of the requirements of the QAPD to decommissioning activities is determined on a case by case basis. The QAPD satisfies the requirements of 10 CFR 50 Appendix B, 10 CFR 71 Subpart H, and 10 CFR 72 Subpart G.

The SOLUTIONS Executive Vice President and General Manager is responsible for the establishment and implementation of a quality assurance program which meets all regulatory requirements. The quality assurance program, as described in this QAPD, is implemented through the use of approved procedures (i.e., policies, directives, procedures, manuals, instructions, or other documents) which provide written guidance for the control of Important to Safety items and activities and provides for the development of documentation to demonstrate objective evidence of compliance with stated requirements.

Solutions Executive

Executive Vice President and General Manager

5/29/15

Date

Dairyland Executive

President and CEO

9/30/15

Date

LA CROSSE BOILING WATER REACTOR (LACBWR)

QUALITY ASSURANCE PROGRAM DESCRIPTION (QAPD)

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0.0 INTRODUCTION

A. General

Upon NRC approval, SOLUTIONS will be the NRC licensee responsible for all activities under the LACBWR License. SOLUTIONS will commence decommissioning of the LACBWR site. DPC will retain ownership of the land and spent fuel and be the owner licensee. DPC will be subcontracted for the management and operation of the LACBWR ISFSI. Upon completion of decommissioning, SOLUTIONS will apply to the NRC to transfer responsibility for the NRC License back to DPC. Thereafter, DPC will maintain the ISFSI, and be responsible for the ultimate disposition of the spent nuclear fuel.

In order to minimize disruption and maximize efficiency, this revision of the LACBWR Quality Assurance Program Description (QAPD) was jointly developed by DPC and SOLUTIONS to facilitate the various stages of license transition described above. During the decommissioning activities, SOLUTIONS will subcontract the operations and maintenance of the ISFSI to DPC. Although DPC procedures and processes will continue to be used for the operations and maintenance of the ISFSI, SOLUTIONS will be the licensee with overall responsibility and authority to ensure the QAPD requirements applicable to the ISFSI are effectively implemented by DPC, or others, as applicable. The requirements of this QAPD will apply to all ISFSI activities and selected plant decommissioning activities.

The QAPD is designed to meet the requirements of 10 CFR 50, Appendix B, 10 CFR 71, Subpart H, and 10 CFR 72, Subpart G and reflects the direction of applicable regulatory guides and industry standards, as they apply to the operation and maintenance of the LACBWR ISFSI and the decommissioning of the LACBWR plant, thereby assuring that risk to the health and safety of the public is not increased.

The group performing and directly responsible for the work, such as project management, engineering, design, procurement, installation, maintenance, testing, and dismantlement shall be responsible for the quality of work. This includes quality control and verification that all work is performed in accordance with approved documents. QA personnel have responsibility for auditing these groups and assuring management that the QA program is being fully and effectively implemented. QA is recognized as an interdisciplinary function and not the sole responsibility of QA personnel.

The requirements and commitments contained in this QAPD are mandatory and must be implemented, enforced, and adhered to by all individuals and organizations. Employees are encouraged to actively participate in the continued development of the QA program as well as its implementation.

B. Terms and Definitions

The terms and definitions listed below are used frequently throughout this document.

LACBWR – La Crosse Boiling Water Reactor.

QUALIFIED TECHNICAL REVIEW - Thorough reviews of the documents specified in this QAPD shall be conducted by a Qualified Technical Reviewer.

QUALITY ASSURANCE (QA) – All those planned and systematic actions necessary to provide adequate confidence that structures, systems, or components (SSCs) will perform satisfactorily in service.

QUALITY CONTROL (QC) – Those quality actions which provide a means to control and measure the characteristics of an item, process or facility to established requirements.

FACILITY – Encompasses the plant site, which is undergoing decommissioning, and the ISFSI site where spent fuel is stored. Excluded are the DPC transmission substation adjacent to the plant site and power transmission apparatus located beyond the LACBWR switchyard.

PLANT – Encompasses the buildings that functionally supported the operation of the LACBWR nuclear power facility.

SCHEDULE INTERVAL – A time frame within which a scheduled activity shall be performed with a maximum allowable extension not to exceed 25 percent of the schedule interval.

IMPORTANT TO SAFETY (ITS) – A classification given to structures, systems, and components (SSCs) that provide nuclear safety design functions. (See Appendix A for complete details).

I. ORGANIZATION

A. General Requirements

1. This section defines the responsibilities of key project members accountable for implementation of the QAPD. Functions and actions can be delegated; however, the responsibility remains with the designated individual.

2. Onsite and offsite organizations shall be established for station and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting the safe storage of nuclear fuel.

3. Since SOLUTIONS and DPC will be working to the requirements of this QAPD, each organization is depicted on the Figure 1, La Crosse Solutions Organization. This QAPD identifies key on-site project management team positions for SOLUTIONS and their off-site corporate support groups. The QAPD also defines the DPC management team that will manage the ISFSI operations.

4. Lines of authority, responsibility, and communication shall be established and defined for the highest management levels through intermediate levels to and including all operating organization positions. These relationships shall be documented and updated, as

appropriate, in the form of organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation.

5. The individuals who carry out health physics and quality assurance activities may functionally report to an appropriate onsite manager; however, they shall have sufficient organizational freedom to ensure their ability to perform their assigned functions.

B.1 Organization - SOLUTIONS

1. President - The President manages the operation of Energy*Solutions* stewardship projects at U.S. Reactor sites, and assures that the LACBWR project receives timely and effective support from Energy*Solutions* corporate groups. The President meets periodically with the GM and other key managers to review the operation of the LACBWR ISFSI and decommissioning and to address project management, quality, and related issues. The President shall have corporate responsibility for the safe storage of nuclear fuel and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the plant to ensure the safe storage of nuclear fuel.

2. Executive Vice President and General Manager (GM) - This executive provides direct oversight of the project, and other selected tasks, to ensure the project is properly planned, staffed and executed. The GM has overall authority and responsibility for the establishment and effective implementation of the QAPD. The GM has periodic meetings with the management team to review plans and progress and to address stakeholder, quality, and project management issues. The GM delegates to DPC and the management team the day-to-day responsibilities for the ISFSI and decommissioning by approved documents, respectively.

3. Project Manager (PM) - The PM is responsible for all decommissioning activities, including fire protection and industrial safety activities at the decommissioning site. The PM shall have authority over those on site activities necessary for safe storage of nuclear fuel which have been subcontracted to DPC. The PM is also responsible for the functions described in Appendix C of this QAPD, and for the Qualified Technical Review process utilized for decommissioning. The PM retains authority for each proposed test, experiment, or modification to systems or equipment that affect the safe storage of nuclear fuel which has been subcontracted to DPC.

4. Quality Assurance Manager (QAM) - The QAM reports to the PM, and has access to the Energy*Solutions* Corporate QA Director for quality matters. The QAM is responsible for establishing and maintaining the QAPD, monitoring the project's quality objectives through overview and inspection activities, and providing feedback to management on the effectiveness of the QAPD. The QAM evaluates, accepts, and performs oversight of supplier and subcontractor Quality Assurance Programs.

   The QAM provides orientation and training on applicable quality

requirements to the SOLUTIONS organization. The QAM periodically provides reports on project quality activities to the PM, and the management team.

5. Radiation Protection Manager (RPM) - The RPM is responsible for all radiation protection, environmental protection, site closure, and waste shipping activities at the entire site.

6. Licensing Manager (LM) – The LM is responsible for all interface activities with the Regulators such as licensing submittals, regulatory reports, reportability issues, QAPD revisions, REMP/ODCM reports, financial reports, Decommissioning Plan revisions, SNM inventory reports, etc.

B.2 Organization – DPC (subcontracted)

1. Site Manager, Genoa (SMG) – The SMG has responsibility for the administration and operation of the LACBWR ISFSI and the operation of the Genoa 3 coal-fired plant and the Qualified Technical Review process utilized at the ISFSI.

2. ISFSI Manager (IM) - The IM reports directly to the SMG and is responsible for operation and maintenance of the LACBWR ISFSI within the limits set forth in the Decommissioning Plan, Technical Specifications and this QAPD.

3. Security Project Manager (SPM) – The SPM reports directly to the ISFSI Manager and is responsible for ensuring regulatory requirements are adequately met and the Security Plan, related procedures, training and contingency requirements are developed and maintained current.

4. QA Specialist / Engineer – The QA Specialist / Engineer is responsible for performing independent overviews of ISFSI related activities, administering the ISFSI's corrective action program, providing orientation and training on applicable quality program requirements to DPC staff, and interfacing with SOLUTIONS off-site QA staff.

5. Engineering Manager (EM) - The EM is responsible for the engineering of ISFSI activities and for ensuring that adequate technical review is applied to changes, tests, and experiments.

