**SMUD****SACRAMENTO MUNICIPAL UTILITY DISTRICT**  
**The Power To Do More.®***P.O. Box 15830, Sacramento, CA 95852-1830; 1-888-742-SMUD (7683)*

NQA 06-003

January 17, 2006

U.S. NRC Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555Docket 50-312  
Rancho Seco Nuclear Generating Station  
License DPR-54  
Docket 72-11  
Rancho Seco Independent Spent Fuel Storage Installation  
License SNM-2510**REPORT OF CHANGES TO RANCO SECO QUALITY PROGRAM THAT DO NOT REQUIRE PRIOR NRC APPROVAL**

Attention: John Hickman

In accordance with 10 CFR 50.54(a)(3), 10 CFR 50.71(e) and 10 CFR 50.4(b)(7), the Sacramento Municipal Utility District (the District) hereby submits changes to the Rancho Seco Quality Assurance Program Manual (RSQM) Policy and RSQM Sections I, II and XVIII that do not reduce commitments in the Rancho Seco quality assurance program previously accepted by the NRC. The revisions make several administrative, organizational, and editorial changes to the RSQM Policy, RSQM-Section I, "Organization," and RSQM-Section II, "Quality Assurance Program." Also, the revision implements NRC Order for Modification of the Rancho Seco ISFSI License, dated 08/18/04, in RSQM-Section XVIII, "Audits" as the Order relates to the annual Rancho Seco Security audit.

A RSQM change summary is presented below.

**RSQM Policy (Revision 8)**

1. Made administrative and editorial changes to streamline the policy statement.
2. Changed the position title of the person responsible for executing the Rancho Seco Quality Assurance Program from Quality/Licensing/Administration/Training Superintendent to Supervising Quality Engineer in accordance with the change made to RSQM-Section I, "Organization."

2004

**RSQM Section I – Organization (Revision 12)**

1. Made administrative and editorial changes to clarify procedure and remove unnecessary or redundant administrative details consistent with the requirements contained in 10 CFR 50, Appendix B, Section I, Organization.
2. Made administrative change that updated position title of individual responsible for executing the Rancho Seco Quality Assurance Program. The Supervising Quality Engineer replaced the Quality/Licensing/Administration/Training Superintendent.

**RSQM Section II – Quality Assurance Program (Revision 11)**

- 1 Made administrative changes to improve procedure grammar and clarity, remove redundant RSQM implementing details that are specified in the RSQM implementing procedures, and ensure consistency with the quality assurance criteria wording contained in 10 CFR 50, Appendix B.
- 2 Editorially improved, updated, and revised Attachment II-1, "Application of Quality Assurance Program Criteria," to clarify application of the QAP criteria to Program Activity Areas.
- 3 Removed reference to a triennial outside/independent fire protection audit in accordance with previously District approved and NRC accepted revision 10 to RSQM-Section XVIII, "Audits."

**RSQM Section XVIII – Audits (Revision 11)**

Revised wording associated with the annual Security audit in accordance with the District's response to item 8 of NRC ISFSI License Order dated 08/18/04, to ensure the annual Security audit includes an individual knowledgeable and practiced in ISFSI access authorization program performance objectives.

**RSQM Change Evaluation Summary**

Because the RSQM changes addressed above are administrative and editorial in nature and the RSQM continues to fully implement the requirements of 10 CFR 50, Appendix B, the RSQM changes do not reduce the commitments associated with the Rancho Seco Quality Assurance Program (QAP) previously submitted to the NRC. Based on the above summary and in accordance with 10 CFR 50.54(a)(3), the District concludes these RSQM changes (1) do not reduce the commitments in the QAP previously accepted by the NRC and (2) may be implemented without prior NRC approval.

If you or members of your staff have any questions or require additional information, please contact Richard Mannheimer at (916) 732-4916.

Sincerely,

A handwritten signature in black ink, appearing to be 'R. E. Jones', written over the printed name.

Robert E. Jones  
Supervising Quality Engineer

Enclosure (RSQM Policy, revision 8, RSQM-Section I, revision 12, RSQM-Section II, revision 11 and RSQM-Section XVIII, revision 11)

Cc w/Encl: Region IV Administrator, NRC, Arlington  
Director, Spent Fuel Project Office, NMSS, NRC, Washington DC 20555-0001

MANUAL: RANCHO SECO QUALITY MANUAL

NUMBER: RSQM-POLICY

TITLE: QUALITY ASSURANCE POLICY

REVISION: 8

LEAD DEPARTMENT:

PAGE 1 OF 2

NUCLEAR QUALITY ASSURANCE

EFFECTIVE DATE:

8/4/05

#### REVISION SUMMARY:

8→

1. Made editorial changes to remove unnecessary statements, improve clarity, and simplify wording.
2. Made administrative change that updated position title of individual responsible for executing the Rancho Seco Quality Assurance Program. The Supervising Quality Engineer replaced the Quality/Licensing/Administration/Training Superintendent.

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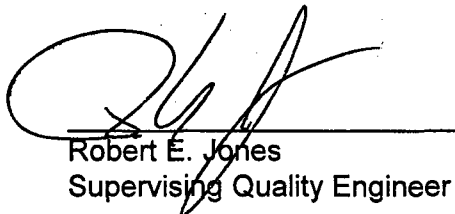
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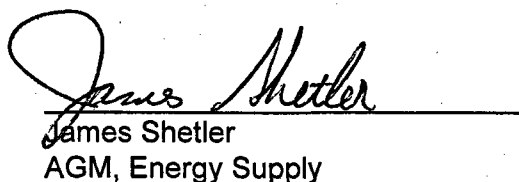
## QUALITY ASSURANCE POLICY

The Sacramento Municipal Utility District's (SMUD) policy regarding quality assurance at the Rancho Seco nuclear facility, which includes the Rancho Seco Nuclear Generating Station (RSNGS; licensed and undergoing decommissioning pursuant to 10 CFR 50) and the Rancho Seco Independent Spent Fuel Storage Installation (ISFSI; licensed and operated pursuant to 10 CFR 72), is as follows:

