LACROSSE *SOLUTIONS*

10 CFR 50.54(a)(4)

September 4, 2018 LC-2018-0079

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

La Crosse Boiling Water Reactor
Facility Operating License No. DPR-45
NRC Docket Nos. 50-409 and 72-046

Subject: Submittal of La Crosse Boiling Water Reactor (LACBWR) Quality Assurance Program Description (QAPD), Revision 30, for Approval

References:
1. Letter from Bruce Watson, U.S. Nuclear Regulatory Commission, to Barbara A. Nick, Dairyland Power Cooperative, "La Crosse Boiling water Reactor - Safety Evaluation Approving Revision 29 to the Quality Assurance Program Description," dated May 31, 2016
2. Letter from Kenneth W. Robuck, Energy*Solutions,* to U.S. Nuclear Regulatory Commission, "Application for Order Approving License transfer and Conforming Administrative License Amendments," dated June 27, 2018

In accordance with the requirements of 10 CFR 50.54(a)(4), LaCrosse*Solutions*, LLC is submitting Revision 30 of the LACBWR QAPD for NRC approval prior to implementation. LaCrosse*Solutions*, LLC and Dairyland Power Cooperative (DPC) have recently submitted an application to transfer the LACBWR Possession-Only License No. DPR-45 to DPC following completion of decommissioning activities. Revision 30 of the QAPD is reflective of that change and, with NRC approval, would be implemented at the time of license transfer. It should be noted that although we do not believe there is a reduction in commitment as documented in Attachment 3, there was a reduction in the organization structure due to the completion of decommissioning. Therefore, we understand the NRC may require a prior review.

There are no regulatory commitments contained in this letter. If you have any questions regarding this letter, please contact me at (860) 462-9707.

Respectfully,

Gerard van Noordennen

Gerard van Noordennen
Vice President Regulatory Affairs

Attachments:
Attachment 1: LACBWR QAPD Revision 30
Attachment 2: LACBWR QAPD Revision 30 Summary of Changes
Attachment 3: LACBWR 50.54(a) Determination

cc: Marlayna Vaaler, U.S. NRC Project Manager
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Q004
NMSS26
NMSS

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ATTACHMENT 1

LACBWR QAPD Revision 30

LA CROSSE BOILING WATER REACTOR

QUALITY ASSURANCE PROGRAM DESCRIPTION

REVISION 30

La Crosse *Solutions*, LLC (SOLUTIONS):

Anthony R. Bejma
Anthony R. Bejma Aug 23 2018 4:49 PM

QA Approval: _____ cosign
Anthony R. Bejma, SOLUTIONS QA Manager Date

Manager Approval: Joseph a Nowak 8/24/2018
Joe Nowak, SOLUTIONS Project Manager Date

Mike Nicol
Corporate QA Approval: _____ Aug 24 2018 8:47 AM
cosign
Mike Nicol, EnergySolutions Corporate Director, QA Date

Dairyland Power Cooperative (DPC)

QA Approval: See Next Page for all DPC Approvals
Quality Assurance

Manager Approval: See Next Page for all DPC Approvals
Site Manager, Genoa

LA CROSSE BOILING WATER REACTOR

Independent Spent Fuel Storage Installation (ISFSI)

QUALITY ASSURANCE PROGRAM DESCRIPTION (QAPD)

REVISION 30

Preparer: _____ 8/1/18
Date

Qualified Technical Reviewer (QTR): _____ 8/1/18
John Henkelman, Quality Assurance Representative Date

ISFSI Manager (IM): _____ 8/1/18
Cheryl Olson, ISFSI Manager Date

Genoa Site Manager (GSM): _____ 8/2/18
Lane Peters, Genoa Site Manager Date

Vice President Generation: _____ 8/6/18
John Carr, Vice President Generation Date

DPC President/CEO: _____ 8/6/18
Barbara Nick, President and CEO Date

LA CROSSE BOILING WATER REACTOR

Independent Spent Fuel Storage Installation (ISFSI)

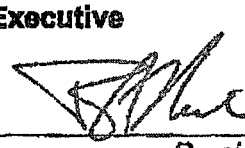
STATEMENT OF QUALITY ASSURANCE POLICY

The Quality Assurance Program Description (QAPD) described herein has been developed by Dairyland Power Cooperative (DPC) to provide an 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. 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 QAPD satisfies the requirements of 10 CFR 50 Appendix B, 10 CFR 71 Subpart H, and 10 CFR 72 Subpart G.