II. QUALITY ASSURANCE PROGRAM

A. General

The QA program described herein sets forth the requirements for the QA organization, personnel responsibilities, controls, and measures established to achieve, maintain, and document quality. These requirements include, but are not limited to, the following:

1. Incorporation of applicable regulatory criteria, codes, standards, and design bases for ITS SSCs into the ISFSI operations and maintenance procedures.

2. Performance of all installation, calibration, and testing on all necessary

ITS SSCs in accordance with approved ISFSI procedures.

3. Approved procedures being used in the operation, maintenance, repair, and modification of the ISFSI in compliance with licensing regulations and consistent with established quality practices.

4. Maintenance of QA recordkeeping, including reports, test results, records, and logs.

5. Resolution of items identified as adverse to quality with appropriate notifications made to management.

6. Performance of audits and surveillances by QA personnel to verify that ISFSI administrative controls, procedures, and procurement documents contain the necessary QA input requirements and appropriate documentation thereof.

B. Applicability

1. The entire QAPD described herein is applied to the LACBWR ISFSI in a graded approach to quality that is commensurate with an item's or an activity's importance to safety.

2. The following sections of the QAPD described herein or an industry equivalent may be applied to the decommissioning of the LACBWR plant in a graded approach to quality that is commensurate with an item or activities importance to safety:

   a. For any Radioactive Material Transport Packages subject to the provisions of 10 CFR 71, Subpart C, "General Licenses," the full QAPD applies. For these activities associated with the ISFSI, the implementation of the QAPD is by the DPC staff as noted herein. For these activities associated with decommissioning, the implementation of the QAPD is by the appropriate SOLUTIONS staff.

   b. For all other decommissioning activities, the applicable portions of Sections I, II, XV, XVI and XVII and Appendix C of this QAPD may apply.

   c. The applicability of the requirements of this QAPD may be extended to other activities as designated by the Project Manager. Decommissioning activities are otherwise controlled by procedures, processes and policies deemed adequate by the management responsible for the successful completion of those activities.

C. Regulatory Commitments

Except when alternatives or exceptions are identified, the implementing procedures for the QAPD shall comply with the quality assurance guidance documents listed in Appendix B. Additionally, the following clarifications apply to all guidance documents listed in Appendix B:

1. If the guidance in any of the listed documents is in conflict with the QAPD, the guidance provided in the QAPD is the controlling document.

2. Standards, guides, codes, etc., identified in any commitment document are not quality assurance program requirements unless that document is also listed in the Appendix.

3. Guidance applicable to safety related items and activities (10 CFR 50) are applicable to comparable items and activities (Important To Safety) required by 10 CFR 71 and 10 CFR72.

D. Administrative Controls

The Administrative Controls defined in Appendix C were previously included in the Technical Specifications and were relocated to this QAPD at the completion of fuel transfer to support decommissioning. The Qualified Technical Review was added at the time SOLUTIONS became the licensee. The following subjects shall be independently reviewed by a Qualified Technical Reviewer:

1. 10 CFR 50.59 and 10 CFR 50.82 evaluations for changes in the facility as described in the Decommissioning Plan (DP) and Post Shutdown Decommissioning Activities Report (PSDAR), changes in procedures as described in the DP and PSDAR, and tests or experiments not described in the DP and PSDAR to verify that such actions do not involve a change to the Technical Specifications or will not require NRC approval pursuant to 10 CFR 50.59 and 10 CFR 50.82;

2. Proposed changes to the programs required by Appendix C, and to verify that such changes do not involve a change to the Technical Specifications and will not require NRC approval pursuant to 10 CFR 50.59 and 10 CFR 72.48; and

3. Proposed changes to the license or Technical Specifications.

E. Implementation

1. Individuals that are assigned responsibilities as described in Section I, "ORGANIZATION," shall prepare administrative and quality assurance procedures as necessary to implement the requirements of this program in support of operation and maintenance of the LACBWR ISFSI and decommissioning activities as applicable. Procedures shall include appropriate quantitative and qualitative acceptance criteria necessary to determine that the activity is being properly performed.

2. Audit or surveillance reports are distributed to management for their review and assessment of the QA program, as to effectiveness, scope, adequacy, and implementation.

3. Indoctrination in the QA program requirements through General Employee Training shall be provided to all facility personnel and contractors performing activities that could affect the quality of structures, systems, or components, or engaged in decommissioning activities.

4. Independent Management Assessments are periodically performed to monitor overall performance and confirm that activities affecting quality

comply with the QAPD and that the QAPD is effectively implemented. Independent Management Assessment is performed by individual(s) designated by the President, independent of activities assessed, and who provide the appropriate level of expertise in the activities assessed. The Independent Management Assessment results are communicated in an understandable form and in a timely fashion to a level of management having the authority to effect corrective action. In addition, these results are reported in a timely fashion to the President.

F. Personnel Training and Qualification

1. Each member of the facility staff (including audit, surveillance and inspection personnel) shall have sufficient qualifications to perform their assigned duties. Regulatory Guide 1.8 -1977 (ANSI N18.1 – 1971) is utilized for determining and assessing appropriate staff qualifications.

2. Training programs are established and implemented to ensure that personnel achieve and maintain suitable proficiency. Additionally, personnel training and qualification records are maintained in accordance with procedures.

3. In addition to the above, the following specific qualification requirements are required:

   a. The position of the QA Manager shall meet the following minimum qualifications:

      - Graduate of a four-year accredited engineering or science college or university, or the equivalent in practical experience plus five (5) or more years in positions of leadership, such as lead engineer, project engineer, audit team leader, etc.

      - At least two years of this experience should be associated with nuclear quality assurance activities, and at least one year of this experience shall be in a quality assurance organization. An additional two years of quality assurance program implementation may be substituted for the one-year experience within a quality assurance organization.

      - A master's degree in engineering or business management is considered equivalent to two years of experience.

   b. The position of Radiation Protection Manager shall meet the following minimum qualifications:

      - Academic degree in an engineering/science field or equivalent as provided for in paragraph (c), below.

      - Minimum of five years professional experience in the area of radiological safety, three years of which shall be in applied radiation work in a nuclear facility.

      - Technical experience in the area of radiological safety beyond

the five year minimum may be substituted on a one-for-one basis towards the academic degree requirement (four years of technical experience being equivalent to a four year academic degree).

- Academic and technical experience must total a minimum of nine years.

c. The position of Qualified Technical Reviewers shall meet the following minimum qualifications:

- Qualified Technical Reviewers shall be knowledgeable in the subject area being reviewed.
- Qualified Technical Reviewers shall be individuals without direct responsibility for the document under review; these reviewers may be from the same functionally cognizant organization as the individual or group performing the original work.
- Qualified Technical Reviewers shall have at least 5 years of professional experience and either a Bachelor's degree in Engineering or the Physical Sciences or shall have equivalent qualifications evaluated on a case by case basis and approved by the Project Manager or Site Manager, Genoa.
- The Project Manager shall appoint Qualified Technical Reviewers for decommissioning activities and the Site Manager, Genoa shall appoint Qualified Technical Reviewers for ISFSI-related activities.

III. DESIGN CONTROL AND REVIEW

A. General

This section establishes the requirements to assure that Important To Safety (ITS) structures, systems, and components (SSCs) of the LACBWR ISFSI are added, deleted, changed or modified in accordance with the codes, standards, and regulations that governed the original design, except as amended and approved. Measures shall be established for the review, evaluation, and approval of all design changes governing ISFSI SSCs. The Engineering Manager (EM) shall ensure that the design control and review for ITS SSCs shall be performed by the appropriate Design Authority (ref. Appendix A) utilizing their approved 10 CFR 50 Appendix B or 10 CFR 72 Subpart G Quality Assurance Program.

Design, fabrication, or modification of storage and shipping casks used for shipment of radioactive materials will not be conducted under this section.

B. Responsibilities

1. The DPC staff is responsible for establishing procedures to implement

design control and the incorporation of design documents into work orders, procedures and instructions.

2. The EM is responsible for the incorporation of design bases, regulatory requirements, codes and standards into drawings and specifications related to ITS SSCs design and changes thereto. The EM is also responsible for the review of design drawings, specifications, calculations, and procurement documents to assure that quality standards are included or referenced.

3. The Qualified Technical Reviewer is responsible for providing an independent review of changes to the ISFSI ITS SSCs. They shall provide assurance that the modification meets the design bases, regulatory requirements, and applicable codes and standards. The review shall determine whether the proposed modifications require prior NRC approval. If prior NRC approval is needed, any license amendment request shall be referred to SOLUTIONS licensing support.

C. Requirements

1. A Work Order shall be initiated for all modifications to ITS SSCs and systems maintained operational during ISFSI activities. Work Orders may be initiated by any knowledgeable person.

2. Design bases, regulatory requirements, and applicable codes and standards shall be delineated and specify appropriate quality standards and requirements for all proposed ISFSI modifications to ITS SSCs and systems maintained operational during ISFSI activities. These conditions shall be incorporated into drawings, specifications, procurement documents, and procedures.