- 8→  
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- I. Organizations involved in QA Class 1 activities and the other Program Activity Areas specified in Rancho Seco Quality Manual (RSQM) Section II, Attachment II-1, shall be structured, managed, and operated to provide compliance with the RSQM. Procedures shall be prepared that implement the activities required to safely operate the Rancho Seco nuclear facility and achieve the following objectives:
- 8→
- a. Comply with government regulations and established SMUD management policies, applying a systematic, disciplined, and uniform approach to quality assurance.
- ←
- b. Provide facilities designed, modified, constructed, tested and operated in accordance with specified requirements with reasonable assurance that failures or malfunctions will not cause undue risk to public health and safety.
- ←
- c. Ensure prompt identification and resolution of actual and potential problems in design, procurement, construction, testing, operations, maintenance, and modification of the structures, systems, and components associated with QA Class 1 activities or other applicable Program Activity Areas specified in RSQM Section II, Attachment II-1.
- 8→←
- II. The RSQM and implementing procedures constitute the Rancho Seco Quality Assurance Program (QAP). The QAP applies to activities, plans, and programs affecting the operation and the quality of structures, systems, components, and services addressed in the RSQM. The QAP will be implemented by organizations responsible for achieving and verifying quality assurance.
- 8→
- III. The Assistant General Manager (AGM), Energy Supply, has delegated the responsibility and authority for developing and executing the QAP to the Supervising Quality Engineer. Any conflicts or questions involving interpretation of the requirements or resulting from the implementation of the QAP must be referred to the Supervising Quality Engineer.

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Robert E. Jones  
Supervising Quality Engineer

  
James Shetler  
AGM, Energy Supply

MANUAL: RANCHO SECO QUALITY MANUAL	NUMBER: RSQM-SECTION I
TITLE: ORGANIZATION	REVISION: 12
LEAD DEPARTMENT:	PAGE 1 OF 4
NUCLEAR QUALITY ASSURANCE	EFFECTIVE DATE: 8/4/05

REVISION SUMMARY:

1. Made minor editorial changes to the Quality Assurance group references.
2. Removed an administrative detail addressing trend analyses consistent with the wording contained in 10 CFR 50, Appendix B, Section I, Organization.
3. Editorially removed an administrative detail that addresses CMRG review of 10 CFR 50.59/10 CFR 72.48 safety evaluations. This administrative detail is addressed in plant administrative procedures (RSAP-0260 and RSAP-0901) and is not a subject of the 10 CFR 50, Appendix B criteria.
4. Made administrative change that updated position title of individual responsible for executing the Rancho Seco Quality Assurance Program. The Supervising Quality Engineer replaced the Quality/Licensing/Administration/Training Superintendent.

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## I. ORGANIZATION

### 1.0 PURPOSE

This section describes the Sacramento Municipal Utility District (SMUD) organization and personnel responsible for establishing, implementing, and verifying the Quality Assurance Program (QAP) at the Rancho Seco nuclear facility, which includes the Rancho Seco Nuclear Generating Station (RSNGS; licensed and undergoing decommissioning pursuant to 10 CFR 50) and the Rancho Seco Independent Spent Fuel Storage Installation (ISFSI; licensed and operated pursuant to 10 CFR 72).

### 2.0 REFERENCE DOCUMENTS

- 2.1 10 CFR 50, Appendix B, Criterion I, Organization
- 2.2 ANSI N45.2-1971, Section 3, Organization
- 2.3 Safety Guide 33/ANSI N18.7, Administrative Controls for Nuclear Power Plants
- 2.4 Rancho Seco Quality Manual, Appendix A
- 2.5 10 CFR 71.103, Quality Assurance Organization
- 2.6 10 CFR 72.142, Quality Assurance Organization

### 3.0 POLICY

- 3.1 The establishment and implementation of the Rancho Seco QAP, which is comprised of this Rancho Seco Quality Manual (RSQM) and the RSQM implementing procedures, shall be SMUD's responsibility. Some QAP functions may be delegated to other SMUD approved external organizations, but overall responsibility for the QAP remains with SMUD.
- 3.2 Definitive lines of authority, responsibility, and communication shall be established for those organizations involved in the QAP.
- 3.3 Quality Assurance personnel assigned to the Rancho Seco nuclear facility have defined responsibilities and organizational freedom to identify problems that affect quality; to initiate, recommend, or provide solutions; and to verify implementation of solutions. They have the authority to initiate action to stop unsatisfactory work pending implementation of necessary corrective action to bring the unsatisfactory conditions into conformance.

- 3.4 The organizational structure and functional responsibility assignments shall be such that attainment of program objectives is accomplished by individuals or groups who inspect, examine, audit or otherwise verify conformance to established requirements, and who are independent of the individuals or groups who performed the original activity.

#### **4.0 ORGANIZATION AND REQUIREMENTS**

- 4.1 The General Manager (GM) through the Assistant General Manager (AGM), Energy Supply shall have corporate responsibility for overall safe operation of the Rancho Seco nuclear facility and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the facility to ensure safe operation.
- 4.2 The Manager, Plant Closure and Decommissioning (Plant Manager), reports directly to the AGM, Energy Supply. The Plant Manager assures that the Rancho Seco nuclear facility is properly staffed and adequately budgeted to ensure staff can safely carry out their responsibilities. He also assures staff (1) responds to Commitment Management Review Group (CMRG) safety review recommendations and (2) coordinates quality concerns with the Quality Assurance group.

The Plant Manager is responsible for the safe and reliable decommissioning of RSNGS, pursuant to 10 CFR 50, and operation of the ISFSI, pursuant to 10 CFR 72. The Plant Manager has the responsibility and authority to implement the QAP and ensure optimum quality performance of the Rancho Seco nuclear facility.

The Plant Manager is responsible for the administrative actions necessary to assure that the QAP is implemented by the organizations under his direction. To this extent, the Plant Manager shall maintain continuing involvement in quality matters and shall assess the scope, status, implementation, and effectiveness of the QAP through Quality Assurance Audits and Surveillances.