The Quality Assurance Representative 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.

Dairyland Executive



President and CEO

8/16/18

Date

LA CROSSE BOILING WATER REACTOR (LACBWR)

Independent Spent Fuel Storage Installation (ISFSI)

QUALITY ASSURANCE PROGRAM DESCRIPTION (QAPD)

TABLE OF CONTENTS

0.0 INTRODUCTION

A. General

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, thereby assuring that risk to the health and safety of the public is not increased.

The quality assurance program described herein is applied by Dairyland Power Cooperative (DPC) to assure adherence to quality requirements of the LACBWR ISFSI. The QA program shall be applied to activities with a graded approach to quality that is commensurate with an item's or an activity's importance to safety such as design, engineering, procurement, installation, operations, maintenance, and modification by DPC or its contractors, and their subcontractors. In cases where QA Program activities are delegated to others, DPC retains responsibility for the program and its effectiveness.

It is DPC policy that the group performing and directly responsible for the work 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 in this document.

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.

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

Figure 1 shows the organizational structure for the LACBWR ISFSI and establishes the functional lines of authority and responsibility of various groups and individuals participating in the LACBWR ISFSI QA program. The authority and duties of persons or groups responsible for the direction, implementation, and auditing of this program are as follows:

1. DPC President and CEO reports to the DPC Board of Directors and has corporate responsibility for all quality assurance matters relating to the operation and maintenance of the LACBWR ISFSI. This individual has delegated the authority and responsibility for administration of quality assurance for the LACBWR ISFSI to the Quality Assurance Representative.

2. Vice President (VP), Generation reports directly to the DPC President and CEO and has corporate responsibility for the of the overall operation and maintenance of the LACBWR ISFSI.

3. Site Manager, Genoa (SMG) has the overall responsibility for the administration and operation of the LACBWR ISFSI and the operation of the Genoa 3 coal-fired plant. The SMG approves all procedures that implement the requirements of NRC-approved programs and plans. SMG reports to the Vice President, Generation.

4. ISFSI Manager (IM) reports directly to the Site Manager, Genoa, has on-site responsibility for the operation and maintenance of the LACBWR ISFSI. This individual has responsibility for implementing the quality assurance requirements at the operating ISFSI through administrative control procedures and procedures required to fulfill the requirements of this program. Activities performed by outside individuals or groups, outside consultants, and representatives of NRC activities, with regard to the LACBWR ISFSI facility are performed under the authority and responsibility of the IM.

5. Manager, Corporate Security (SM) reports to the Director of Safety and Security and has responsibility for the security of the ISFSI and the spent nuclear fuel and has access to the DPC President and CEO if necessary for security matters. The SM is responsible for implementation and administration of the LACBWR ISFSI Physical Security Plan.

6. Quality Assurance (QA) Representative reports directly to the corporate QA Manager with direct access to the DPC President and CEO, if necessary, for quality assurance matters. The QA Representative has responsibility for establishing a quality assurance program and performing audits and surveillances of the program to determine its effectiveness. The QA Representative has the authority and organizational freedom to verify activities affecting quality and is independent of undue influences and responsibilities for schedules and costs. The QA Representative has the responsibility and authority to stop unsatisfactory work and control further processing, delivery, or installation of nonconforming materials and has the responsibility and authority to identify quality problems, to recommend or provide solutions, and to verify their implementation. The QA Representative is responsible for administration of the corrective action program.