3. All proposed ISFSI modifications shall be reviewed to determine whether they require prior NRC approval.

IV. PROCUREMENT DOCUMENT CONTROL

A. General

This section establishes the measures to assure that procurement documents (purchase requisitions and orders) covering material, equipment, and services for ISFSI ITS SSCs specify appropriate quality requirements. The purchase order specifies or references the applicable requirements, design bases, codes, and standards to assure quality.

B. Responsibilities

1. The DPC staff is responsible for developing procedures to control the preparation, review, and approval of purchase orders for material, equipment, and services covered by the QA program.

2. The DPC staff is responsible for initiation of purchase requisition worksheets for material, equipment, and services required for maintenance, repair, and modifications.

3. The Engineering Manager is responsible for preparing engineering

specifications which detail the technical and quality requirements for ITS material, equipment, and services.

4. The DPC staff is responsible for preparing purchase requisitions for material, equipment, and services.

5. Purchasing is responsible for preparing, reviewing, approving, issuing, and controlling purchase orders.

6. The QA Specialist / Engineer is responsible for review of ITS procurement documents to ensure inclusion of appropriate quality requirements.

C. Requirements

1. Purchase requisitions for new material, equipment, and services and for spare or replacement parts shall be initiated by any department personnel. The purchase requisition shall contain the information such as quantity, item description, and technical and quality requirements necessary for procurement of the item.

2. Purchase orders shall include specifications that contain all the information necessary to assure material, equipment, and services are of adequate quality. This shall include material selection, design data, equipment description, source inspection and testing requirements, cleaning and packaging requirements, and required documentation as deemed necessary.

3. Documentation that is required to provide evidence that materials, equipment, and services are of adequate quality shall be clearly delineated in purchase orders. This shall include a listing of each item of documentation to be submitted, when it is to be submitted, what requires approval prior to manufacture, and to whom it shall be submitted.

4. To the extent necessary, ITS procurement documents shall require suppliers of material, equipment, and services to have a quality assurance program complying with the pertinent provisions of 10 CFR 21, 10 CFR 50, Appendix B, and/or 10 CFR 72, Subpart G. Suppliers shall be required to provide access to their facilities and records for inspection and audit, as required, to determine compliance with provisions of the purchase order. These requirements shall extend to lower tier procurements, as determined by management.

5. ITS purchase requisitions shall be reviewed by the QA Specialist / Engineer to assure that all necessary quality requirements are included or referenced.

6. Formal purchase orders that have been prepared from the purchase requisition shall be reviewed to assure all required information is correctly incorporated.

7. Changes in technical content in procurement documents shall be initiated and reviewed in accordance with the same procedures utilized

in preparation of the original document.

V. INSTRUCTIONS, PROCEDURES, AND DRAWINGS

A. General

This section establishes the measures to assure that activities relating to ISFSI activities are performed in accordance with approved instructions, procedures, and drawings.

B. Responsibilities

1. The DPC staff is responsible for preparing or reviewing all procedures that are required for implementation of the QAPD.

2. The ISFSI Manager is responsible for approval of ISFSI related procedures that implement NRC-approved programs and plans.

3. The Qualified Technical Reviewer is responsible for reviewing all initial and revised procedures that affect ITS ISFSI operations and shall determine whether changes to these procedures require prior NRC approval.

C. Requirements

1. Detailed instruction for ISFSI activities shall be contained in procedures and checklists covering the following activities:

   a. administrative control,

   b. general security system operation,

   c. Security Plan implementation,

   d. quality assurance,

   e. surveillance and test activities of equipment,

   f. fire protection program, and

   g. Emergency Plan Implementation.

2. For activities other than those within normal craft expertise, instructions for maintenance and repair of ISFSI equipment or systems shall be contained in procedures or Work Orders. The guidance shall contain instructions for preparation, performance, testing, and return to service. The guidance may reference manufacturer's instruction manuals, drawings, and other sources, as applicable.

3. Instructions, procedures, or drawings for ITS activities shall delineate methods and sequences when an activity is to be performed. These documents shall include appropriate quantitative or qualitative acceptance criteria for determining that the activity has been satisfactorily performed.

4. The department responsible for an activity shall be required to provide the necessary technical input and review of changes to instructions, procedures, or drawings.

5. Changes to or deviations from established instructions, procedures, or drawings will require the same review and approval as the original document. However, temporary changes to procedures that do not change the intent of the original procedure may be made in ink, dated, and approved by two people of the management staff.

6. Procedures will be reviewed periodically as set forth in administrative procedures.

VI. DOCUMENT CONTROL

A. General

This section establishes the requirements for document control as it applies to the LACBWR ISFSI.

B. Responsibilities

1. The DPC staff is responsible for preparing a standard procedure for controlling the issuance of procedures and for preparing procedures for controlling the distribution of operating, maintenance, repair, and modification procedures for the ISFSI.

C. Requirements

1. Procedures shall be established for the issuance of procedures, drawings, and specifications. A document control procedure shall be prepared to provide a uniform system of document identification.

2. All documents shall have an identification number, title, date, and revision number. Documents shall be filed and controlled by use of this identification. Each type of document shall be filed in a central location identified in a document control procedure.

3. Drawings, specifications, and procedures, including revisions, shall be reviewed for adequacy and approved for release by authorized personnel. The required reviews and approvals shall be specified in a document control procedure.

4. The administrative staff shall assure that current documents are distributed to and used at the location where the prescribed activity is performed. Documents and revisions shall be distributed as specified in a document control procedure. Preliminary and superseded documents shall be clearly identified and closely controlled to preclude their misuse.

5. An index of each type of document shall be established and maintained to provide the current status of documents.

VII. CONTROL OF PURCHASED MATERIAL, EQUIPMENT, AND SERVICES

A. General

This section establishes the requirements to assure that purchased ITS material, equipment, and services for the ISFSI, whether purchased directly or through contractors and subcontractors, conform to the procurement documents.

B. Responsibilities

1. The QA Specialist / Engineer is responsible for developing procedures for supplier evaluation and qualification and for coordinating supplier evaluation, qualification, and evaluating supplier quality programs. The QA Specialist / Engineer is responsible for developing procedures for receiving inspection of material and equipment.

2. DPC staff shall be responsible for evaluating supplier manufacturing and technical capabilities.

C. Supplier Qualification

1. Qualification of suppliers shall consist of assessing past experience with the supplier, supplier's reputation and experience in the field, and in the nuclear industry, a QA program and/or other factors, as appropriate.

2. Suppliers of casks used for shipment and storage of radioactive material shall be evaluated to ensure that the design and fabrication of packaging are performed under the control of an NRC-approved and DPC-accepted (ISFSI scope) or SOLUTIONS-accepted (decommissioning scope) QA program.

D. Source Inspection

1. When appropriate, suppliers shall be requested to furnish DPC with sufficient information concerning their manufacturing and inspection plan to permit DPC or their designated agent to plan and implement a source inspection plan.

2. When appropriate, inspection plans shall include witness and hold points for inspection of items, witnessing of processes or tests, audit of required quality documentation, and verification that vendors have complied with the specification requirements and have documented any deviation from the specifications.

E. Receiving Inspection

1. Items shall be examined by appropriately trained staff upon receipt for shipping damage, correctness of identification, and specified quality documentation, in accordance with approved instructions.

2. Documentary evidence attesting that items conform to purchase order requirements shall be available at the ISFSI prior to installation or use of the item.

3. Documentary evidence shall be sufficient in order to identify that the

specific requirements, such as codes, standards, and specifications, can be confirmed for the purchased item. This requirement shall be satisfied by having available copies of the purchase order and appropriate documents referenced therein.

4. All ITS materials, parts, and components will be segregated upon receipt and will be placed in a receiving inspection hold area separate from storage facilities. After acceptance, the material will be identified as acceptable and placed in specified storage.

5. During receiving inspection, if a nonconformance or discrepancy exists, the material shall be placed on hold and will remain in a hold status until final disposition is determined. A corrective action document shall be initiated.

6. Items dispositioned as unacceptable for use shall be rejected and removed from the controlled receiving inspection area.

VIII. IDENTIFICATION AND CONTROL OF MATERIALS, PARTS, AND COMPONENTS

A. General

This section establishes the requirements for identification and control of ITS material, parts, and components, based on the ISFSI system designation, from receipt at the facility through installation or use.

B. Responsibilities

1. The DPC staff is responsible for establishing the overall requirements for the identification and control of materials, parts, and components from receipt through installation or use, and/or developing procedures and instructions for the control and issuance of quality related materials, parts, and components.

2. The ISFSI Manager shall approve and ensure implementation of procedures or instructions for the identification and control of materials, parts, and components.

3. Appropriately trained DPC staff is responsible for control of, identification, and issuance of all ITS material, parts, and components.