- 4.3 The Quality Assurance group, headed by the Supervising Quality Engineer, reports to the Plant Manager, is independent from operating pressures or other lines of authority, and ensures an active QAP is implemented at the Rancho Seco nuclear facility in accordance with regulatory requirements. The Quality Assurance group has the authority to take any issue concerning the quality of operations at the Rancho Seco nuclear facility to the AGM, Energy Supply.



- 4.4 The Quality Assurance group shall have sufficient authority and organizational freedom to identify problems that affect quality, recommend solutions, and verify implementation of solutions, as appropriate. Commensurate with this responsibility is the authority to initiate action to stop unsatisfactory work and control delivery, further processing, installation, construction, modification of nonconforming items, or the continuation of nonconforming services/operations, pending correction of the unsatisfactory condition.
- 4.5 Corporate and on-site organizational responsibilities are described in greater detail in Rancho Seco Administrative Procedure (RSAP) number 0101 (RSAP-0101). Specific duties and responsibilities for organizations whose activities affect quality are described in RSQM Sections II through XVIII and Appendix A.
- 4.6 The CMRG advises the Plant Manager and the AGM, Energy Supply on matters related to the safe operation of the Rancho Seco nuclear facility. The CMRG composition, responsibility, authority, review subjects, and reporting requirements are addressed in RSAP-0260, "Commitment Management Review Group and Commitment Tracking System."
- 4.7 The CMRG acts as the site safety review committee and provides onsite management oversight of Rancho Seco nuclear facility activities during decommissioning and ISFSI operations.
- 4.8 The CMRG is the senior management group responsible for reviewing all Potential Deviations from Quality (PDQ) to determine if a condition is a Deviation from Quality (DQ) and requires determination of the cause, extent, remedial corrective actions, and actions to prevent recurrence. The CMRG reviews and approves DQ dispositions and assigns corrective actions identified in DQ dispositions. The CMRG also determines whether a PDQ is potentially reportable pursuant to 10 CFR 21.

## 5.0 GENERAL RESPONSIBILITIES

The nuclear organization is involved in the design, operation, maintenance and modification of the Rancho Seco nuclear facility and is responsible for describing and clearly defining the duties and authority of individuals whose work affects quality. RSAP-0101 defines the Rancho Seco nuclear facility organization and the responsibilities associated with each onsite work group. Each work group has the responsibility to ensure that their procedures implement QAP requirements.

MANUAL: RANCHO SECO QUALITY MANUAL

NUMBER: RSQM-SECTION II

TITLE: QUALITY ASSURANCE PROGRAM

REVISION: 11

PAGE 1 OF 18

LEAD DEPARTMENT:

EFFECTIVE DATE:

QUALITY ASSURANCE

9/15/05

#### REVISION SUMMARY:

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1. Editorially modified the wording in the section 3.0 to remove extraneous words, clarify wording, and improve grammar.
2. Made several editorial changes to restructure and streamline section 4.0. Improved procedure clarity and grammar and removed unnecessary administrative details to ensure consistency with the 10 CFR 50, Appendix B quality assurance criteria wording.
3. Removed specific reference to the Master Equipment List (MEL) and generically addressed the responsibility for assigning the Quality Classification of equipment that falls under the QAP as an Engineering function. The MEL program is an RSQM implementing detail and is implemented in RSAPs and Engineering administrative procedures.
4. Editorially modified applicability notes (A), (B), and (C) and Footnote (1) associated with Attachment II-1, "Application of Quality Assurance Program (QAP) Criteria" to clarify application of the QAP criteria to Program Activity Areas.
5. Modified Footnote (6) on Attachment II-1 to remove reference to a triennial outside/independent fire protection audit. Revision 10 to RSQM-Section XVIII, "Audits," removed the requirement to use an outside/independent fire protection specialist at least once every three years for the performance of the fire protection audit.

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## II. QUALITY ASSURANCE PROGRAM

### 1.0 PURPOSE

The purpose of this section is to describe the Rancho Seco Quality Assurance Program (QAP) implemented at the Rancho Seco nuclear facility, which includes the Rancho Seco Nuclear Generating Station (RSNGS; licensed and undergoing decommissioning pursuant to 10 CFR 50) and the Rancho Seco Independent Spent Fuel Storage Installation (ISFSI; licensed and operated pursuant to 10 CFR 72).

### 2.0 REFERENCES

- 2.1 10 CFR 50, Appendix B, Criterion II, Quality Assurance Program
- 2.2 ANSI N45.2-1971, Section 2, Quality Assurance Program
- 2.3 Safety Guide 33/ANSI N18.7, Administrative Controls for Nuclear Power Plants
- 2.4 10 CFR 71, Subpart H, Quality Assurance Requirements for Packaging and Transportation of Radioactive Material
- 2.5 10 CFR 72, Subpart G, Quality Assurance Requirements for the Independent Storage of Spent Nuclear Fuel
- 2.6 NRC Form 311, Quality Assurance Approval for Radioactive Material Packages, Approval No. 0489

### 3.0 POLICY

The QAP described herein is designed to assure compliance with the requirements of 10 CFR 50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants" including the requirements of applicable NRC Regulatory Guides and ANSI Standards.

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Also, the QAP is designed to fulfill the quality requirements for (1) the use of radioactive material transport packages and (2) the operation of the Rancho Seco Independent Spent Fuel Storage Installation (ISFSI) in accordance with 10 CFR 71.101(f) and 10 CFR 72.140(d), respectively.

