

# Emergency Plan 10 CFR 72.32 Review

The Emergency Plan, RSLBD-020, Rev. 1, was reviewed to ensure continued compliance with the requirements of 10 CFR 72.32 and Interim Staff Guidance 16.

<b>Topic</b>	<b>10CFR72 Section</b>	<b>ISG-16 Section</b>	<b>RSLBD-020 Section</b>
Facility Description	32 (a) (1)	3.1 & 3.2	1.5 & 1.6
Types of Accidents	32 (a) (2)	3.3	2.0
Classification of Accidents	32 (a) (3)	3.4	3.0 & 3.1
Detection of Accidents	32 (a) (4)	3.5	2.1
Mitigation of Accidents	32 (a) (5)	Mitigation of Consequences 3.6	2.1, 6.2, & 6.3
Assessment of Releases	32 (a) (6)	3.7	2.1.4
Responsibilities	32 (a) (7)	3.8	4.2 & 4.3
Notification and Coordination	32 (a) (8)	3.9	4.2, 4.3, 5.2, 5.4.1
Information to be Communicated	32 (a) (9)	3.10	5.2 & 5.5
Training	32 (a) (10)	3.11	7.2
Safe Condition	32 (a) (11)	3.12	4.5
Exercises	32 (a) (12i)	3.13	1.1, 7.3 & 7.6
	32 (a) (12ii)	3.13	7.1, 7.3
Hazardous Chemicals	32 (a) (13)	3.14	1.4
Comments on Plan	32 (a) (14)	3.15	N/A
Offsite Assistance	32 (a) (15)	3.16	4.6
Information to Public	32 (a) (16)	N/A	4.2, 5.2,

Rancho Seco Implementing Procedures listed below provide additional guidance and clarification on emergency plan implementation, training, and testing.

- RSIP-003 Emergency Actions
- RSIP-004 Emergency Preparedness Training
- RSIP-005 Emergency Preparedness Surveillance Program

Based upon review of 10CFR72.32 and Interim Staff Guidance 16, the Rancho Seco Emergency Plan, RSLBD-020, continues to meet requirements.

## RSLBD-020 Rev. 1 Emergency Plan Reduction in Effectiveness Review

This review of Revision 1 to the Emergency Plan documents that the revision does not result in a reduction in the effectiveness of the NRC approved Emergency Plan. The evaluation of Revision 1 utilized the guidance of RIS-2005-02, Revision 1. Editorial changes as described in section 2.6 of RIS-2005-02, Revision 1, are not evaluated.

The evaluation documentation consists of a comparison of the current Emergency Plan (Rev. 0) with the Revision 1 changes. The comparison is presented in table format with the current Emergency Plan, Rev. 0, content on the left side and the proposed Emergency Plan, Rev. 1, on the right side. Changes are highlighted with red font. The evaluation of each section revision follows, demonstrating the rationale leading to the determination that the changes contained in Emergency Plan, Rev. 1, do not result in a reduction in the effectiveness of Rancho Seco's NRC approved Emergency Plan and may be implemented without prior NRC approval pursuant to 10 CFR 72.44(f)

**RSLBD-020 Rev. 1 Emergency Plan Reduction in Effectiveness Review**

RSLBD-020 Emergency Plan Rev. 0	RSLBD-020 Emergency Plan Rev. 1
Section 1.0 Introduction	Section 1.0 Introduction
<p>This document describes Sacramento Municipal Utility District's (SMUD's) plan for responding to emergencies that may occur at Rancho Seco while the used fuel and the greater than Class C waste (GTCC) is in dry storage at the Independent Spent Fuel Storage Installation (ISFSI)</p> <p>This Emergency Plan includes emergency response for the IOSB and ISFSI. The following indicates applicability.</p> <ul style="list-style-type: none"> <li>• Sections of the Plan that are applicable to the IOSB only are indicated by <b>(10 CFR 50)</b> at the beginning of the section.</li> <li>• Sections of the Plan that are applicable to the ISFSI are indicated by <b>(10 CFR 72)</b> at the beginning of the section.</li> <li>• Sections with no indication of <b>(10 CFR 50)</b> or <b>(10 CFR 72)</b> are applicable to both the IOSB and the ISFSI.</li> </ul>	<p>This document describes Sacramento Municipal Utility District's (SMUD's) plan for responding to emergencies that may occur at Rancho Seco while the used fuel and the greater than Class C waste (GTCC) are in dry storage at the Independent Spent Fuel Storage Installation (ISFSI).</p>
<p>This change reflects the current site licensing eliminating the need to reference section applicability to Parts 50 and/or 72. Removal of references to regulatory requirements no longer applicable after the termination of the Part 50 license do not minimize the effectiveness of the retained Part 72 requirements as documented in this evaluation and the accompanying Part 72.32 evaluation.</p>	

RSLBD-020 Rev. 1 Emergency Plan Reduction in Effectiveness Review

1.2 REGULATORY REQUIREMENTS	1.2 REGULATORY REQUIREMENTS
<p>This Plan meets the requirements established by, and describe in, the following parts and sections of the Code of Federal Regulations:</p> <p>1.2.1 (10 CFR 50) Domestic Licensing of Production and Utilization Facilities, Section 47(b), Section 54(q), and Appendix E, as modified by exemptions granted by the NRC, to Rancho Seco Nuclear Generating Station. The exemptions were granted in USNRC letter dated February 22, 1991, to Mr. Dan Keuter, AGM, Nuclear, from Dennis M. Crutchfield, Director, Division of Advanced Reactors and Special Projects, Office of Nuclear Reactor Regulation.</p> <p>1.2.2 (10 CFR 72) "Licensing Requirements for the Independent storage of Spent Nuclear Fuel and High-Level Radioactive Waste Storage", Section 32(a), "Emergency Planning".</p>	<p>This Plan meets the requirements established by, and describe in, 10 CFR Part 72 "Licensing Requirements for the Independent storage of Spent Nuclear Fuel and High-Level Radioactive Waste Storage," Section 72.32(a), "Emergency Plan".</p>
<p>This change reflects the current site licensing eliminating the need to reference section applicability to Parts 50 and/or 72. Removal of references to regulatory requirements no longer applicable after the termination of the Part 50 license do not minimize the effectiveness of the retained Part 72 requirements as documented in this evaluation and the accompanying Part 72.32 evaluation.</p>	