C. Requirements

1. Approved instructions and procedures shall be implemented for the identification and control of materials, parts, and components from receipt through installation or use. An identification system utilizing purchase order numbers shall be implemented for identification of material, parts, and components.

2. Specifications shall require that materials, parts, and components are identified in accordance with purchase order numbers and shall require that documentation have identification providing traceability to an item.

3. Physical identification by purchase order number shall be used to the maximum extent possible for relating an item at any time to applicable

documentation. Identification shall be either on the item or records traceable to the item. Where physical identification is impractical, physical separation, procedural control, or other appropriate means shall be employed.

IX. CONTROL OF SPECIAL PROCESSES

A. General

This section establishes the measures to assure special processes, including welding, heat treating, and non-destructive testing that are identified as ISFSI ITS, are controlled and accomplished by qualified personnel using qualified procedures in accordance with applicable codes, standards, specifications, criteria, and other special requirements.

B. Responsibilities

1. The DPC staff is responsible for establishing procedures that describe how personnel and procedures are qualified for special processes.

2. The QA Specialist / Engineer is responsible for reviewing of procedures for welding, heat treating, cleaning, non-destructive examination, and filler metal control and for assuring maintenance, repair, and modification work involving special processes is performed by qualified personnel in accordance with qualified procedures.

3. The ISFSI Manager is responsible for assuring the qualification of personnel in special processes and maintaining records of qualified personnel and procedures performing ISFSI activities.

C. Requirements

1. Welding, heat treating, cleaning, and non-destructive examination shall be accomplished under controlled conditions in accordance with applicable codes, standards, criteria, and other special requirements, using qualified personnel and procedures. Qualification of personnel and procedures shall comply with the requirements of applicable codes and standards.

2. Welders and welding procedures shall be qualified, as appropriate, in accordance with Section IX of the ASME Boiler and Pressure Vessel Code and/or appropriate American Welding Society (AWS) Welding Codes.

3. Non-destructive examination personnel shall be qualified in accordance with the American Society for Non-destructive Testing Standard SNT-TC-1A.

4. Procedures shall be established to describe the method used to control the receipt, storage, baking, drying, and disbursal of welding filler metals.

5. Equipment used for accomplishing special processes shall be calibrated, maintained, stored, handled, and issued in accordance with applicable procedures or instructions.

X. INSPECTION

A. General

This section establishes a program for inspection of ISFSI activities to verify conformance with approved procedures, drawings, and specifications.

B. Responsibilities

1. The DPC staff is responsible for assuring adequate inspection requirements are included in engineering specifications, and reviews of any inspection procedures implementing this section are completed.

2. The QA Specialist / Engineer is responsible for establishing inspection procedures and assuring adequate inspection requirements are included in procedures. They are also responsible for coordinating the assignments of qualified inspection personnel.

3. The ISFSI Manager shall be responsible for approving ISFSI inspection procedures or instructions and shall ensure sufficient inspections are performed to provide adequate confidence that project activities meet predetermined requirements.

C. Requirements

1. Inspections shall be performed only by qualified personnel. In no case shall an acceptance inspection be performed by the individual who performed the activity.

2. Provisions to ensure inspection planning is properly accomplished are to be established. Planning activities shall identify the characteristics and activities to be inspected, the inspection techniques, the acceptance criteria, and the organization responsible for performing the inspections.

3. Mandatory inspection hold points, which require witnessing or inspecting of an activity before proceeding, shall be indicated in the appropriate procedure, specification, or work order. The inspection shall be documented to indicate approval and release prior to continuation of the activity.

4. Inspection requirements shall apply to all activities whether performed by company personnel or contractor personnel, and shall require that inspection procedures and instructions, along with necessary drawings, are provided prior to commencing inspection activities.

5. Inspection requirements governing modifications, repairs, and replacement shall be in accordance with the original design and inspection requirements or as amended by approved changes to the original design.

XI. TEST CONTROL

A. General

This section establishes the requirements for an ISFSI test program to demonstrate that ITS SSCs will perform satisfactorily in service. The test program shall include, but not be limited to, surveillance testing, special tests, post maintenance testing, and testing following ISFSI modification or significant changes in procedures.

B. Responsibilities

1. The DPC staff is responsible for establishing the requirements to control the test program and for preparation and review of test procedures, surveillance during testing, and review and documentation of test results. The DPC staff is also responsible for establishing specifications, requirements and acceptance criteria for testing following ISFSI modifications or installation activities and the review of results for testing following modifications.

2. The ISFSI Manager is responsible for the approval of ISFSI test procedures or instructions.

3. The Qualified Technical Reviewer is responsible for review of all ITS proposed test procedures, special testing procedures, performance testing procedures following ISFSI modification and performing 10 CFR 72.48 evaluations to verify that ISFSI tests do not require prior NRC approval.

C. Requirements

1. A program shall be established to assure all testing required to demonstrate that ITS SSCs will perform satisfactorily in service is identified and documented.

2. Testing shall be performed in accordance with approved test procedures that incorporate or reference the requirements and acceptance criteria contained in applicable design documents and Technical Specifications.

3. Test procedures shall incorporate, but not be limited to, requirements for such items as: hold points, witness points, caution notes, emergency requirements, and test jumper logs.

4. Test procedures shall include, as a minimum, provisions for assuring that:

   a. Prerequisites have been completed that include, as a minimum:

      1) Control of systems status as necessary.

      2) Availability of calibrated instrumentation and special equipment.

   b. Test objectives and applicable acceptance limits are stated.

   c. Test results are documented.

   d. Detailed instructions for performing the test are included.

e. Test results are reviewed and approved.

5. Test reports shall include identification of the inspector, individual conducting the test, the data recorder, the type of observation made, the equipment used, the test results, the acceptability of the test results, and approved disposition for any deviations.

6. Test results which fail to meet the requirements and acceptance criteria shall be properly noted and appropriate corrective action taken.

XII. CONTROL OF MEASURING AND TEST EQUIPMENT

A. General

This section establishes the requirements for written procedures for the control, calibration, and periodic adjustment of tools, gauges, instruments, and other measuring and test equipment used to verify conformance to established ISFSI technical requirements.

B. Responsibilities

1. The DPC staff is responsible for establishing requirements for a program for the control, calibration, and periodic adjustment of tools, gauges, instruments, and other measuring and test equipment used.

2. Personnel using Measuring and Test Equipment are responsible for ensuring tools, gauges, instruments, and other measuring and test equipment are calibrated to assure compliance with the implementing procedures.

3. The ISFSI Manager is responsible for ensuring implementation of the requirements of this section of the manual for ISFSI activities and for approving ISFSI procedures or instructions.

C. Requirements

1. Inspection, test, and work procedures shall include provisions to assure tools, gauges, instruments, and other inspection, measuring, and test equipment and devices used in activities affecting quality are of the proper range, type, and accuracy to verify conformance to established requirements and test parameters.

2. To assure equipment accuracy, inspection, measuring, and test equipment shall be controlled, calibrated, adjusted, and maintained periodically, or prior to use. Calibrations are performed against certified measurement standards that are traceable to nationally recognized standards. Where national standards do not exist, provisions will be established to document the basis for calibration. Control measures and procedures shall prevent the use of calibrated tools, gauges, instruments, and other measuring and test equipment by unauthorized personnel. Special calibration and control measures are not required for devices when normal commercial practices provide adequate accuracy.

3. When an item of measuring and test equipment is found to be out of

calibration, an investigation will be conducted and documented to determine the validity of previous inspections, tests, or calibrations which were performed with the use of that item.

4. Records or logs of the calibration history of measuring and test equipment shall be maintained.

5. Measuring and test equipment shall be controlled by a permanently affixed serial number. Calibration decals, tags or stickers shall be displayed prominently on each device and shall reflect the date of calibration, due date of the next calibration (for recurring calibration) and identity of person performing the calibration.

XIII. HANDLING, STORAGE, AND SHIPPING

A. General

This section establishes the requirements for ISFSI procedures to control the handling, storage, shipping, cleaning, packaging, and preservation of ITS material and equipment to prevent damage, deterioration, or loss through shipment, installation or use.

B. Responsibilities

1. The DPC staff is responsible for establishing requirements for the handling, storage, and shipping of materials, parts, and components covered by the QA program.

2. The ISFSI Manager is responsible for approval of all implementing procedures or instructions related to the ISFSI and ensuring the implementation of the requirements of this section of the QAPD.

C. Requirements

1. The requirements for handling, storage, shipping, cleaning, and preservation of materials, and equipment shall be documented in approved procedures.

2. Procurement documents shall include instructions for the handling, storage, shipping, cleaning, and preservation of the item being supplied, as applicable.

3. Procurement documents specify marking requirements, special covering, and protective environments, such as inert gas atmosphere, moisture content levels, and temperature levels, as applicable.

4. Specifications and procedures establish the requirements for special handling tools and equipment to ensure safe and adequate handling of critical, sensitive, or radioactive items.