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#### 4.0 GENERAL REQUIREMENTS

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- 4.1 This Rancho Seco Quality Manual (RSQM) is organized to present the 18 quality criteria in the order they are addressed in 10 CFR 50, Appendix B. The RSQM states the Rancho Seco policy for each criterion and describes how controls pertinent to each criterion are to be carried out.
  - 4.2 In accordance with 10 CFR 50.54(a), the Quality Assurance group (Quality) submits to the Nuclear Regulatory Commission (NRC) an annual report of RSQM changes that do not reduce the commitments previously accepted by the NRC. Also, in accordance with 10 CFR 50.54(a), Quality submits RSQM changes that reduce commitments previously accepted to the NRC for their review and approval prior to implementation.
  - 4.3 The QAP is implemented by organizations responsible for achieving quality and by organizations responsible for verifying quality.
  - 4.4 Engineering identifies the Quality Assurance (QA) classification of structures, systems, and components (SSCs) commensurate to their importance to safety.
  - 4.5 Quality Assurance classification 1 (QA Class 1) is assigned to SSCs that are considered safety-related in accordance with 10 CFR 50, Appendix B.
    - 4.5.1 The QA Class 1 assignment includes 10 CFR 72 (ISFSI) and 10 CFR 71 (Transportation Package) SSCs as specified in RSAP-0302.
    - 4.5.2 All 18 elements of the 10 CFR 50, Appendix B quality criteria apply to activities affecting QA Class 1 SSCs during operation, maintenance, testing, and modifications.
  - 4.6 Some 10 CFR 50, Appendix B quality criteria apply to non-QA Class 1 programs and activities such as radiation protection, emergency preparedness, radioactive waste handling and shipping, fire protection, facility operations, effluent control, environmental monitoring, security, training, and 10 CFR 71/72 important-to-safety, as indicated in RSQM-Section II, Attachment II-1.
    - 4.6.1 Engineering identifies the 10 CFR 71 and 10 CFR 72 non-QA Class 1 SSCs that are important-to-safety in accordance with RSAP-0302.
    - 4.6.2 SMUD activities performed under 10 CFR 71 shall be limited to procurement, maintenance, repair, and use as authorized by the NRC Quality Assurance Program Approval for Radioactive Material Packages (NRC Form 311; Approval Number 0489).
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- 4.7 Attachment II-1 indicates the minimum QAP criteria that must be applied to specific Program Activity Areas.
- 4.8 Attachments II-2 and II-3 tabulate the NRC regulatory guides and ANSI standards, with exceptions and applicable revisions, that SMUD is committed to meeting as part of its QAP.
- 4.9 Activities associated with the safe operation of the Rancho Seco nuclear facility are accomplished under controlled conditions. Preparations for such activities include confirmation that prerequisites have been met.
- 4.11 Development, control, and use of computer programs associated with the design and safe operation of the Rancho Seco nuclear facility are subject to appropriate controls.
- 4.12 Training programs shall be established to assure personnel responsible for performing and verifying activities that affect quality have the required proficiency and qualifications to perform the assigned tasks.
- 4.13 QAP Policy/Procedures/Instructions:
- a. The QAP is documented in written policies, procedures, and instructions. The overall policies and general requirements are outlined in the RSQM. Specific details related to implementation of the established QAP policies are contained in Rancho Seco Administrative Procedures (RSAPs). Organizations responsible for performing QAP functions shall prepare additional implementing procedures as necessary. Quality reviews RSAPs to assure RSQM requirements are accomplished in a controlled manner.
  - b. Quality is responsible for RSQM preparation, issuance, and control. The RSQM, including any changes, supplements, or attachments, is issued and maintained as a controlled document.
  - c. Quality and the Plant Manager shall review and approve proposed RSQM changes.
- 4.14 Resolution of Differences:
- RSQM requirements take precedence over differing quality requirements specified in other work group procedures until Quality evaluates the issue and determines which requirements must be modified.

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Questions or disputes involving RSQM interpretation or implementation must be referred to Quality for resolution.

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4.15 Packaging and Transportation of Radioactive Material:

The QAP shall be applied to packaging and transportation of radioactive material as specified in References 2.4 and 2.6.

5.0 **RESPONSIBILITIES**

General organizational responsibilities are described in RSQM Section I,  
ORGANIZATION

6.0 **GENERAL REQUIREMENTS**

II-1, Application of Rancho Seco Quality Assurance Program Criteria

II-2, Regulatory Commitments

II-3, Exceptions

# Attachment II-1 (Page 1 of 2)

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## APPLICATION OF RANCHO SECO QUALITY ASSURANCE PROGRAM (QAP) CRITERIA (A, B, C)

- (A) An 'X' means application of the RSQM requirements associated with the QAP Criteria is required.  
 (B) No 'X' means application of the RSQM requirements associated with the QAP Criteria is optional.  
 (C) RSQM implementing details are provided in the RSAPs and other QAP implementing procedures.

Program Activity Areas ↓	QAP CRITERIA <sup>(1)</sup>																		References
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	
Safety Related / 10 CFR 71/72 Important-to-Safety, Category A (QA Class 1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	ISFSI TS 5.4.1k RSQM, APP. A, 10 CFR 50, APP. B RSAP-0302, ATT. 6
Facility Operations (License Condition and Tech. Spec. Compliance)	X	X			X	X					X	X		X	X	X	X	X	ISFSI TS 5.4.1k RSQM Section XVIII 10 CFR 50/72 Licenses
Radiation Protection	X	X	X <sup>(2)</sup>		X	X									X	X	X	X	ISFSI TS 5.4.1k 10 CFR 20 RSQM, APP. A
Radioactive Effluent Control Program (RECP) <sup>(3)</sup>	X	X		X	X	X	X								X	X	X	X	ISFSI TS 5.4.1k Reg. Guide 4.15 RSQM, APP. A 10 CFR 50, APP. I
Radiological Environmental Monitoring Program (REMP) <sup>(3)</sup>	X	X		X <sup>(4)</sup>	X	X	X								X	X	X	X	ISFSI TS 5.4.1k Reg. Guide 4.15 RSQM, APP. A
Radwaste Handling and Shipping (Including Process Control Program) <sup>(5)</sup>	X	X		X	X	X	X			X		X	X		X	X	X	X	ISFSI TS 5.4.1k 10 CFR 71 10 CFR 20.2006(d) RSAP-0302, ATT. 6 RSQM, APP. A
Fire Protection <sup>(6)</sup>	X	X			X	X									X	X	X	X	ISFSI TS 5.4.1k & 5.7 RSQM, APP. A Decommissioning Order
Security <sup>(7)</sup>	X	X			X	X									X	X	X	X	ISFSI TS 5.4.1k 10 CFR 72.44 & 186 10 CFR 73
Emergency Preparedness	X	X			X	X									X	X	X	X	ISFSI TS 5.4.1k 10 CFR 50.54(l) 10 CFR 50, APP. E RSQM, APP. A
Training	X	X			X	X									X	X	X	X	ISFSI TS 5.4.1k 10 CFR 72.190 RSQM, APP. A
10 CFR 71/72 Important-to-Safety, Category B & C <sup>(5)</sup> (QA Class 2)	X	X	X	X	X	X	X			X		X	X		X	X	X	X	ISFSI TS 5.4.1k RSAP-0302, ATT. 6 10 CFR 72.3 & 72.140 10 CFR 71.101