**RSLBD-020 Rev. 1 Emergency Plan Reduction in Effectiveness Review**

<p><b>1.3 STATE OF CALIFORNIA NUCLEAR EMERGENCY PLANNING REQUIREMENTS</b></p>	<p><b>1.3 STATE OF CALIFORNIA NUCLEAR EMERGENCY PLANNING REQUIREMENTS</b></p>
<p>California Health And Safety Code, <b>Chapter 4, Part 9, Division 104</b>, §114650-114685, The Radiation Protection Act of 1999, requires joint Utility, State and local government emergency planning for plume and ingestion pathways associated with nuclear power plants <b>with a generating capacity of 50 megawatts or more.</b></p> <p>Rancho Seco has all of its spent nuclear fuel and GTCC waste in dry storage at the ISFSI. <b>The generating capacity of Rancho Seco does not meet the 50-megawatt criteria established by the State of California.</b> Therefore, Rancho Seco is not required to meet the requirements of The Radiation Protection Act of 1999.</p>	<p>California Health And Safety Code, <b>Division 104, Part 9, Chapter 4</b>, §114650-114685, The Radiation Protection Act of 1999, requires joint Utility, State and local government emergency planning for plume and ingestion pathways associated with nuclear power plants.</p> <p>Rancho Seco has all of its spent nuclear fuel and GTCC waste in dry storage at the ISFSI. Therefore, Rancho Seco is not required to meet the requirements of The Radiation Protection Act of 1999.</p>
<p>This change reflects a change in the text of the California Health and Safety Code and has no effect on the implementation of the Emergency Plan; therefore this change does not reduce the effectiveness of the previously approved Emergency Plan.</p>	

<p><b>1.5 SITE AND NEAR SITE DESCRIPTION</b></p>	<p><b>1.5 SITE AND NEAR SITE DESCRIPTION</b></p>
<p>The nearest population center of 25,000 or more is the city of <b>Lodi</b>, which is about <b>17 miles southwest</b> of the site.</p> <p>The climate near Rancho Seco is typical of the central valley of California. No indication of geological faulting is present at the site.</p> <p><b>(10 CFR 50) The Emergency Planning Zone for Rancho Seco is the fenced area around the Interim Onsite Storage Building. Any potential radiological releases are not expected to exceed the State of California Protective Action Guidelines, or the U.S. Environmental Protection Agency (EPA) protective action guide (PAG) exposures as detailed in EPA-400-R-92-001, "Manual of Protective Action Guides and Protective Actions for Nuclear Incidents".</b></p> <p>Maps of the site and near site areas are shown in Figures 1-1 and 1-2.</p>	<p>The nearest population center of 25,000 or more is the city of <b>Elk Grove</b>, which is about <b>11 miles northwest</b> of the site.</p> <p>The climate near Rancho Seco is typical of the central valley of California. No indication of geological faulting is present at the site.</p> <p>Maps of the site and near site areas are shown in Figures 1-1 and 1-2.</p>

**RSLBD-020 Rev. 1 Emergency Plan Reduction in Effectiveness Review**

<p>This change reflects the update of the nearest population center of 25,000 or more and has no effect on implementation of the Emergency Plan. Therefore, this change does not reduce the effectiveness of the Emergency Plan.</p> <p>This change reflects the termination of the Part 50 license EPZ and has no effect on the implementation of the Part 72 ISFSI Emergency Plan; therefore this change does not reduce the effectiveness of the previously approved Emergency Plan.</p>	
<p><b>1.6 (10 CFR 72) ISFSI DESCRIPTION</b></p> <p>The ISFSI consists of a concrete slab approximately 225 feet long, 170 feet wide, and 2 feet thick <b>at the location of</b> the Horizontal Storage Modules (HSM). There are 22 HSMs on the concrete slab. A double security fence surrounds the slab.</p> <p>The ISFSI <b>Protected Area</b> is the area bounded by the <b>double fence surrounding the concrete slab</b>. The ISFSI Emergency Planning Zone is the nuisance fencing surrounding the ISFSI at approximately 100 meters in all directions.</p>	<p><b>1.6 (10 CFR 72) ISFSI DESCRIPTION</b></p> <p>The ISFSI <b>Protected Area (PA)</b> consists of a concrete slab approximately 225 feet long, 170 feet wide, and 2 feet thick <b>below</b> the Horizontal Storage Modules (HSM). There are 22 HSMs on the concrete slab. A double security fence surrounds the slab.</p> <p>The ISFSI <b>PA</b> is bounded by the ISFSI Emergency Planning Zone nuisance fencing surrounding the ISFSI PA at approximately 100 meters in all four directions.</p>
<p>This change reflects minor changes of wording for clarity and has no effect on the implementation of the Emergency Plan; therefore this change does not reduce the effectiveness of the previously approved Emergency Plan.</p>	

<p><b>Figure 1-1</b></p>	<p><b>Figure 1-1</b></p>
<p>This change reflects the termination of the Part 50 license EPZ and has no effect on the implementation of the Part 72 ISFSI Emergency Plan; therefore this change does not reduce the effectiveness of the previously approved Emergency Plan.</p>	

<p><b>2.0 TYPES OF ACCIDENTS</b></p> <p>The consequences of potential accidents were considered in the development of the emergency preparedness program for Rancho Seco. These potential accidents form the</p>	<p><b>2.0 TYPES OF ACCIDENTS</b></p> <p>The consequences of potential accidents were considered in the development of the emergency preparedness program for Rancho Seco. These potential accidents <b>are analyzed</b></p>
--	---

## RSLBD-020 Rev. 1 Emergency Plan Reduction in Effectiveness Review

basis for the response described in this plan.

in the ISFSI Final Safety Analysis Report (ISFSI SAR) and form the basis for the response described in this plan.