7. Licensing Engineer (LE) reports to the ISFSI Manager and is responsible for all interface activities with the Regulators such as licensing submittals, regulatory reports, reportability issues, QAPD revisions, REMP/ODCM reports, financial reports, SNM Inventory reports, etc. The LE is also responsible for the engineering of ISFSI activities.

8. ISFSI Security Project Manager (ISPM) reports to the SM and has responsibility for ensuring that the physical security of the ISFSI is maintained in accordance with the Security Plan and related procedures. The ISPM is also responsible for ensuring the security staff is trained and proficient.

9. Radiation Protection Manager reports directly to the ISFSI Manager and is responsible for the administration, maintenance, and implementation of the Radiation Protection Program, Process Control Program, Offsite Dose Calculation Manual, Radioactive Effluent Controls Program, and Radiological Environmental Monitoring Program.

B. Dairyland Power Cooperative Management Organization

Figure 2 shows the organizational structure for Dairyland Power Cooperative. The LACBWR ISFSI is a responsibility of the DPC President and CEO. The responsibility for all purchases as they apply to all generating stations, including LACBWR ISFSI, and responsibility for control, identification, and issuance of all materials, parts, and components is the responsibility of the Vice President, Generation and Chief Financial Officer.

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. Use of approved procedures for 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

The LACBWR ISFSI QAPD applies to all activities associated with the ISFSI (10 CFR 72) and ITS SSCs. The QAPD also applies to transportation packages licensed by the NRC under 10 CFR 71. Requirements of the QAPD are performed using a graded approach to quality which is commensurate with an item's or an activity's importance to safety. This graded approach is responsive to NRC Regulatory Guide 7.10.

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 Appendix B.

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 CFR 72.

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. The following subjects shall be independently reviewed by a Qualified Technical Reviewer:

1. 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

2. 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. 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 ISFSI personnel and contractors performing activities that could affect the quality of structures, systems, or components.

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 DPC President and CEO, 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 DPC President and CEO.

F. Personnel Training and Qualification

1. Each member of the ISFSI 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 as a guide in determining and assessing appropriate staff qualifications.

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

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

   a. The position of the QA Representative 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 Qualified Technical Reviewers (QTR) shall meet the following minimum qualifications:

      - Be knowledgeable in the subject area being reviewed.

      - Have no 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.

      - 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 Site Manager, Genoa.

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

- Four-year academic degree in an engineering/science field or equivalent as provided for 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.

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 LE 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 ISFSI staff is responsible for establishing procedures to implement design control and the incorporation of design documents into work orders, procedures and instructions.

2. The LE 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 LE 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 QTR is responsible for providing an independent review of changes to the ISFSI ITS SSCs. The review results 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 the LE for processing.

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

3. The LE is responsible for preparing engineering specifications which detail the technical and quality requirements for ITS material, equipment, and services.

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

5. The QA Representative is responsible for review of ITS procurement documents to ensure inclusion of appropriate quality requirements.

C. Requirements

1. Purchase requisitions shall be initiated for new material, equipment, and services and for spare or replacement parts. 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 Representative 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 ISFSI related activities affecting quality are prescribed and performed in accordance with approved instructions, procedures, and drawings.

B. Responsibilities

1. The ISFSI staff is responsible for preparing or reviewing and performing their activities in accordance with procedures required for implementation of the QAPD.

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

3. The QTR 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. Physical Security Plan implementation,

   d. quality assurance,

   e. surveillance and test activities of equipment,

   f. radiation 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 ISFSI staff 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.

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 ISFSI staff is responsible for preparing a standard procedure for controlling the issuance of documents such as instructions, procedures, drawings and for preparing procedures for controlling the distribution of operating, maintenance, repair, and modification documents for the ISFSI.