5. Special handling tools and equipment will be inspected and tested in accordance with approved procedures, at specified intervals, to verify that tools and equipment are adequately maintained.

6. Materials and equipment will normally be handled by materials

handling personnel. Other special shipments which require special equipment and handling will be handled by knowledgeable and trained personnel.

7. Storage of material and equipment will be in areas free from fumes, vapors, and dust. Storage will be in areas protected from the weather, as appropriate, and in which chemical storage is excluded, except as may be specifically authorized in writing. Storage will be in areas which satisfy the handling and storage requirements specified for the item.

XIV. INSPECTION, TEST, AND OPERATING STATUS

A. General

This section describes the system for indicating the inspection, test, and operating status of ITS components and systems at the ISFSI.

B. Responsibilities

1. The DPC staff is responsible for ensuring that the status of operating equipment or systems to be removed from service for maintenance, test, inspection, repair, or modification is in accordance with the approved procedures and shall monitor the status of activities for compliance with approved procedures and shall ensure inspection results are properly logged. They shall establish the procedures for implementing the work inspection or status sheets during maintenance, repair, and modifications and shall ensure inspection results are properly logged. The DPC staff is also responsible for the control of ISFSI status during modifications.

C. Requirements

1. Equipment or systems not ready for normal service shall be clearly identified by use of tags.

2. Equipment or system inspection and test status shall be indicated.

3. SSCs that are found to be unacceptable during or after testing shall have their status clearly identified.

XV. CORRECTIVE ACTION

A. General

This section establishes measures to assure that conditions adverse to quality at the ISFSI, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and non-conformances are promptly identified and corrected. This includes the control of materials, parts, or components that do not conform to requirements, thereby preventing their inadvertent use or installation.

B. Responsibilities

1. The DPC staff is responsible for establishing procedures for the

identification, review, and correction of conditions adverse to quality which includes the control, evaluation, and disposition of deficient materials, parts, and components.

2. The DPC staff is responsible for reviewing nonconforming items that cannot be corrected by vendor action and recommending disposition. The DPC staff is also responsible for preparing procedures for repair and rework of nonconforming items.

3. The DPC staff is responsible for reviewing conditions adverse to quality to determine the cause of the condition and for recommending corrective action to preclude repetition.

C. Requirements

1. Conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, shall be reported on a corrective action document. Materials, parts, or components that do not conform to requirements shall be identified and placed in a hold status. Nonconforming items shall remain in a segregated area until approved disposition has been determined.

2. The corrective action document shall identify the condition, the cause of the condition, and the corrective action taken.

3. For vendor-supplied items or services, the vendor shall be notified of all nonconforming items and requested to correct the deficiencies. DPC staff with assistance from procurement support staff shall be responsible for coordinating the disposition of deficient items with vendors. The QA Specialist / Engineer is responsible for inspecting and accepting or rejecting items that have been corrected by vendors.

4. Deficiencies which cannot be corrected by the vendor shall be reviewed by the DPC staff who will recommend repair, rework, accept, or reject. Items shall be repaired or reworked only in accordance with approved procedures and shall be re-inspected after repair by the QA Specialist / Engineer. DPC staff shall ensure that documented and approved procedures are available prior to repair or rework.

5. Items which are accepted for use with a known deficiency shall be fully documented with the specification requirement, justification for acceptance, and effect of such use. All such items shall be approved by the corrective action document prior to use.

6. Conditions adverse to quality which involve design deficiencies, or recommended corrective actions that involve a design change, shall be reviewed by DPC staff or applicable Design Authority (ref. Appendix A).

7. Conditions that may be reportable per 10CFR72.242, 10CFR71.95, or 10CFR21 shall be reported in accordance with approved procedures.

XVI. QUALITY ASSURANCE RECORDS

A. General

This section establishes measures for maintaining records associated with the operation, maintenance, installation, repair, and modification of ISFSI SSCs, and the decommissioning activities, covered by the QAPD. Also included are historical records gathered and collected during plant and ISFSI operations which are either required to support the dry cask storage systems stored at the ISFSI or ultimate shipment to a federal repository.

The requirements below do not apply to records that are determined to be exempt from records keeping requirements in accordance with the terms of any NRC-approved records exemption that may be granted to SOLUTIONS for records related to the LACBWR site.

B. Responsibilities

1. The DPC staff is responsible for establishing the requirements of this section.

2. The ISFSI Manager is responsible for approving and ensuring implementation of procedures for this section.

C. Requirements

1. Record Management System - Quality Records shall be identified, controlled and stored in accordance with written procedures. The record system includes the retention of those design, fabrication, inspection, operation, and surveillance records essential to demonstrate product quality. It provides for the identification of materials and their corresponding manufacturing, installation, inspection, test, and audit results. Requirements and responsibilities for the transmittal, distribution, retention, maintenance, and disposition of records are specified in approved procedures. QA records shall be protected against damage, deterioration, unauthorized change, or loss. For any work performed, the records to be generated must be identified, along with a means of matching the record to the item or activity to which it applies. Records must be legible, reproducible, and accurate. For subcontractors/sub-suppliers, the original QA record of the deliverables will be transmitted to SOLUTIONS or DPC when applicable.

2. Authentication - Documents shall be considered valid records only if stamped, initialed, or signed and dated by authorized personnel or otherwise authenticated, including the use of electronic approval and authorization. This authentication may take the form of a statement by the responsible individual or organization. Handwritten signatures are not required if the document is clearly identified as a statement by the reporting individual or organization. These records may be originals or reproduced copies.

3. Indexing - The records indexing system must include records identification, location of the record within the system, and minimum retention time. The records and/or indexing system(s) shall provide

sufficient information to permit identification between the record and the items or activities to which it applies.

4. Distribution and Control - The records shall be distributed, handled, and controlled in accordance with written procedures. Measures shall be established to preclude the entry of unauthorized personnel into the storage area, or the distribution of records to unauthorized personnel. Records maintained by the supplier at their facility or other location shall be accessible to the purchaser or their designated alternate.

5. Classification of records - Records shall be classified for retention and storage requirements as either lifetime or nonpermanent. Records that meet any of the following criteria are designated Lifetime records and must be maintained.

    a. Project lifetime records shall include, as a minimum, design specifications, stress reports or stress calculations, "as-built" and interface control drawings, copies of material test reports, tabulation of materials for "as-built" configuration, NDE reports including examination reports, and nonconformance reports. Lifetime record retention is based on the life of the program, life of the item, life of the facility, or life of the license, as applicable.

    b. Nonpermanent records are required to show evidence that an activity was performed in accordance with applicable requirements. Retention times must be established in writing.

    In addition, retention periods specified in various governing codes and standards (e.g. 10CFR71, 10 CFR 72) will be included in the retention requirements established in approved procedures for QA records.

    For subcontractors/sub-suppliers, the original QA record of the deliverables will be transmitted to SOLUTIONS or DPC when applicable.

6. Storage Requirements - The records shall be stored in predetermined location(s) that meet the requirements of applicable standards, codes, and regulatory agencies. Prior to storage of records, a written storage procedure shall be prepared and responsibility assigned for enforcing the requirements of that procedure.

    Records shall be stored to prevent damage from moisture or temperature. All records maintained in hard copy form shall be firmly attached to binders or placed in folders, envelopes, or boxes for storage in file cabinets or within containers on shelving. Records may be stored in electronic media provided that the process for managing and storing the records are documented in approved procedures. Media used for the retention of records include, but are not limited to, microfilm, compact disks, magnetic media, optical disks or servers. The format used must be capable of producing legible and complete documents during the entire retention period.

    a. Records shall be stored in facilities that minimize the risk of damage or destruction from the following:

b. Natural disasters such as wind, flood, or fires;

c. Environmental conditions such as high and low temperatures and humidity; and

d. Infestation by insects, mold, or rodents.

7. Disposition - Various regulatory agencies have requirements concerning records that are within the scope of the QAPD. The most stringent requirements shall be used in determining the final disposition.

XVII. AUDITS

A. General

This section establishes the requirements for a system of planned and documented audits to verify compliance with all aspects of the QA program and to assess the effectiveness of the program as it applies to the ISFSI. The system provides for the reporting and review of audit results by appropriate levels of supervision and management.

B. Responsibilities

1. The QA Specialist / Engineer is responsible for developing audit checklists, designating and training audit personnel, and conducting audits.

2. The QA Specialist / Engineer performs independent review and audit to verify that the ISFSI is being maintained consistent with company safety, administrative, and licensing provisions.

C. Requirements

Implementing procedure(s) for the internal audit/survey program shall include controls to ensure that the following are met:

1. Audits shall be performed in accordance with written procedures or checklists by appropriately trained personnel having no direct responsibilities in the area audited. Deficiencies from previous audits shall be reviewed and re-audited, as appropriate. The checklists are used as guides to the auditor.