- o Dry Shielded Canister (DSC) Leakage

- Vol. I, Section 8.2.2 DSC Leakage, analyzes a DSC leakage accident. The analysis concludes that no credible condition can breach the DCS shell or the double seal welds at each end of the DSC. Therefore, an EAL on DSC leakage is not needed.

- o Accident Pressurization of a DSC

- Vol. I, Section 8.2.3, Accident Pressurization, analyzes an accident pressurization of the DSC. The analysis of the DSCs for the accident pressurization load shows that no significant deformations occur to the DSC which could prevent retrieval from the Horizontal Storage Module (HSM) or, inhibit normal transport or on-site transfer operation. In addition, the DSC pressure boundaries are analyzed to withstand the accident internal pressure to prevent release of any radioactive materials to the environment. Therefore, an EAL for Accident Pressurization is not necessary.

- o Earthquake

- Vol. I, Section 8.2.4, Vol. II. Section 8.3.2 and Vol. III. Section 8.3.2, analyze an earthquake event and all three sections state that overturning due to the design basis seismic event will not occur. Therefore an Earthquake EAL specific to the ISFSI, HSM or DSC is not necessary.

- o Fire

- Vol. I, Section 8.2.5 analyzes the effect of a fire involving 300 gallons of diesel fuel and states that direct engulfment of the HSM or DSC during storage in the HSM is not a credible event. Therefore, a Fire EAL for storage of spent fuel in the HSMs is not necessary.

- o Tornado winds and tornado generated missiles

- Vol. II, Section 8.3.1 and Vol. III., Section 8.3.1 analyze tornado and tornado generated missiles and state that the cask is



designed to withstand the tornado wind and tornado missile loads without damage to the containment structure. Therefore, an EAL specific to the ISFSI, HSM or DSC is not necessary.

o Flood

□ Vol. II, Section 8.3.3 and Vol. III., Section 8.3.3 analyze design basis flood and state that no corrective actions are required in the event of a flood. Therefore, an EAL for a flood is not required.

o Lightning effects

□ Vol. II., Section 8.3.4 and Vol. III., Section 8.3.5 analyze lightning events and states the likelihood of lightning striking the HSM and causing an off-normal condition is not considered to be a credible event. Also there are no radiological consequences. Therefore, an EAL specific to the ISFSI, HSM or DSC is not necessary.

o Complete blockage of HSM Air inlet and outlet vents

□ Vol. II, Section 8.3.5, analyzes the consequences of complete blockage of HSM air inlet and outlet vents and causing an off-normal condition is not considered to be a credible event. Therefore, an EAL specific to the blockage of HSM air inlet and outlet vents is not necessary.

o Reduced HSM Air Inlet and Outlet Shielding

□ Vol. II., Section 8.3.6, analyzes the consequences of Reduced HSM Air Inlet and Outlet Shielding. The analysis shows that there are no radiological or thermal consequences. An EAL for reduced HSM air inlet and outlet shielding is not needed

o Snow and ice loads

□ Vol. II., Section 8.3.7, analyses the consequences of snow and ice loads. The SAR states that snow and ice loads are not required for Rancho Seco Site. Therefore, an EAL for snow and ice loads is not required.

o Accidental Drop

□ Drop of the MP-187 Cask, containing a

**RSLBD-020 Rev. 1 Emergency Plan Reduction in Effectiveness Review**

	<p>DSC, during transfer operations has been evaluated using a bounding 80 inch drop. (Ref. Volume I, Section 8.2.1, ISFSI SAR). DSC integrity is not compromised by the bounding drop. Therefore, an EAL specific to the ISFSI is not necessary. However, conservatively, an EAL for a severe man-made incident is included in the Alert EALs as described in Section 3 of the Plan.</p>
<p>This change reflects the IFSAR as the basis for potential accidents at the ISFSI. Also relocates the Part 72 postulated accident from section 2.2 of the Rev. 0 document to section 2.0 of the Rev. 1 document. These clarifying and editorial changes do not reduce the effectiveness of the previously approved Emergency Plan.</p>	

<p><b>2.1 IOSB (10 CFR 50) ACCIDENTS</b></p>	<p><b>2.1 DETECTING ACCIDENTS</b></p>
<p><u>2.1.1 ANALYSIS OF POSTULATED ACCIDENTS</u></p> <p>The accidents that might occur at Rancho Seco while the facility is in the long-term storage mode have been analyzed for their severity of consequences and probability of occurrence. The analysis of these accidents are contained in the Radioactive Material Storage and Decommissioning Safety Analysis Report (RADSAR)</p> <p><u>2.1.2 ACCIDENTS CONSIDERED CREDIBLE DURING DECOMMISSIONING</u></p> <p>Rancho Seco RADSAR Section 7.1, Accidents Analysis, states,</p> <p>During radioactive material storage, SMUD will be overseeing the facility in a static state until the material is shipped off site for disposition. During decommissioning SMUD will perform decontamination and dismantlement of the remaining structures in addition to maintenance, waste management, and surveillance. The accidents discussed in NUREG/CR-0130 associated with safe storage (continuing care) and immediate dismantlement would be applicable during radioactive material storage and decommissioning, respectively. However, the potential consequences associated with these</p>	<p>2.1.1 Due to the relatively passive status of the facility, detection of abnormal conditions or accidents occurs early by workers involved in and around the tasks being performed, based on visual, audible, and other sensory observations.</p> <p>Site personnel notify telephone extension 4311 of abnormal or unsafe conditions. This phone is answered at the Primary Alarm Station. All personnel who are granted unescorted access authorization within the Emergency Planning Zone receive General Employee Training, which stresses telephoning 4311 to report any emergency or abnormal conditions.</p> <p>2.1.2 Fixed and portable instrumentation may be used to detect abnormal conditions.</p> <p>2.1.3 On-shift personnel are made aware of abnormal conditions or of other dangers during long-term storage activities, by the Siemens System indications and annunciators.</p> <p>2.1.4 The Rancho Seco ISFSI Technical specifications, Section 5.5.2, Radiological Environmental Monitoring Program, states: "Operation of the Rancho Seco ISFSI will not create any radioactive materials or results in any credible liquid or gaseous effluent release." Accordingly, no (effluent) monitoring or alarms are required at the ISFSI.</p>