## Attachment II-1 (Page 2 of 2)

Footnotes:

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- (1) 10 CFR 50, Appendix B, Quality Criteria and corresponding RSQM section titles:

- I. Organization
- II. Quality Assurance Criteria
- III. Design Control
- IV. Procurement Document Control
- V. Instruction, Procedures, and Drawings
- VI. Document Control
- VII. Control of Purchased Material, Equipment, and Services
- VIII. Identification and Control of Materials, Parts, and Components
- IX. Control of Special Processes
- X. Inspection
- XI. Test Control
- XII. Control of Measuring and Test Equipment
- XIII. Handling, Storage, and Shipping
- XIV. Inspection, Test, and Operating Status
- XV. Nonconforming Materials, Parts, or Components
- XVI. Corrective Action
- XVII. Quality Assurance Records
- XVIII. Audits

- (2) Design Control as applied to permanent protective shielding.

- (3) Rancho Seco applies the NRC Regulatory Guide 4.15 QA/QC program to the RECP and REMP. This Reg. Guide 4.15 program meets the applicable 10 CFR 50, Appendix B QA/QC program requirements.

- (4) As applied to environmental monitoring laboratory analysis services.

- (5) As applied to 10 CFR 71 activities authorized pursuant to NRC Form 311, "Quality Assurance Approval for Radioactive Material Packages," Approval No. 0489. (Refer to RSQM Section II, Steps 4.3.2 and 4.4.2)

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- (6) No Fire Protection equipment or services falls under the QAP.

- (7) Security QAP requirements only apply to 10 CFR 72 ISFSI facility activities.



ATTACHMENT II-2 (Page 1 of 3)

REGULATORY COMMITMENTS

SMUD commits to the requirements of the regulations and industry standards listed below with any exceptions identified in Attachment II-3.

DOCUMENT	REVISION/DATE	TITLE
1. Reg. Guide 1.8	9/75	Personnel Selection and Training Per ISFSI Tech. Spec. 5.3
2. Safety Guide 28 ANSI N45.2	6/7/72 1971	Quality Assurance Requirements for Nuclear Power Plants
3. Reg. Guide 1.28 ANSI/ASME NQA-1 Supplement 17S-1	8/85 1983	Supplementary Requirements for Quality Assurance Records (See Attachment II-3, Exception No. 1)
4. Safety Guide 30 ANSI N45.2.4	8/11/72 1972	Quality Assurance requirements for the installation, Inspection, and Testing of Instrumentation and Electrical Equipment (See Attachment II-3, Exception No. 2)
5. Safety Guide 33	11/3/72	Administrative Controls for Nuclear Power Plants as Addressed in RSQM Appendix A
6. Reg. Guide 1.37 ANSI N45.2.1	3/16/73 1973	Quality Assurance Requirements for Cleaning Fluid Systems and Associated Components of Water- Cooled Nuclear Power Plants (See Attachment II-3, Exception No. 3)
7. Reg. Guide 1.38 ANSI N45.2.2	3/16/73 1972	Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage and Handling of Items for Water-Cooled Nuclear Power Plants (See Attachment II-3, Exception No. 8)

MANUAL: RANCHO SECO QUALITY MANUAL

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ATTACHMENT II-2 (Page 2 of 3)

REGULATORY COMMITMENTS (Continued)

DOCUMENT	REVISION/DATE	TITLE
8. Reg. Guide 1.39 ANSI N45.2.3	3/16/73 1973	Housekeeping Requirements for Water-Cooled Nuclear Power Plants (See Attachment II-3, Exception No. 4)
9. Reg. Guide 1.54 ANSI N101.4	6/73 1972	Quality Assurance Requirements for Protective Coatings Applied to Nuclear Facilities
10. Reg. Guide 1.58 ANSI N45.2.6	9/80 1978	Qualification of Nuclear Power Plant Inspection, Examination, and Testing Personnel (See Attachment II-3, Exception No. 5)
11. Reg. Guide 1.64 ANSI N45.2.11	10/73 1974	Quality Assurance Requirements for the Design of Nuclear Power Plants (See Attachment II-3, Exception No. 6)
12. Reg. Guide 1.74 ANSI N45.2.10	2/74 1973	Quality Assurance Terms and Definitions (See Attachment II-3, Exception No. 7)
13. Reg. Guide 1.94 ANSI N45.2.5	Rev. 2 1978	Quality Assurance Requirements for Installation, Inspection, and Testing of Structural Concrete and Structural Steel During the Construction Phase of Nuclear Power Plants
14. Reg. Guide 1.116 ANSI N45.2.8	6/76 1975	Quality Assurance Requirements for Installation, Inspection, and Testing of Mechanical Equipment and Systems

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REGULATORY COMMITMENTS (Continued)

DOCUMENT	REVISION/DATE	TITLE
15. Reg. Guide 1.120	11/77	Fire Protection Guidelines for Nuclear Power Plants
16. Reg. Guide 1.123 ANSI N45.2.13	7/77 1976	Quality Assurance Requirements for Control of Procurement Items and Services for Nuclear Power Plants
17. Reg. Guide 1.144 ANSI N45.2.12	1/79 1977	Auditing of Quality Assurance Programs for Nuclear Power Plants
18. Reg. Guide 1.146 ANSI N45.2.23	8/80 1978	Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants
19. Reg. Guide 4.15	2/79	Quality Assurance for Radiological Monitoring Programs

ATTACHMENT II-3 (Page 1 of 8)

EXCEPTIONS:

EXCEPTION NO. 1: Reg. Guide 1.28/NQA-1, Supplement 17S-1

SMUD complies with the recommendations of this regulatory guide with the following clarifications:

With regard to Section 2.4 of Supplement 17S-1 titled Index: The phrase "an index" is clarified to mean a collection of documents or indices which, when taken together, supply the information attributed to "an index" in the standard.