2. Audits may be conducted by the QA Specialist / Engineer or other qualified personnel, such as technical specialists from other departments and outside consultants.

3. Audit and surveillance results shall be documented and reviewed with supervision responsible for the area audited, who shall take necessary action to correct reported deficiencies. Follow-up action, including re-audit/re-survey of deficient areas, is initiated as deemed appropriate.

4. The QA Specialist / Engineer shall assess the following:

   a. evaluation of quality assurance practices, procedures, and instructions;

   b. effectiveness of implementation; and

   c. conformance with approved procedures.

5. Audit schedules assure that the following areas are audited at the indicated frequencies or more frequently as performance dictates.

   a. The conformance of ISFSI operation to provisions contained within the NAC-MPC CoC Technical Specifications and applicable license conditions is audited at least once every 24 months. The audit shall include elements such as:

      - Training and qualifications of the staff.
      - Actions taken to correct deficiencies occurring with equipment, structure, systems, or method of operation that affect nuclear safety.
      - Performance of activities required by the QA program to meet the criteria of 10 CFR 50, Appendix B, 10 CFR 71, Subpart H and 10 CFR 72, Subpart G.
      - Implementation of the programs required by Appendix C, 1.0 through 2.5.

   b. Other activities/documents as requested by SOLUTIONS or DPC management.

6. Deficiencies or nonconformances identified during an audit shall be documented and brought to the attention of the Project Manager and ISFSI Manager, as applicable. Follow-up shall be performed to verify that corrective actions have been taken to correct the deficiencies or nonconformances.

7. Audit reports are sent to management for their review and assessment of the QA program.

8. Audit reports shall be forwarded to the SOLUTIONS Senior Executive Vice President and General Manager, the DPC President and CEO, and to the management positions responsible for the areas audited, within 30 days after completion of the audit.

9. External audits or surveys of suppliers providing Important To Safety materials, parts, equipment or services are performed at the indicated frequency or more frequently as performance dictates.

10. Suppliers providing commercial grade calibration and testing services who are accredited by a nationally recognized accrediting body, using procedures consistent with those found in ANSI/ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration

Laboratories", do not have to be periodically surveyed if the conditions of the NRC Safety Evaluation dated February 9, 2015 are met (see Appendix B). Controls shall be established in applicable procedures to ensure the requirements of the NRC Safety Evaluation are satisfied.

IMPORTANT TO SAFETY STRUCTURES, SYSTEMS AND COMPONENTS

The pertinent quality assurance requirements of 10 CFR 50, Appendix B, 10 CFR 71 Subpart H and 10 CFR 72 Subpart G will be applied, as a minimum, to all quality activities affecting the Important To Safety (ITS) Structures, Systems and Components (SSCs) associated with spent fuel storage and transportation package.

NOTE

The safety classification of SSCs of the LACBWR ISFSI facility may be revised based on engineering evaluations and a revision to the NAC-MPC FSAR. These modifications are controlled in accordance with the Design Control process and are not considered a reduction in the commitments to the QAPD.

The quality classification of NRC-licensed Dry Spent Fuel Storage Components and Transportation Packages may not be revised using the LACBWR Design Control process. These modifications must be made by the Certificate Holder. The Certificate Holder is responsible for design and licensing controls for these components under their NRC-approved Quality Assurance Program. SOLUTIONS utilizes these types of components and packages under the provisions of a NRC General License for Radioactive Material Transportation Packages (10 CFR 71) and Spent Fuel Storage (10 CFR 72).

Items and services associated with Packaging and Transportation of Radioactive Material as described in 10 CFR 71, and Independent Storage of Spent Nuclear Fuel as described in 10 CFR 72, will also fall under the requirements of the QAPD.

ITS SSCs associated with spent fuel storage and radioactive material transportation packages are defined below:

IMPORTANT TO SAFETY AS DEFINED BY 10 CFR 71 AND 10 CFR 72

A. Dry Spent Fuel Storage (10 CFR 72)

SSC	Quality Category	Design Authority
Transportable Storage Canister and Fuel Basket Assembly	A	NAC Intl.
Vertical Concrete Cask	B	NAC Intl.
Transfer Cask and Adapter Plate	B	NAC Intl.
ISFSI Pad	C	DPC
Lifting Yoke	B	NAC Intl.
Damaged Fuel Can	A	NAC Intl.

IMPORTANT TO SAFETY STRUCTURES, SYSTEMS AND COMPONENTS

B. Transport of Spent Fuel and GTCC Waste (10 CFR 71)

SSC	Quality Category	Design Authority
Transportable Storage Canisters and Fuel Basket Assembly	A	NAC Intl.
Damaged Fuel Can	A	NAC Intl.
Transportable Storage Canister and Basket Assembly For GTCC Waste Containers	A	NAC Intl.
Storage Transport Cask (STC)	A	NAC Intl.

C. Radioactive Material Transport Packages (10 CFR 71)

Radioactive Material Transport Packages subject to the provisions of 10 CFR 71, Subpart C, "General Licenses," are Important To Safety and subject to the applicable requirements of the QAPD.

NOTES:

1. See NAC-MPC Final Safety Analysis Report for additional classification information.
2. See NAC Storage Transport Cask (STC) Final Safety Analysis Report and associated NAC specifications for additional classification information.
3. For the definition of Quality Categories A, B, and C refer to NUREG/CR-6407.

APPENDIX B

REGULATORY COMMITMENTS, ALTERNATIVES AND EXCEPTIONS

1.0 REGULATORY COMMITMENTS

1.1 Regulatory Guide 1.8, 1-R-5/77, Personnel Selection and Training, Endorses ANSI N18.1-1971 (as applicable).

1.2 Regulatory Guide 7.10, Revision 2 (3/05), "Establishing Quality Assurance Programs for Packaging Used in the Transportation of Radioactive Material."

1.3 NUREG/CR-6407, "Classification of Transportation Packaging and Dry Fuel Storage System Components According to Important to Safety (2/96)."

2.0 ALTERNATIVES

2.1 Nuclear Energy Institute (NEI) NEI 14-05, "Guidelines for the Use of Accreditation in Lieu of Commercial Grade Surveys for Procurement of Laboratory Calibration and Test Services," revision 0, and associated NRC Safety Evaluation dated February 9, 2015.

3.0 EXCEPTIONS

None

ADMINISTRATIVE CONTROLS

These Administrative Controls were developed to support operation of the LACBWR plant while in SAFSTOR (dismantlement) and operation of the LACBWR ISFSI. These requirements were previously included in the Technical Specifications and were relocated to this QAPD during active decommissioning.

1.0 PROCEDURES

1.1 Written procedures shall be established, implemented, and maintained covering the Plant decommissioning activities referenced below and in Section 2.0:

1.1.1 All programs specified in Section 2 of this Appendix.

1.1.2 Fire Protection Program implementation.

1.1.3 Radiation Protection Program implementation.

1.2 Each procedure required by Section 1.1 above and programs listed in Section 2.1 through 2.5, and any changes thereto, shall be independently reviewed by a Qualified Technical Reviewer and approved by the Project Manager or designee prior to implementation.

2.0 PROGRAMS AND MANUALS

2.1 Process Control Program (PCP)

The PCP shall be maintained on-site and will be available for NRC review. Licensee-initiated changes to the PCP shall be submitted to the NRC in the annual Radioactive Effluent Release Report for the period in which the change(s) was made. This submittal shall contain:

2.1.1 Information to support the rationale for the change;

2.1.2 A determination that the change did not reduce the overall conformance of the solidified waste product to existing criteria for solid wastes; and

2.1.3 Documentation of the fact that the change has been reviewed and found acceptable by a Qualified Technical Reviewer.

ADMINISTRATIVE CONTROLS

2.2 Offsite Dose Calculation Manual (ODCM)

The ODCM shall be maintained by the licensee. Changes to the ODCM will be outlined in the annual Radioactive Effluent Release Report per Section 2.5.2. This submittal shall contain:

2.2.1 Detailed information to support the rationale for the change. Information submitted should consist of a package of those pages of the ODCM changed with each page numbered and provided with an approval and date box, together with appropriate analyses or evaluations justifying the change(s); and

2.2.2 A determination that the change will not reduce the accuracy or reliability of dose calculations or setpoint determinations.

2.3 Radioactive Effluent Controls Program

A program shall be provided conforming to 10 CFR 50.36a for control of radioactive effluents and for maintaining the doses to members of the public from radioactive effluents as low as reasonably achievable. The program (1) shall be contained in the ODCM, (2) shall be implemented by health physics procedures and instructions, and (3) shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

2.3.1 Limitations on the operability of radioactive liquid and gaseous monitoring instrumentation, including surveillance tests and setpoint determination in accordance with the methodology in the ODCM;

2.3.2 Limitations on the concentrations of radioactive material released in liquid effluents to unrestricted areas conforming to 10 CFR 20, Appendix B, Table 2, and Column 2;

2.3.3 Monitoring, sampling and analysis of radioactive liquid and airborne particulate in accordance with 10 CFR 20 and with the methodology and parameters described in the ODCM.