2. The IM is responsible for approving documents.

C. Requirements

1. Procedures shall be established for the issuance of documents such as instructions, procedures, and drawings. 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 of issuance, 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. Instructions, procedures, and drawings, 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 ISFSI 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 Representative is responsible for developing procedures for supplier evaluation and qualification and for coordinating and evaluation of supplier quality programs. The QA Representative is responsible for developing procedures for receiving inspection of material and equipment.

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 supplier's QA program and/or other factors, as appropriate. The effectiveness of the control of quality by contractors and subcontractors shall be assessed at intervals consistent with the importance, complexity, and quantity of the product or services.

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 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 ISFSI throughout installation and use.

B. Responsibilities

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

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

3. Appropriately trained ISFSI 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 related to SSCs designated 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 ISFSI staff is responsible for establishing procedures that provide for qualification of personnel and procedures for special processes.

2. The QA Representative 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 IM is responsible for assuring the qualification of personnel in special processes and maintaining records of special processes related to personnel qualification and controls.

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 ISFSI 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 Representative is responsible for establishing inspection procedures, assuring adequate inspection requirements are included in procedures, and coordinating the assignments of qualified inspection personnel.

3. The IM 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 ISFSI 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 ISFSI 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 IM is responsible for the approval of ISFSI test procedures or instructions.

3. The QTR 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.

      3) Establishment of suitable environmental conditions.

   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 procedure for the control, calibration, and periodic adjustments of tools, gauges, instruments, and other measuring and test equipment used at the ISFSI, consistent with an activity's Importance to Safety.

B. Responsibilities

1. The ISFSI 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 IM is responsible for ensuring implementation of the measuring and test equipment program 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 ISFSI staff is responsible for establishing requirements for the handling, storage, and shipping of materials, parts, and components covered by the QA program.

2. The IM 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

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

3. The ISFSI staff is responsible for promptly identifying and correcting conditions adverse to quality and for determining the significance of the condition.

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, and the corrective action taken. For significant conditions adverse to quality, the cause of the condition shall be determined and corrective action taken to preclude repetition. The significant condition, the cause of the condition, and the corrective action shall be documented and reported to management.

3. For vendor-supplied items or services, the vendor shall be notified of all nonconforming items and requested to correct the deficiencies. ISFSI staff with assistance from procurement support staff shall be responsible for coordinating the disposition of deficient items with vendors. The QA Representative 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 ISFSI staff that 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 Representative. ISFSI 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 ISFSI staff or applicable Design Authority (ref. Appendix A).

7. Conditions shall be evaluated for reportability per 10 CFR 72.242, 10 CFR 71.95, or 10 CFR 21 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 covered by the QAPD. Also included are historical records which are either required to support the dry cask storage systems stored at the ISFSI or ultimate shipment to a federal repository.

B. Responsibilities

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

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

C. Requirements

1. Record Management System - Quality Assurance 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 or instructions. 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 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.

    c. In addition, retention periods specified in various governing codes and standards (e.g. 10 CFR 71, 10 CFR 72) will be included in the

retention requirements established in approved procedures for QA records.

d. For subcontractors/sub-suppliers, the original QA record of the deliverables will be transmitted to 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 or instruction shall be prepared and responsibility assigned for enforcing the requirements of that procedure or instruction.

   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 Representative is responsible for developing audit checklists, designating and training audit personnel, and conducting audits.

2. The QA Representative 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 Representative or other qualified personnel, such as technical specialists and outside consultants.

3. Audit and surveillance results shall be documented and reviewed with management 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 Representative 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.

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

7. Deficiencies or nonconformances identified during an audit shall be documented and brought to the attention of the IM. Follow-up shall be performed to verify that corrective actions have been taken to correct the deficiencies or nonconformances.

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

9. Audit reports shall be forwarded to the DPC President and CEO, and to the management positions responsible for the areas audited, within 30 days after completion of the audit.

10. 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.

11. 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 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. DPC 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.

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 ISFSI. These requirements were previously included in the Technical Specifications and were relocated to this QAPD.