The specific location of a record "within a storage area" may not be delineated (e.g., the specific location within a computer record file may not be constant; further, SMUD may utilize a computer assisted random access filing system where such location could not be readily "documented," or would such a location be "relevant.") The storage location will be delineated, but where file locations change with time, the specific location of a record within that file may not always be documented.

With regard to Section 4.3, Supplement 17S-1 titled Safekeeping: Routine general office and nuclear site security systems and access controls are provided: No special security systems are required to be established for record storage areas.

With regard to Section 4.4, Supplement 17S-1, titled Facility: This Section provides no distinction between temporary and permanent facilities. To cover temporary storage, the following clarification is added: "Records completed but not yet transferred for permanent storage may be temporarily stored in one-hour fire rated file cabinets. In general, records shall not be maintained in such temporary storage for more than four months after completion without being microfilmed or placed in permanent storage. Open-ended documents revised or updated on a more-or-less continuing basis over an extended period of time (e.g. personnel qualification and training documents, equipment history cards) which are cumulative in nature (e.g. nonconforming item logs and control room log books) shall become QA records when they are issued as a specific revision (e.g. the master audit schedule); when they are filled-up or discontinued (e.g. log books or equipment history cards); on a predefined periodic basis when the completed portion of the on-going document shall be transferred to records control as a "record" (e.g. training and qualification records).

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EXCEPTIONS: (Continued)

EXCEPTION NO. 2: Reg. Guide 1.30/ANSI N45.2.4-72

Specific clarifications for ANSI N45.2.4-1972 are indicated below by section:

Section 1.4

Definitions in this standard that are not included in ANSI N45.2.10 shall be used; all definitions which are included in ANSI N45.2.10 shall be used as clarified in SMUD commitment to Regulatory Guide 1.74.

Section 2.1

Planning requirements, as determined by engineering, shall be incorporated into modification procedures.

Section 2.3

Procedures and Instructions shall be implemented as set forth in Sections II, III, V, X and XI of this program and by compliance with the Rancho Seco Plant Technical Specifications and Regulatory Guide 1.33 (ANSI N18.7).

Section 2.4

Results will be implemented as set forth in Sections X, XI, and XVII of this program and by compliance with ANSI N18.7 in lieu of the requirements set forth here.

Section 2.5.2

Calibration and Control covers three classes of instrumentation used by SMUD: (1) M&TE (portable measuring instruments, test equipment, tools, gages, and non-destructive test equipment used in measuring and inspecting safety-related structures, systems, and components); (2) reference standards (primary, secondary, transfer, and working); and (3) permanently installed process instrumentation (PI).

With respect to the first sentence, M&TE and reference standards shall be included in calibration program and shall either be calibrated at prescribed intervals or shall be calibrated prior to use. With respect to the last sentence, personnel shall be trained and procedures shall require that the calibration sticker shall be reviewed to determine calibration status prior to use: This label shall be considered to clearly identify equipment that is out of calibration.

Lack of a sticker shall require record review and affixing a new sticker based on calibration data. M&TE and reference standards shall comply with sentences 2, 3, and 4.

## ATTACHMENT II-3 (Page 3 of 8)

EXCEPTIONS: (Continued)

## EXCEPTION NO. 2: Reg. Guide 1.30/ANSI N45.2.4-73 (Continued)

## Section 2.5.2 (Continued)

With respect to the third sentence, SMUD uniquely identifies each safety-related component of permanently installed process instrumentation. This identification provides traceability to calibration data. These actions are SMUD's alternative to the tagging or labeling of items to indicate the calibration date and the identity of the person who performed the calibration. Permanently installed process instrumentation shall comply with sentences 1, 2, and 5.

## Section 3

Pre-construction Verification will be implemented as follows: (1) is required only for modifications, (2) no special checks are required to be made by the person withdrawing a replacement part from the warehouse equivalent controls are assured by compliance with Regulatory Guide 1.38 (ANSI N45.2.2) as set forth in this table, and, (3) shall be complied with as determined by engineering, by individual technicians as part of the modification process.

## Section 5.1

Inspections, including subsections 5.1.1, 5.1.2, and 5.1.3, will be implemented as set forth in Section X of this program. The inspection program will incorporate, as determined by engineering and Quality those items listed in these subsections.

## Section 5.2

Tests, including subsections 5.2.1 through 5.2.3, will be implemented as set forth in Sections III and XI of this program. In some cases Surveillance testing may be used to meet the appropriate requirements of this section.

## Section 6

Post-Construction Verification is not generally considered applicable at operating facilities because of the scope of the work and the relatively short interval between installation and operation. Where considered necessary by engineering and Quality, the elements described in this Section will be used in the development and implementation of inspection and testing programs as describe in Sections III, X, and XI of this program.

## Section 7

Data Analysis and Evaluation will be implemented as stated herein after adding the clarifying phrase "Where used" at the beginning of that paragraph.

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EXCEPTIONS: (Continued)

EXCEPTION NO. 3: Reg. Guide 1.37/ANSI N45.2.1-73

Specific clarifications for this Regulatory Guide and ANSI N45.2.1-1973 are indicated below:

With regard to Paragraph C.3 of Regulatory Guide 1.37: The water quality for final flushing of fluid systems and associated components shall be at least equivalent to the quality of the operating system water, except for the oxygen and nitrogen content; but this does not infer that chromate's or other additives, normally in the system water, will be added to the flush water.