## RSLBD-020 Rev. 1 Emergency Plan Reduction in Effectiveness Review

accidents would be less because of a reduction in the Rancho Seco radionuclide inventory due to:

1. The completion of the first phase of decommissioning,
2. Prior radioactive waste shipments, and
3. Radioactive decay.

Therefore, the potential decommissioning accidents at Rancho Seco are bounded by the accident evaluation specified in NUREG/CR-0130.

Accidents during radioactive material storage and decommissioning could result from equipment failure, human error, and service conditions. With spent fuel removed from the 10 CFR Part 50 licensed facility, accidents during storage monitoring and decommissioning may be categorized as:

1. Fires associated with combustible materials,
2. Loss of contamination control,
3. Natural phenomena, and
4. Human caused events external to Rancho Seco.

These potential accidents during radioactive material storage and decommissioning are addressed in NUREG/CR-0130 for safe storage (continuing care) and immediate dismantlement. The Rancho Seco source term is bounded by NUREG/CR-0130.

Therefore, for radioactive material storage and decommissioning activities at Rancho Seco, the potential accidents are bounded by the NUREG/CR-0130 evaluation.

Monitoring Badges will be utilized for monitoring direct radiation at the ISFSI as part of the Radiological Environmental Monitoring Program (REMP).

This change reflects the termination of the Part 50 basis accidents and the relocation of Detecting Accident content to section 2.1 of the Rev. 1 document. Neither of these changes impacts the implementation of the Part 72 ISFSI Emergency Plan; therefore this change does not reduce the effectiveness of the previously approved Emergency Plan.

**RSLBD-020 Rev. 1 Emergency Plan Reduction in Effectiveness Review**

<p><b>3.1.3 (10 CFR 50) Long-term Storage Classification Level:</b></p>	<p><b>3.1.3 ISFSI Classification Level:</b></p>
<p><b>(10 CFR 50) Long-term Storage Classification Level:</b>  <u>Unusual Event</u>                  An incident indicated by abnormal conditions where the safe storage and containment of radiological materials has been compromised. An Unusual Event may involve or potentially involve a low-level release of radioactive material to the environment that requires monitoring and/or assistance from external responders.                  An Unusual Event could require cessation of normal activities and require greater than normal attention to protection of site personnel.                  The primary purpose for declaration of an Unusual Event is to notify internal staff, emergency responders and regulatory agencies that an atypical situation exists. Declaration of an Unusual Event brings SMUD and external agencies to a state of readiness and provides a systematic handling of incident information and decision-making to mitigate the incident.                  A summary of Unusual Events is listed in Table 3-1. The Summary of EALs is generic, with specific threshold values for the EALs listed in RSIP-003, "Emergency Actions", Attachment 1, "Classification of Emergencies".</p>	<p><u>Alert</u>                  An incident indicated by abnormal or accident conditions associated with the Rancho Seco ISFSI.                  An Alert is an event that affects the integrity of ISFSI structures or creates a safety hazard to personnel, or a security event that has serious consequences.                  The primary purpose for declaration of an Alert is to notify internal staff, emergency responders and regulatory agencies that an atypical situation exists. Declaration of an Alert brings SMUD and external agencies to a state of readiness and provides a systematic handling of incident information and decision-making to mitigate the incident.                  The EALs for an Alert are listed in Table 3-1.</p>
<p>This change reflects the termination of the Part 50 accident classifications no longer applicable post license termination and the relocation of Part 72 ISFSI classification levels to section 3.1.3 of the Rev. 1 document. Neither of these changes impacts the implementation of the Part 72 ISFSI Emergency Plan; therefore this change does not reduce the effectiveness of the previously approved Emergency Plan.</p>	

# RSLBD-020 Rev. 1 Emergency Plan Reduction in Effectiveness Review

Table 3-1	Table 3-1
<p style="text-align: center;">TABLE 3-1 (10CFR 50 EVENTS) EAL SUMMARY – UNUSUAL EVENT</p> <ol style="list-style-type: none"> <li>1. Transportation of a radiologically contaminated injured individual from on-site to the hospital.</li> <li>2. Communications with security supervision has confirmed the seriousness or credibility of any of the following events related to the storage of materials within the IOSB: <ul style="list-style-type: none"> <li>• Actual or probable sabotage within the IOSB</li> <li>• Attempted theft of nuclear material from the IOSB</li> </ul> </li> <li>3. <del>or</del> Emergency Coordinator's discretion for other conditions within the IOSB that require the assistance of external emergency responders to evaluate and mitigate the incident to safeguard the public and environment.</li> </ol>	<p style="text-align: center;">TABLE 3-1 EAL – ISFSI ALERT</p> <ol style="list-style-type: none"> <li>1. A severe man-made incident or natural phenomenon, which affects the integrity of ISFSI structures or creates a significant personnel safety hazard. (For example, explosions or aircraft crash.)</li> <li>2. Communications with security supervision has confirmed the seriousness or credibility of any of the following events in accordance with the Rancho Seco ISFSI Physical Protection Plan: <ul style="list-style-type: none"> <li>• Bomb attack or terrorist threat made against Rancho Seco</li> <li>• Internal or external civil disturbance related to the storage of nuclear materials</li> <li>• Actual or probable sabotage</li> <li>• Attempted theft of special nuclear material</li> </ul> </li> <li>3. Emergency Coordinator's discretion for other conditions within the ISFSI that require the assistance of external emergency responders to evaluate and mitigate the incident to safeguard the public and environment.</li> </ol>
<p>This change reflects the termination of the Part 50 EAL Summary no longer applicable post license termination and the relocation of Part 72 ISFSI EAL Summary to Table 3.1 of the Rev. 1 document. Neither of these changes impacts the implementation of the Part 72 ISFSI Emergency Plan; therefore this change does not reduce the effectiveness of the previously approved Emergency Plan.</p>	