2.3.4 Limitations on the annual and quarterly doses or dose commitment to a member of the public from radioactive materials in liquid effluents released to unrestricted areas conforming to 10 CFR Part 50, Appendix I;

2.3.5 Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every year;

ADMINISTRATIVE CONTROLS

2.3.6 Limitations on the annual and quarterly doses to a member of the public from tritium and all radionuclides in particulate form with half-lives greater than eight days in gaseous effluents released to areas beyond the site boundary conforming to 10 CFR 50, Appendix I;

2.3.7 Limitations on the annual dose or dose commitment to any member of the public due to release of radioactivity and to radiation from uranium fuel cycle sources conforming to 40 CFR Part 190.

2.4 Radiological Environmental Monitoring Program

A program shall be provided to monitor the radiation and radionuclides in the environs of the plant. The program shall provide representative measurements of radioactivity in the highest potential exposure pathways. The program shall (1) be contained in the ODCM; (2) conform to the guidance of 10 CFR 50, Appendix I; and (3) include the following:

2.4.1 Monitoring, sampling, analysis, and reporting of radiation and radionuclides in the environment in accordance with the methodology and parameters described in the ODCM.

2.4.2 Participation in an Interlaboratory Comparison Program to ensure that independent checks on the precision and accuracy of the measurements of radioactive material in the environmental sample matrices are performed as part of the Quality Assurance Program for environmental monitoring.

2.5 Reporting Requirements

In addition to applicable reporting requirements of Title 10, Code of Federal Regulations, the following reports shall be submitted prior to March 1 of each year in accordance with 10 CFR 50.4.

2.5.1 Annual Radiological Environmental Monitoring Report

An Annual Radiological Environmental Monitoring Report which shall include summarized and tabulated results, including interpretations and analysis of data trends, of environmental samples taken during the previous calendar year. In the event that some results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted as soon as possible in a supplementary report.

ADMINISTRATIVE CONTROLS

The report shall also include the following: a summary description of the Radiological Environmental Monitoring Program; a map of all sampling locations keyed to a table giving distances and directions from the plant; the results of the Interlaboratory Comparison Program; and a discussion of all analyses in which the lower limit of detection (LLD) was not achievable.

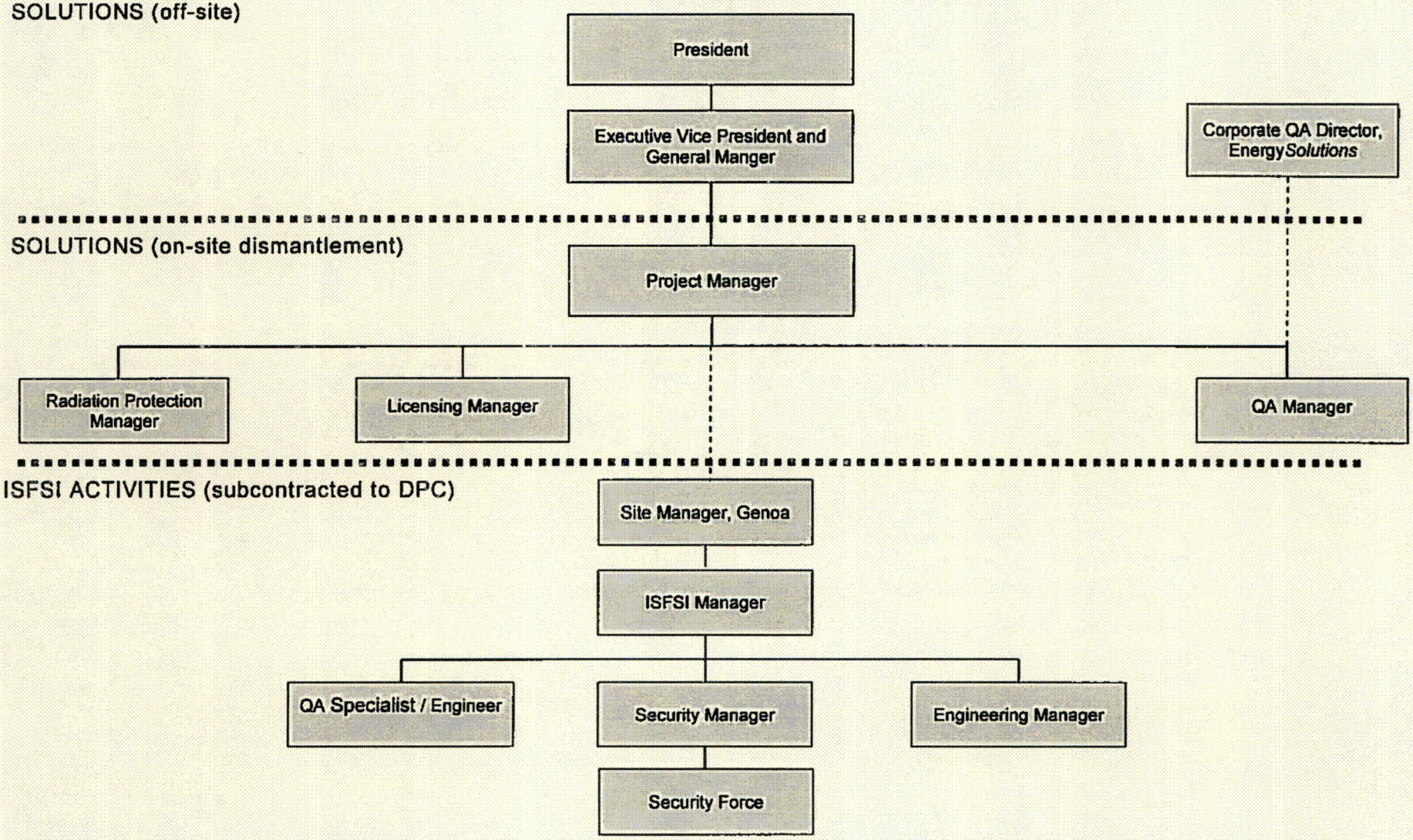
2.5.2 Annual Radioactive Effluent Release Report

Paragraph (a)(2) of 10 CFR 50.36a, "Technical Specifications on Effluents from Nuclear Power Reactors," requires that a report be made to the Commission annually. The report shall specify the quantity of each of the principal radionuclides released to unrestricted areas by liquid or gaseous effluents during the previous year. With the exception of the collection of hourly meteorological data, the information submitted shall be in accordance with Appendix B of Regulatory Guide 1.21 (Revision 1) dated June 1974 with data summarized on at least a quarterly basis.

This same report shall include an assessment, performed in accordance with the ODCM, of radiation doses to members of the public from radioactive liquid and airborne particulate released beyond the effluent release boundary. This report shall contain any changes made to the ODCM during the previous twelve months.

FIGURE 1

La Crosse Solutions Organization



Enclosure 2

LACBWR QAPD, Revision 29, Summary of Changes

LACBWR
QUALITY ASSURANCE PROGRAM DESCRIPTION
(QAPD)

Revision 29

Summary of Changes

The Dairyland Power Cooperative (DPC) and LaCrosse Solutions (SOLUTIONS) have recently submitted an application to transfer the La Crosse Boiling Water Reactor (LACBWR) Possession-Only License No. DPR-45 to from DPC to LaCrosse Solutions

QAPD Revision 29 was developed in conjunction with the SOLUTIONS application for the Transfer of the NRC 10 CFR 50 license from DPC to SOLUTIONS for the completion of decommissioning. Upon NRC approval, SOLUTIONS will be the NRC licensee responsible for all activities under the LACBWR License. QAPD Revision 29 reflects the licensee change from DPC to SOLUTIONS, and reflects the plan to subcontract the management and activities at the ISFSI to DPC. Upon completion of decommissioning, SOLUTIONS will apply to the NRC to transfer responsibility for the NRC License back to DPC.

In order to minimize disruption and maximize efficiency, this revision of the QAPD was jointly developed by DPC and SOLUTIONS to facilitate the various stages of license transition described above.

The proposed revision is a substantial revision to the QAPD and will replace the current QAPD Revision 28 in its entirety. Major or substantial changes are described along with the justifications for those changes. In addition, various minor changes are discussed in summary form.

Many of the following changes were based on similar changes that the NRC approved in the Zion*Solutions* Project Quality Assurance Project Plan, ZS-QA-10, Revision 7. The LACBWR site status is substantially the same as that of Zion at the time the Zion ZS-QA-10, Rev. 7 was approved and implemented (i.e., fuel transfer completed, only decommissioning remaining). Note that by Revision 28 of the QAPD DPC had already completed the major QA Program transition to the Regulatory Guide 7.10 (RG 7.10) basis after fuel transfer was completed. Therefore, the ZS-QA-10 Revision 7 and the QAPD Revision 28 were already aligned in that the program basis both were aligned to RG 7.10.