With regard to Paragraph C.4 of Regulatory Guide 1.37: Expendable materials, such as inks and related products; temperature indicating sticks; tapes; gummed labels; wrapping materials (other than polyethylene); water soluble dam materials; lubricants; NDT penetrant materials and couplants, desiccants, which contact stainless steel or nickel alloy surfaces shall not contain lead, zinc, copper, mercury, cadmium and other low melting points metals, their alloys or compounds as basic and essential chemical constituents. No more than 0.1 percent (1,000 ppm) halogens will be allowed where such elements are leachable or where they could be released by breakdown of the compounds under expected environmental conditions.

With regard to Section 5 of ANSI N45.2.1-1973 titled Installation Cleaning: The recommendation that local rusting on corrosion resistant alloys be removed by mechanical methods is interpreted to mean that local rusting may be removed mechanically, but the use of other removal means is not precluded, as determined by Engineering or Chemistry.

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EXCEPTIONS: (Continued)

EXCEPTION NO. 4: Reg. Guide 1.39/ANSI N45.2.3-73

Specific classifications for ANSI N45.2.3-73 are indicated for specific sections below:

Section 1.4

Definitions: Definitions in this standard that are not included in Regulatory Guide 1.74 (ANSI N45.2.10) will be used. All definitions that are included in ANSI N45.2.10 will be used as clarified in SMUD's commitment to Regulatory Guide 1.74.

Section 2.1

Planning: SMUD may choose not to utilize the five-level zone designation system, but will utilize standard janitorial and work practices to maintain a level of cleanliness commensurate with program requirements in the areas of housekeeping, plant and personnel safety, and fire protection.

Cleanliness will be maintained, consistent with the work being performed, so as to prevent the entry of foreign material into safety-related systems. This will include, as a minimum, documented cleanliness inspections that will be performed prior to system closure. As necessary, (e.g. the opening is larger than the tools being used) control of personnel, tools, equipment, and supplies will be established when the reactor system is opened for inspection, maintenance, modification or repair.

Additional housekeeping requirements will be implemented as required for control of radioactive contamination.

Section 2.2

Procedures and Instructions: Appropriate procedures will be written and implemented.

Section 3.2

Control of Facilities: SMUD may choose not to utilize the five-level zone designation system, but will utilize standard janitorial and work practices to maintain a level of cleanliness commensurate with program requirements in the areas of housekeeping, plant and personnel safety, and fire protection.

Cleanliness will be maintained, consistent with the work being performed, so as to prevent the entry of foreign material into safety-related systems. This will include, as a minimum, documented cleanliness inspections that will be performed prior to system closure. As necessary, (e.g. the opening is larger than the tools being used) control of personnel, tools, equipment, and supplies will be established when the reactor system is opened for inspection, maintenance, modification or repair.



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EXCEPTIONS: (Continued)

EXCEPTION NO. 4: Reg. Guide 1.39/ANSI N45.2.3-73 (Continued)

Section 3.2 (Continued)

Additional housekeeping requirements will be implemented as required for control of radioactive contamination.

EXCEPTION NO. 5: Reg. Guide 1.58/ANSI N45.2.6

SMUD complies with the recommendation of the regulatory guide with the following clarification:

With regard to Paragraph C.5: The Level III function of inspection planning, reviewing and concurring with inspection, examination and testing procedures is performed by designated individuals from the Quality & Industrial Safety Department.

EXCEPTION NO. 6: Reg. Guide 1.64/ANSI N45.2.11

SMUD complies with the recommendation of the regulatory guide with the following clarification:

With regard to Paragraph C.2: In exceptional circumstances, the designer's immediate supervisor can perform design verification, provided:

1. The supervisor is the only technically qualified individual available.
2. The need is individually documented and approved in advance by the supervisor's management.
3. QA audits cover frequency and effectiveness of use of supervisors as design verifiers to guard against abuse.

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EXCEPTIONS: (Continued)

EXCEPTION NO. 7: Reg. Guide 1.74/ANSI N45.2.10-73

SMUD complies with the recommendations of this regulatory guide with the following clarifications:

SMUD reserves the right to define additional words or phrases that are not included in this Standard. Such additional definitions will be documented in appropriate procedures.

In addition to the Standard's definition of "Inspection," SMUD will use the following definition when referring to activities that are NOT performed by QC personnel: Examining, viewing closely, scrutinizing, looking over or otherwise checking activities. Personnel performing these functions are not necessarily certified to Reg. Guide 1.58 (ANSI N45.2.6).

When SMUD intends for Inspection to be performed in accordance with the QA Program by personnel certified as required by that program and for activities defined by "inspection" in ANSI N45.2.10, appropriate references to the plant QC organization or the procedures to be used for performing the activity will be made. If such references are NOT made, inspections are to be considered under the additional definition given above.

"Independent Verification": Verification by an individual other than the person who performed the operation or activity being verified that required actions have been completed. Such verification may not necessarily require confirmation of the action at the physical location if adequate remote indication of completion of action is available. In determining the acceptability of remote verification, the consequences of the action not being 100% completed and the validity of the remote indication for confirming the completion of the desired action will be considered. Examples include, but are not limited to: Verification of a breaker opening by observed remote breaker indication lights; verification of a set point (made with a voltmeter or ammeter for example) by observing the actuation of status or indicating lights at the required panel-meter indicated value; verification that a valve has been positioned by observing the starting or stopping of flow on meter indications or by remote valve positions indicating lights.

"Will": (Not defined in any ANSI Standard) - Means the same as "shall" except when used to denote simple futurity. When used to denote futurity, "will" is normally followed by "be".

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EXCEPTIONS: (Continued)

EXCEPTION NO. 8: Reg. Guide 1.38/ANSI N45.2.2

Section 2.7

Classification of Items - SMUD may choose not to utilize the four levels of item classification, but will address packaging and storage requirements for items based on the needs of individual items and manufacturers recommendation.