4.2 NORMAL SMUD ORGANIZATION	4.2 NORMAL SMUD ORGANIZATION
<p>The overall SMUD organization is shown in the <b>Radioactive Material Storage and Decommissioning Safety Analysis Report (RADSAR)</b> and in the Independent Spent Fuel Storage Installation Safety Analysis Report (ISFSI SAR). The Chief Executive Officer &amp; General Manager administers the affairs of SMUD under the policies of the elected Board of Directors. Upon request from the Emergency Coordinator, the Chief Executive Officer &amp; General Manager directs SMUD resources to provide support and outside assistance. The Manager, Rancho Seco Assets is responsible for the activities at Rancho Seco and provides policy oversight to the Emergency Coordinators.</p>	<p>The overall SMUD organization is shown in the ISFSI Final Safety Analysis Report (ISFSI SAR). The Chief Executive Officer &amp; General Manager administers the affairs of SMUD under the policies of the elected Board of Directors. <b>The Chief Executive Officer &amp; General Manager, through the Chief Energy Delivery Officer and Director, Power Generation have corporate responsibility for the overall safety and management of the Rancho Seco ISFSI.</b> Upon request from the Emergency Coordinator, the Chief Executive Officer &amp; General Manager directs SMUD resources to provide support and outside assistance. The Manager, Rancho Seco Assets is responsible for the activities at Rancho Seco and provides policy oversight to the Emergency Coordinators.</p>
<p>This change removes reference to the RADSAR (Part 50 license basis) no longer applicable post license termination and adds text clarifying the senior management responsibility for the safe management of the ISFSI. Neither of these changes impacts the implementation of the Part 72 ISFSI Emergency Plan; therefore this change does not reduce the effectiveness of the previously approved Emergency Plan.</p>	

**RSLBD-020 Rev. 1 Emergency Plan Reduction in Effectiveness Review**

4.3 EMERGENCY ORGANIZATION	4.3 EMERGENCY ORGANIZATION
<p>4.3.1 The Emergency Response Organization (ERO) consists of on-shift staff, augmented responders, SMUD resources, and external emergency responders. This organizational structure is described below. The ERO is shown on Figure 4-1.</p> <p>4.3.3.10 Initiate <b>Reentry and Recovery activities</b> or Restoration activities, as appropriate.</p>	<p>4.3.1 The Emergency Response Organization (ERO) consists of on-shift staff, augmented responders, SMUD resources, and external emergency responders. This organizational structure is described below. The ERO is shown on Figure 4-1 <b>and Figure 4-2.</b></p> <p>4.3.3.10 Initiate Restoration activities, as appropriate.</p>
<p>This change includes Figure 4-2 in the description of the Emergency Organization and removes the Reentry and Recovery activities (Part 50 requirement). These changes do not impact the implementation of the Part 72 ISFSI Emergency Plan; therefore they do not reduce the effectiveness of the previously approved Emergency Plan.</p>	

4.4 (10 CFR 50) REENTRY AND RECOVERY FOR SITE ACTIVITIES	4.4 ISFSI CLOSEOUT AND RESTORATION ACTIVITIES
<p><b>Reentry and recovery operations may be required after an emergency, depending on the severity of the emergency. Reentry and Recovery activities are to be conducted in coordination with local, state and federal responders and regulators.</b></p> <p><b>The Emergency Coordinator is responsible for closeout of emergencies, which includes determining if reentry and recovery operations are required.</b></p> <p><b>4.4.1 Reentry</b></p> <p><b>Reentry activities are a coordinated and authorized entry into an area that was evacuated during a declared emergency due to personnel or radiological hazards. The purpose of reentry is to evaluate the conditions of the area. Reentry will be conducted in accordance with the EIPs.</b></p> <p><b>4.4.2 Recovery</b></p> <p><b>Recovery activities may be initiated after a declared emergency has been closed out, and it has been determined that a dedicated organization is necessary to recover from the hazards remaining from an emergency.</b></p>	<p>The Emergency Coordinator is responsible for closeout of emergencies, which includes determining if the incident is under control and the consequences have been mitigated. After closeout, restoration activities are initiated, as required, to return the ISFSI to a safe condition. ISFSI Closeout and Restoration activities are to be conducted in coordination with local, state and federal responders and regulators.</p>

**RSLBD-020 Rev. 1 Emergency Plan Reduction in Effectiveness Review**

<p>Recovery operations will be conducted in accordance with EIPs.</p>	
<p>This change reflects the removal of the Part 50 Recovery and Reentry guidance no longer applicable post license termination and the relocation of ISFSI Closeout and Restoration guidance to Section 4.4 of the Rev. 1 document. Neither of these changes impacts the implementation of the Part 72 ISFSI Emergency Plan; therefore this change does not reduce the effectiveness of the previously approved Emergency Plan.</p>	