Change 1 –Organization Changes:

The license transfer application and the approach whereby SOLUTIONS will manage and perform decommissioning activities and will subcontract DPC to manage and perform ISFSI activities made extensive changes necessary to the QAPD Policy, Section 0.0 Introduction, Section I Organization, and Figure 1 Organization chart. These changes also made numerous changes necessary throughout the remainder of the QAPD, to align specific references and responsibilities accordingly.

The specific changes to the Organization describe and reflect the language contained in the overall license transfer submittal to the NRC. It is understood that the QAPD Revision 29 would only be implemented in conjunction with the NRC approved license transfer from DPC to SOLUTIONS.

Given the precondition of NRC approval of the license transfer, the Organization changes herein are specifically identified under 10 CFR 50.54(a)(3)(iii) as not representing a reduction in commitment, and therefore the QAPD Revision 29 changes of this nature continue to satisfy the criteria of Appendix B to 10CFR 50 and the Quality Assurance requirements of 10 CFR 71 and 10 CFR 72.

Change 2 – Substantive Changes:

Substantive Change 2A: In recognition of the limited number of ITS and/or radiological items that will require safety reviews at the ISFSI and remaining D&D activities, this revision incorporates significant changes to the safety review functions described in the QA program. The Safety Review Committee (SRC) has been removed from QAPD Revision 29 and replaced by the Independent Management Assessment (IMA). Section II.E.4 identifies an Independent Management Assessment (IMA) function. Individual(s) that perform IMAs are assigned by the President.

The requirements for an independent review function was based on ANSI N18.7-1976 as endorsed by Regulatory Guide 1.33, Revision 2, and were satisfied by the SRC. The composition and function of the SRC as was described in the QAPD revision 28 followed the guidance provided in ANSI N18.7-1976, Section 4.3.1. The program described therein was intended for operating nuclear power plants. 10 CFR 50, Appendix B, does not specifically require an independent review function (as described in ANSI N18.7) as part of its quality assurance program requirements. Appendix B, 10 CFR 50, Criterion II states in part: "The applicant shall regularly review the status and adequacy of the quality assurance program."

The IMA as described in the QAPD revision 29 meets this 10 CFR 50 requirement.

Substantive Change 2B: In recognition of the limited number of ITS and/or radiological items that will require safety reviews at the ISFSI and remaining D&D activities, this revision incorporates significant changes to the safety review functions described in the QA program. The Operations Review Committee (ORC) has been removed from QAPD Revision 29 and replaced with the Qualified Technical Review (QTR).

The QTR is defined in Section 00.B, and QTR qualifications are established in Section II.F.3.c. The documentation that requires QTR is identified in several places in the QAPD: Section II.D, Section III.B.3, Section V.B.3, Section XI.B.3, and Appendix C Sections 1.0 and 2.1.3 all specify documents that require a QTR. The Project Manager and the Site Manager, Genoa are responsible for the QTR function.

This change was approved by the NRC in the case of numerous other decommissioning plants at the same stage of decommissioning, e.g. Yankee Rowe, Connecticut Yankee, and Maine Yankee. This change is justified based on reduced scope and complexity of operations at the station, and reduced staff, making the continued operation of the ORC impractical and unnecessary.

The responsibilities of the QTR will encompass the functions currently performed by the ORC and will be consistent with the scope of activities at a permanently defueled facility in an advanced stage of decommissioning.

Substantive Change 2C: The applicability of the QAPD to the ISFSI and decommissioning scope was clarified in Section II.B. The QAPD Revision 28 Section II.B stated that the QAPD was applicable to "Passive SAFSTOR decommissioning activities". The QAPD applicability to decommissioning scope is now described in the QAPD Revision 29 in the same way as in the Zion ZS-QA-10, Revision 7. This change is justified based on reduced scope and complexity of operations at the station, and is consistent with the scope of activities at a permanently defueled facility in an advanced stage of decommissioning. The applicability of the QAPD to ISFSI ITS activities and 10 CFR 71 licensed waste shipments remains unchanged in QAPD Revision 29.

Substantive Change 2D: The QAPD Revision 28 Section XVII Records was replaced in its entirety with the language from the Zion ZS-QA-10 Revision 7. This change represents practical records controls that have been approved by the NRC in the case of numerous other decommissioning plants at the same stage of decommissioning, e.g. Yankee Rowe, Connecticut Yankee, Maine Yankee and Zion.

Substantive Change 2E: In the Appendix B "alternatives", the 2005 APS submittal and NRC approval related to the calibration services for M&TE was updated to the recent Nuclear Energy Institute (NEI)

NEI 14-05, "Guidelines for the Use of Accreditation in Lieu of Commercial Grade Surveys for Procurement of Laboratory Calibration and Test Services," Revision 0, and associated NRC Safety Evaluation dated February 9, 2015. This is acceptable since it is approved by NRC Safety Evaluation, and provides more flexibility for acceptance of testing and calibration services.

Substantive Change 2F: In Section XVI.C, the following sentence was added as an enhancement: "Conditions that may be reportable per 10CFR72.242, 10CFR71.95, or 10CFR21 shall be reported in accordance with approved procedures."

Substantive Change 2G: In Appendix C, Section 1.1, the following references were removed, justified as follows:

1.1.1 ISFSI Operations and Maintenance: This was removed as a redundancy. The QAPD Section V already applies to ISFSI Operations and Maintenance, so it was not necessary for this to be listed in Appendix C also.

1.1.5 Physical Security Plan implementation: The requirements for procedure to implement the Physical Security Plan are self-proscribed therein, and it is not necessary to list this in Appendix C.

1.1.6 Emergency Plan implementation: The requirements for procedure to implement the Emergency Plan are self-proscribed therein, and it is not necessary to list this in Appendix C.

1.1.7 Procedure for controlling temporary changes: Based on current status of ISFSI and decommissioning temporary changes are not required.

Change 3 - Editorial / Administrative Improvements and Clarifications:

Editorial changes to remove historical information no longer relevant after license transfer, make specific references more general in nature, and eliminate unnecessary detail of no QA program relevance were made. The types of changes of this nature are as follows:

Editorial Changes Type 3A: In a few instances, historical details that were not necessary were eliminated. These include changes to eliminate "Passive SAFSTOR" in Section 0.0B, and removing historical detail at the introduction to Appendix C.

Editorial Changes Type 3B: In a few instances, specific references were changed to be more general in nature. Examples include: Section XV, "Corrective Action Report (CAR)" was made "corrective action document", and "Purchasing" was made "procurement support staff." VI.C.4, "Administrative Staff" was made "administrative staff." In Section V.C, "procedures" was replaced by "guidance" and "Work Orders" in places to provided flexibility.

Editorial Changes Type 3C: In a few instances, unnecessary detail of no QA program relevance was eliminated, such as "Company", "Administrative Control Procedure (ACP)" and "QA Manual" being removed from Section 0.0.B.

In summary, these types of changes are considered editorial and do not alter the intent or purpose of the QAPD and continue to satisfy the criteria of Appendix B to 10CFR 50 and the Quality Assurance requirements of 10 CFR 71 and 10 CFR 72.

OVERALL EVALUATION:

Radiological risk factors associated with D&D activities have been significantly reduced. All spent fuel has been transferred to the ISFSI. The ISFSI has transitioned to long-term passive operations. Additionally, although not known for certain, there is a remote possibility that Class B and Class C radioactive waste may be required to be shipped offsite for disposal, so the QAPD still applies to those activities should they be necessary.

The QAPD Revision 29 applies to all activities associated with structures, systems, and components (SSCs) which are important to safety (10 CFR 72). The QAPD also applies to transportation packages licensed by the NRC under 10 CFR 71. For other ISFSI and D&D activities, administrative programs and procedures ensure compliance with governing regulations and include appropriate controls for activities under the radiological control programs previously contained in the Technical Specifications.

The proposed revision to the QAPD is appropriate for the remaining D&D activities and ISFSI operations. All safety related systems have been removed from service and have undergone partial or complete demolition. Radiological risk factors associated with D&D activities have been significantly reduced. All spent fuel has been transferred to the ISFSI and Greater Than Class C (GTCC) waste has been removed from the site. Should any Class B and Class C radioactive waste remain to be shipped offsite for disposal, the QAPD would still be applied to those activities.

The ISFSI has transitioned to long-term passive operations. The system is inherently safe by design. The main function of the ISFSI organization is to monitor the environment in a way that demonstrates the integrity of the system. While it continues to be important to maintain an appropriate quality standard that preserves the passive functionality of the system, it can be accomplished satisfactorily through conformance to RG 7.10.

The proposed revision will continue to satisfy the criteria of 10 CFR 50, Appendix B and the QA requirements of 10 CFR 71, Subpart H, and 10 CFR 72, Subpart G.

- End of Changes -