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NUCLEAR QUALITY ASSURANCE		EFFECTIVE DATE:	1/18/05

REVISION SUMMARY:

1. Revised wording in step 4.8 to assure the Security audit will include an individual knowledgeable and practiced in ISFSI access authorization program performance objectives in accordance with the District's response to item 8 of the NRC's Order for Modification of the ISFSI license, dated 08/18/04.

**THIS PROCEDURE IS ISSUED FOR INFORMATION ONLY AND  
SHALL NOT BE USED FOR WORK OR DESIGN.**

## **XVIII. AUDITS**

### **1.0 PURPOSE**

Describe the Rancho Seco Quality Assurance Program (QAP) measures that (1) establish a comprehensive system of planned and periodic audits, and (2) determine the effectiveness of the QAP at the Rancho Seco nuclear facility, which includes the Rancho Seco Nuclear Generating Station (RSNGS; licensed and undergoing decommissioning pursuant to 10 CFR 50) and the Independent Spent Fuel Storage Installation (ISFSI; licensed and operated pursuant to 10 CFR 72).

### **2.0 REFERENCE DOCUMENTS**

- 2.1 10 CFR 50, Appendix B, Criterion XVIII, Audits
- 2.2 Safety Guide 33/ANSI N18.7, Administrative Controls for Nuclear Power Plants
- 2.3 Reg. Guide 1.144/ANSI N45.2.12-1977, Requirements for Auditing of Quality Assurance Programs for Nuclear Power Plants
- 2.4 Reg. Guide 1.146/ANSI N45.2.23-1978, Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants
- 2.5 10 CFR 50.54(a), Conditions of Licenses
- 2.6 10 CFR 71.137, Audits
- 2.7 10 CFR 72.176, Audits

### **3.0 POLICY**

Procedures shall be established and implemented to assure that planned and periodic audits are conducted to verify compliance with all aspects of the QAP.

### **4.0 GENERAL REQUIREMENTS**

- 4.1 Quality Assurance shall establish a schedule for auditing the activities affecting quality. The audit schedule shall be consistent with the audit requirements and frequencies specified herein.

- 4.2 The audit program shall be described in procedures that implement this RSQM section.
- 4.3 Audits shall be conducted to determine the adequacy and effectiveness of programs implemented for the design, procurement, modification, maintenance, and operational activities at the Rancho Seco nuclear facility.
- 4.4 Audit plans shall be developed that identify the audit scope, the requirements, activities to be audited, organizations to be notified, the applicable documents, and the audit schedule.
- 4.5 Audits shall be performed using approved audit checklists.
- 4.6 Audit reports shall be issued which identify the activity that was audited, the personnel that were contacted during the audit, and any conditions adverse to quality noted during the audit.
- 4.7 Process conditions identified as adverse to quality using the Rancho Seco Corrective Action Program.
- 4.8 Personnel conducting audits shall be trained and qualified in accordance with Reference 2.4. In addition, at least one individual participating in the Security audit will be knowledgeable and practiced in the access authorization program performance objectives.
- 4.9 Regularly scheduled audits shall be supplemented by special audits/surveillances when conditions that warrant special audits exist or when requested by SMUD management personnel.

## 5.0 **RESPONSIBILITIES**

General organizational responsibilities are described in Section I, ORGANIZATION.

### 5.1 Quality Assurance is responsible for:

- a. Establishing a schedule for performance of required audits.
- b. Reviewing audit results to evaluate the effectiveness of the QAP.
- c. Implementation of the established audit program.
- d. Training and qualification of audit personnel.
- e. Preparation of trend analysis data.

- 5.2 Each department is responsible for:
- a. Supporting the audit activities.
  - b. Providing prompt response to any deviations from quality identified in the audit.

## **6.0 AUDITS AND AUDIT FREQUENCIES**

- 6.1 Audits of Rancho Seco nuclear facility activities shall be performed under the cognizance of the Quality Assurance organization supervisor. The required audits and audit performance frequencies are as follows:
- a. Conformance to the Rancho Seco nuclear facility Technical Specifications and associated license conditions at least once per year;
  - b. Performance and qualifications of the Rancho Seco nuclear facility technical staff at least once every two years;
  - c. Actions taken to correct deficiencies occurring in facility structures, systems, components, or methods of operation associated with the safe operation of the Rancho Seco Independent Spent Fuel Storage Installation (ISFSI) at least once every two years for those deficiencies not previously audited (Corrective Action Program audit);
  - d. Performance of activities required by the QAP to meet the 10 CFR 50, Appendix B criteria at least once every two years;
  - e. Rancho Seco nuclear facility Emergency Plan and implementing procedures at least once per year;
  - f. 10 CFR 72 ISFSI Physical Protection Plan and implementing procedures at least once per year;
  - g. Other areas of Rancho Seco nuclear facility operation that the Plant Manager considers appropriate;
  - h. Compliance with fire protection requirements and implementing procedures at least once every two years;
  - i. Radiological Environmental Monitoring Program (REMP) and the results thereof at least once every two years;

- j. Off-site Dose Calculation Manual (ODCM) and implementing procedures at least once every two years;
  - k. Process Control Program (PCP) and implementing procedures for processing and packaging of radioactive wastes from liquid systems at least once every two years;
  - l. Performance of activities required by the Quality Assurance Program for Effluent Control and Environmental Monitoring (Reg. Guide 4.15) at least once every two years; and
  - m. Radiation Protection Program content and implementation once per year.
- 6.2 Changes to these audits and audit frequencies are subject to the requirements contained in 10 CFR 50.54(a). In addition, frequencies specified in 10 CFR and related to the performance of specific audits may not be changed unless an exemption or waiver is obtained from the NRC.
- 6.3 The audit reports resulting from items a. through m. above shall be forwarded to the Plant Manager, the AGM, Energy Supply, and the management positions responsible for the areas reviewed within 30 days after completion.