<p><b>4.6.2 Medical Support</b></p>	<p><b>4.5.2 Medical Support</b></p>
<p>4.6.2.4 Injuries that involve radioactive contamination will be directed to University of California Davis Medical Center (UCD). Although under their accreditation standards, all local hospitals providing basic emergency room care should be equipped to handle a contaminated patient if UCD is unavailable. Transportation may be by helicopter or ambulance.</p> <p>4.6.2.5 Qualified hospital personnel will provide radiation protection coverage at the hospital whenever a contaminated patient is transported for treatment.</p>	<p>Deleted</p>
<p>This change renumbers the medical support guidance and removes guidance specific to the potential for radiological contamination of injured personnel. With the termination of the Part 50 license and release of the facility for unrestricted use combined with the absence of any credible event resulting in a radiological release from the Part 72 facility (ISFSI), specific guidance for managing a contaminated, injured worker is no longer required. Removal of guidance for this non-credible event does not reduce the effectiveness of the previously approved Emergency Plan.</p>	

<p><b>Figure 4-1 &amp; Figure 2</b></p>	<p><b>Figure 4-1 &amp; Figure 2</b></p>
<p>Relocated Public Information On-Call staff and Other Staff Available On-Site to Figure 4-2.</p>	<p>Relocated Public Information On-Call staff and Other Staff Available On-Site to Figure 4-2.</p>
<p>This change clarifies the Rancho Seco ERO staffing to distinguish those employees directly involved with Emergency Response from those who may just happen to be on-site for other activities. This change does not affect implementation of the Emergency Plan and, therefore, does not reduce the effectiveness of the previously approved Emergency Plan.</p>	

**RSLBD-020 Rev. 1 Emergency Plan Reduction in Effectiveness Review**

5.5 REPORTS	5.5 REPORTS
<p>A written notification of emergency event closeout will be provided to the State of California and Sacramento County within five working days of emergency closeout.</p> <p>A written follow-up report <b>must</b> be submitted to NRC within <b>30</b> days following an Initial Emergency Notification, as specified in RSNAP-093, External Plant Reports and Posting of Notices.</p>	<p>A written follow-up report <b>may need to</b> be submitted to NRC within <b>60</b> days following an Initial Emergency Notification, as specified in RSNAP-093, External Plant Reports and Posting of Notices</p>
<p>This change removes the requirement to provide written notification to the State and County because this requirement no longer exists. This change also reflects the updated reporting requirement to the NRC based upon termination of the Part 50 license. This change does not affect implementation of the Emergency Plan and, therefore, does not reduce the effectiveness of the previously approved Emergency Plan.</p>	

6.2 ONSITE EMERGENCY RESPONSE FACILITIES AND EQUIPMENT	6.2 ONSITE EMERGENCY RESPONSE FACILITIES AND EQUIPMENT
<p><b>6.2.5 Skin Decontamination Supplies</b></p> <p><b>6.2.5.1 Skin decontamination supplies are available and maintained on-site by the Radiation Protection group.</b></p>	<p><b>Deleted</b></p>
<p>This change removes the requirement to maintain skin decontamination supplies following termination of the Part 50 license. The ISFSI does not have a credible mechanism for contaminating an individual; therefore, decontamination supplies are no longer needed. This change does not affect implementation of the Emergency Plan and, therefore, does not reduce the effectiveness of the previously approved Emergency Plan.</p>	

7.3 DRILLS AND EXERCISES	7.3 DRILLS AND EXERCISES
<p><b>7.3.1 General</b></p> <p>The Emergency Preparedness Group is responsible for developing, planning, scheduling and conducting drills and exercises.</p> <p>Drills are conducted and evaluated in accordance with the RSIP-004, "Emergency Preparedness Training".</p>	<p><b>7.3.1 General</b></p> <p>The Emergency Preparedness Group is responsible for developing, planning, scheduling and conducting drills and exercises.</p> <p>Drills and Exercises are conducted and evaluated in accordance with the RSIP-004, "Emergency Preparedness Training".</p> <p>A critique must be conducted following all</p>



**RSLBD-020 Rev. 1 Emergency Plan Reduction in Effectiveness Review**

<p>A critique must be conducted following all required <b>drills</b>. Deficiencies identified must be evaluated and corrected.</p> <p>The 10 CFR 50 and ISFSI (10 CFR 72) drills and exercises may be conducted in conjunction with each other, if the scenario and objectives are sufficiently comprehensive to be appropriate for both 10 CFR 50 activities and the ISFSI.</p>	<p>required <b>exercises</b>. Deficiencies identified must be evaluated and corrected.</p> <p>Drills and Exercises may be combined so that more than one functional area is performed during an individual drill/exercise.</p>
--	--

This change reflects the termination of the Part 50 license and any consideration for scenario's mandated by it in demonstrating compliance with the Part 72 ISFSI Emergency Plan. This change corrects the requirement for conducting critiques. Previously drills required critiques which is contrary to the requirement in 10 CFR 72.32 to conduct critiques for exercises. This change also acknowledges that drills may incorporate more than one functional area. This change does not impact the implementation of the Part 72 ISFSI Emergency Plan; therefore this change does not reduce the effectiveness of the previously approved Emergency Plan.

<p><b>7.3.3 Fire Drill (10CFR 50 and 10 CFR 72)</b></p>	<p><b>7.3.3 Fire Drill</b></p>
---	--------------------------------

This change reflects the termination of the Part 50 license and the need for regulatory applicability identification for fire drills. This change does not impact the implementation of the Part 72 ISFSI Emergency Plan; therefore this change does not reduce the effectiveness of the previously approved Emergency Plan.

<p><b>7.3.4 Medical Drill (10CFR 50 and 10 CFR 72)</b></p> <p>Annually, a medical drill shall be conducted involving the simulated radioactive contamination of injured personnel. The Site's First Aid Responders and off-site ambulance service will participate in the drill. When possible, the University of California Davis Medical Center or other appropriate hospital shall participate in the drill. The medical drill includes health physics and radiological monitoring.</p>	<p><b>7.3.4 Medical Drill</b></p> <p>Annually, a medical drill shall be conducted. The Site's First Aid Responders will participate in the drill. Offsite emergency responders will be invited to participate in the drill.</p>
--	---

This change reflects the termination of the Part 50 license and the need for regulatory applicability identification for medical drills. Change also removes reference to the contaminated injured worker scenario deleted with the Part 50 EALs. Change also clarifies that offsite support agencies are invited, but not required, to participate in site drills and exercises. This change does not impact the implementation of the Part 72 ISFSI Emergency Plan; therefore this change does not reduce the effectiveness of the previously approved Emergency Plan.