1.0 PROGRAMS AND MANUALS

1.1 Offsite Dose Calculation Manual (ODCM)

The ODCM shall be maintained by DPC. Changes to the ODCM will be outlined in the annual Radioactive Effluent Release Report per Section 1.4.2. This submittal shall contain:

1.1.1 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

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

1.2 Radioactive Effluent Controls Program

There are no effluents from ISFSI operation. 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:

1.2.1 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;

1.2.2 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;

1.2.3 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.

1.2.4 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;

ADMINISTRATIVE CONTROLS

1.2.5 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;

1.2.6 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;

1.2.7 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.

1.3 Radiological Environmental Monitoring Program

A program shall be provided to monitor the radiation in the environs of the ISFSI. 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:

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

1.4 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.

1.4.1 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.

The report shall also include the following:

a. A summary description of the Radiological Environmental Monitoring Program;

ADMINISTRATIVE CONTROLS

b. A map of all sampling locations keyed to a table giving distances and directions from the ISFSI;

c. A discussion of all analyses in which the lower limit of detection (LLD) was not achievable.

1.4.2 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 twelve months. 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

LACBWR ISFSI FACILITY ORGANIZATION CHART

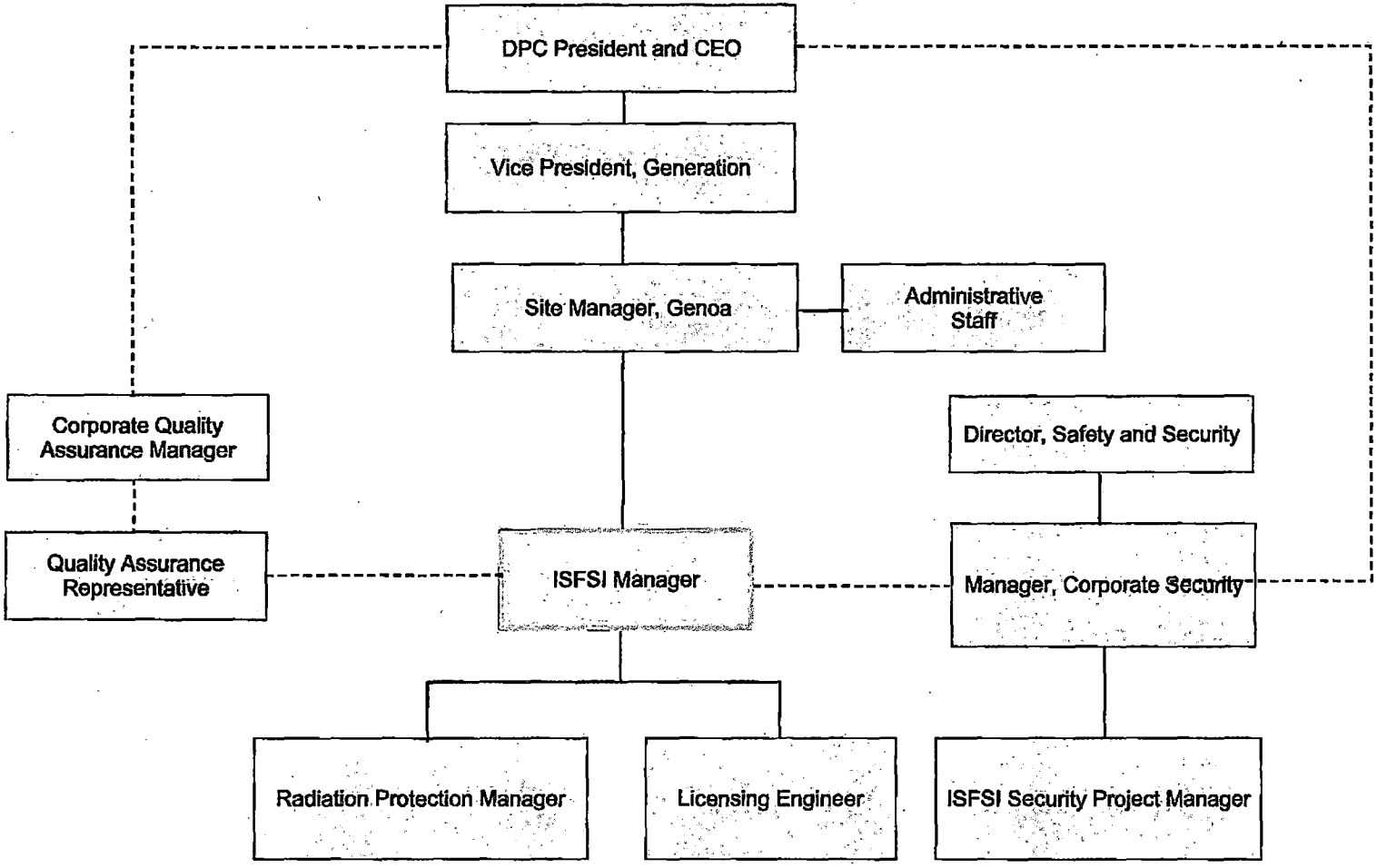
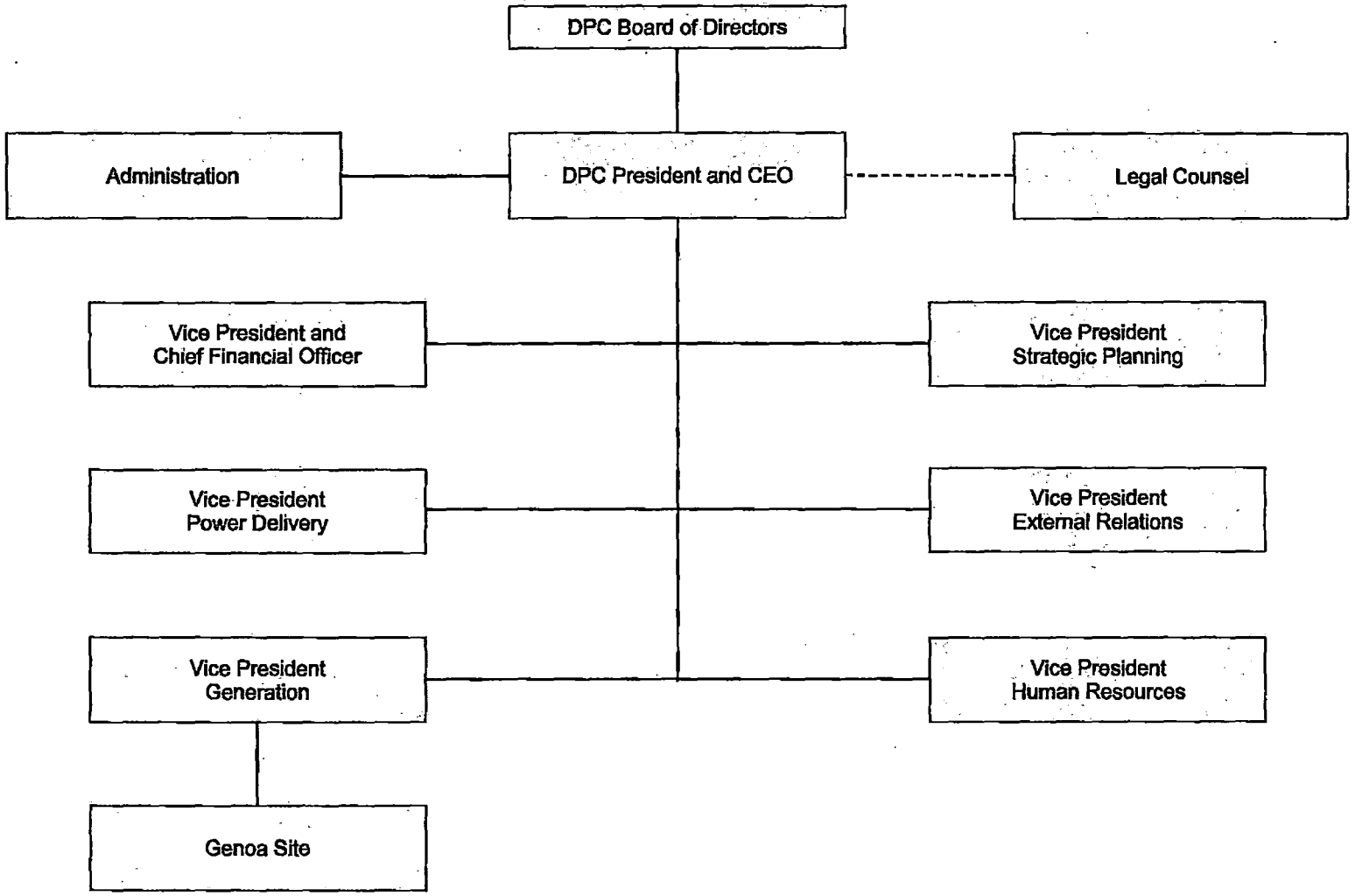