**RSLBD-020 Rev. 1 Emergency Plan Reduction in Effectiveness Review**

<b>7.3.5 Biennial Site Drill (10 CFR 50)</b>	<b>7.3.5 Radiological/Health Physics Drill</b>
Biennially, a site drill shall be conducted which simulates emergencies affecting some of the principal functional areas of the Rancho Seco's onsite emergency response capabilities. This drill may include health physics, radiological monitoring, Dismissal and Accountability, and may involve off-site agencies.	Annually, a radiological/health physics drill shall be conducted.
This change reflects the termination of the Part 50 license and the requirement to perform a Biennial drill required by Part 50, replacing it with the annual radiological/health physics drill required by 10CFR Part 72. This change does not impact the implementation of the Part 72 ISFSI Emergency Plan; therefore this change does not reduce the effectiveness of the previously approved Emergency Plan.	

<b>7.3.6 Biennial Exercise (10CFR 50 and 10 CFR 72)</b>	<b>7.3.6 Biennial Exercise</b>
<p>Biennially, an exercise shall be conducted which simulates emergencies affecting the entire site. <b>The Biennial Exercise will be conducted on alternating years with the 10 CFR 50 Biennial Site Drill.</b></p> <p>This exercise may include health physics, radiological monitoring, security, site dismissal and accountability, and may involve offsite agencies. <b>NRC and</b> local response agencies shall be invited to <b>observe</b> the biennial exercise.</p> <p><b>Both the 10 CFR 50 and ISFSI Biennial Exercise may be conducted as one exercise, if the exercise objectives are sufficiently comprehensive to include both routine Site activities and the ISFSI.</b></p>	<p>Biennially, an exercise shall be conducted which simulates emergencies affecting the entire site. This exercise may include health physics, radiological monitoring, security, site dismissal and accountability, and may involve offsite agencies. Local response agencies shall be invited to <b>participate in</b> the biennial exercise.</p>
This change reflects the termination of the Part 50 license and any consideration for scenario's mandated by it in demonstrating compliance with the Part 72 ISFSI Emergency Plan. This change also deletes the requirement that the site exercise alternate annually with the biennial site drill required by Part 50. This change does not impact the implementation of the Part 72 ISFSI Emergency Plan; therefore this change does not reduce the effectiveness of the previously approved Emergency Plan.	

<b>7.6 EMERGENCY PREPAREDNESS ROUTINE TEST PROGRAM</b>	<b>7.6 EMERGENCY PREPAREDNESS ROUTINE TEST PROGRAM</b>
7.6.1 Emergency Communication System Test	7.6.1 Emergency Communication System Test

**RSLBD-020 Rev. 1 Emergency Plan Reduction in Effectiveness Review**

<ul style="list-style-type: none"> <li>• <b>(10 CFR 50)</b> Quarterly, a test of the Emergency Communications System shall be conducted to test and verify the operability of communication equipment as specified in RSIP-005, "Emergency Preparedness Surveillance Program".</li> <li>• <b>(10 CFR 72)</b> Semi-Annually, a test of the Emergency Communications System shall be conducted to test and verify the operability of communication equipment as specified in RSIP-005, "Emergency Preparedness Surveillance Program". <b>The Semi-annual test requirement may be fulfilled by conducting the Quarterly (10 CFR 50) test.</b></li> </ul>	<ul style="list-style-type: none"> <li>• Semi-annually, a test of the Emergency Communications System shall be conducted to test and verify the operability of communication equipment as specified in RSIP-005, "Emergency Preparedness Surveillance Program".</li> </ul>
---	--

This change reflects the termination of the Part 50 license. This change also removes the reference to meeting the Part 72 test requirement via performance of the Part 50 testing. This change does not impact the implementation of the Part 72 ISFSI Emergency Plan; therefore this change does not reduce the effectiveness of the previously approved Emergency Plan.

<p><b>7.7.2 Support Group Agreements</b></p>	<p><b>7.7.2 Support Group Agreements</b></p>
<p>As necessary, Rancho Seco enters into agreements with off-site individuals, groups, and agencies that support Rancho Seco during emergency conditions. These agreements may be established and maintained via contracts, Letters of Agreement or Memoranda of Understanding. All such agreements are to be reviewed annually and the results documented. <b>All Letters of Agreement and contracts should be renewed every four years.</b></p>	<p>As necessary, Rancho Seco enters into agreements with off-site individuals, groups, and agencies that support Rancho Seco during emergency conditions. These agreements may be established and maintained via contracts, Letters of Agreement or Memoranda of Understanding. All such agreements are to be reviewed annually and the results documented.</p>

This change removes the recommendation (should) to renew applicable agreement documentation every four years. Should the annual review of any existing agreement reveal the need for renewal, it will be administered in accordance with standard SMUD policy. This change does not impact the implementation of the Part 72 ISFSI Emergency Plan; therefore this change does not reduce the effectiveness of the previously approved Emergency Plan.