FIGURE 2

DAIRYLAND POWER COOPERATIVE MANAGEMENT ORGANIZATION



ATTACHMENT 2

LACBWR QAPD Revision 30 Summary of Changes

LACBWR ISFSI
QUALITY ASSURANCE PROGRAM DESCRIPTION (QAPD)
Revision 30

SUMMARY OF CHANGES

Section	Description of Change
0.0	• First two paragraphs removed due to completion of decommissioning and return transfer of license to DPC. • Paragraphs 3 and 4 remove reference to decommissioning and plant dismantlement. • Section B. Terms and Definitions o Removed definition of LACBWR - it is described in the QA Policy; Facility and Plant are removed since licensed area is now reduced to the ISFSI Owner Controlled Area only.
I	• Section A reverted back to revision 28 format eliminating paragraphs 1 through 5. • Section A includes the DPC organization, same format as previously approved in rev 28. • The Manager Quality Assurance position has been changed to Quality Assurance Representative. • The positions of Radiation Protection Manager and Licensing Engineer have been added to the LACBWR ISFSI Organization. • Sections B and C have reverted to the revision 28 format.
II	• Section B removes all reference to decommissioning as plant decommissioning is complete. • Section D removes references to Solutions as well as Decommissioning Plan (D Plan) and Post Shut Down Activities Report (PSDAR), as these activities are complete. • Section F, Changes Manager Quality Assurance to Quality Assurance Representative.
III	• EM changed to LE, minor title change.
IV	• EM changed to LE and QAS changed to QAR, minor title changes. • Removed discussion of temporary change process.
VI	• DPC and Admin Staff changed to ISFSI Staff, minor title change.
VII	• Section C remove reference to Solutions & Decommissioning - plant decommissioning is complete.
IX	• QAS changed to QAR, minor title change
XI	• DPC Staff changed to ISFSI Staff, minor title change
XII	• DPC Staff changed to ISFSI Staff, minor title change • Changed use of M&TE consistent with an activity's Importance to Safety
XIII	• DPC Staff changed to ISFSI Staff, minor title change
XVI	• DPC Staff changed to ISFSI Staff, minor title change
XV	• DPC Staff changed to ISFSI Staff, minor title change • QAS changed to QAR DPC Staff changed to ISFSI Staff, minor title change
XVI	• Section A removes reference to Solutions and plant related records as Plant Decommissioning has been completed. • DPC Staff changed to ISFSI Staff, minor title change
XVII	• QAS changed to QAR, minor title change • Removes reference to Solutions
Appendix C	• Removes reference to active decommissioning and Section 1, for plant decommissioning. • Removes PCP as waste is no longer generated or processed. Removes requirement for intra-comparison of lab samples.
Figure 1	• Removes Solutions and depicts DPC organization.