**RSLBD-020 Rev. 1 Emergency Plan Reduction in Effectiveness Review**

8.2 REFERENCES	8.2 REFERENCES
8.2.1 10 CFR 20 - "Standards for Protection Against Radiation."	8.2.1 10 CFR 20 - "Standards for Protection Against Radiation."
8.2.2 10 CFR 50.47 – "Emergency Plans"	8.2.2 10 CFR 30, Rules of General
8.2.3 10 CFR 50.54 - "Conditions of Licenses"	Applicability to Domestic Licensing of Byproduct Material.
8.2.4 10 CFR 50 Appendix E - "Emergency Planning and Preparedness for Production and Utilization Facilities".	8.2.3 10 CFR 72 - Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High Level Radioactive Waste".
8.2.5 10 CFR 30, Rules of General Applicability to Domestic Licensing of Byproduct Material.	8.2.4 Spent Fuel Project Office Interim Staff Guidance – 16 Emergency Planning
8.2.6 10 CFR 72 - Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High Level Radioactive Waste".	8.2.5 EPA-400-R-92-001 – Manual of Protective Action Guides and Protective Actions for Nuclear Incidents
8.2.7 Regulatory Guide 3.67 – Standard Format and Contents for Emergency Plans for Fuel Cycle and Materials Facilities	8.2.6 Rancho Seco Independent Spent Fuel Storage Installation Safety Analysis Report.
8.2.8 EPA-400-R-92-001 – Manual of Protective Action Guides and Protective Actions for Nuclear Incidents	8.2.7 Rancho Seco Independent Spent Fuel Storage Installation Technical Specifications.
8.2.9 NUREG-0654 - "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants, Rev. 1, November 1980."	8.2.8 Rancho Seco Radiation Control Manual
8.2.10 NUREG/CR-0130, Technology, Safety and Costs of Decommissioning a Reference Pressurized Water Reactor Power Station	8.2.9 Rancho Seco Dosimetry Manual
8.2.11 Rancho Seco Radioactive Material Storage and Decommissioning Safety Analysis Report.	8.2.10 Rancho Seco Quality Manual
8.2.12 Rancho Seco Post Shutdown Decommissioning Activities Report.	8.2.11 Rancho Seco Administrative Procedures.
8.2.13 Rancho Seco Independent Spent Fuel Storage Installation Safety Analysis Report.	8.2.12 Rancho Seco ISFSI Physical Protection Plan
8.2.14 Rancho Seco Independent Spent Fuel Storage Installation Technical Specifications.	8.2.13 California Code of Regulations, Title 19, Division 2
8.2.15 Rancho Seco Radiation Control Manual	
8.2.16 Rancho Seco Dosimetry Manual	

**RSLBD-020 Rev. 1 Emergency Plan Reduction in Effectiveness Review**

<p>8.2.17 Rancho Seco Quality Manual              8.2.18 Rancho Seco Administrative Procedures.              8.2.19 Rancho Seco ISFSI Physical Protection Plan              8.2.20 RSNAP-050 Fire Protection Plan              8.2.21 California Code of Regulations, Title 19, Division 2</p>	
<p>This change reflects the termination of the Part 50 license, regulatory guidance specific to Part 50 licensees and Part 50 license basis documents (RADSAR/PSDAR). This change does not impact the implementation of the Part 72 ISFSI Emergency Plan; therefore this change does not reduce the effectiveness of the previously approved Emergency Plan.</p>	

<p><b>8.3 <u>DEFINITIONS</u></b></p>	<p><b>8.3 <u>DEFINITIONS</u></b></p>
<p>8.3.2 (10 CFR 50) Alert - An event, which results in significant hazards due to radiological conditions, safety hazards that warrants a Dismissal, or Security events that have serious consequences.</p> <p>8.3.4 (10 CFR 50) <u>DECON</u>- A decommissioning alternative, which consists of either removing contaminated equipment, components, systems and structures for disposal at a site authorized to receive such contamination or reducing the radioactive contamination to a level that permits unrestricted use.</p> <p>8.3.12 (10 CFR 50) Notification of Unusual Event - Events indicated by abnormal site conditions that, by themselves, do not constitute a site wide hazard to personnel. An Unusual Event is minor in nature and may involve a low-level release of radioactive material to the environment that requires monitoring. An Unusual Event could require cessation of normal activities and require greater than normal attention to protection of site personnel or equipment. Normally referred to as an "Unusual Event".</p> <p>8.3.18 Recovery - Actions and activities that occur after a declared emergency has been closed out and damage resulting from the emergency is being corrected.</p>	<p>Deleted definitions identified. All others are retained.</p>

**RSLBD-020 Rev. 1 Emergency Plan Reduction in Effectiveness Review**

8.3.19 Reentry - Coordinated and authorized entry into an area which was previously evacuated or isolated during an emergency due to radiation or safety hazards.

8.3.20 Security Shift Supervisor – The senior person on-shift supervisor responsible for maintaining site security and coordination of NRC licensed activities at Rancho Seco on a 24/7 basis. The on-duty Security Supervisor acts as the Emergency Coordinator until relieved. This person may be a SMUD employee or contractor.

This change reflects the termination of the Part 50 license, Part 50 specific emergency action levels, removes the employment designation of the Security Shift Supervisor and renumbers the section to reflect these removals. This change does not impact the implementation of the Part 72 ISFSI Emergency Plan; therefore this change does not reduce the effectiveness of the previously approved Emergency Plan.

8.4 <u>ACRONYMS</u>	8.4 <u>ACRONYMS</u>
<p><b>ALARA</b> -As Low As Reasonably Achievable  <b>Aux Bldg.</b> - Auxiliary Building  <b>Cal-OES</b> – California Office of Emergency Services  <b>CFR</b> - Code of Federal Regulations  <b>EAL</b> - Emergency Action Level  <b>EOC</b> – Emergency Operations Center  <b>EPA</b> - Environmental Protection Agency  <b>EPIP</b> – Emergency Plan Implementing Procedure  <b>EPZ</b> - Emergency Planning Zone  <b>ERO</b> – Emergency Response Organization  <b>IC</b> – Incident Commander  <b>ICS</b> – Incident Command System  <b>IOSB</b> – Interim Onsite Storage Building  <b>ISFSI</b> - Independent Spent Fuel Storage Installation  <b>NIMS</b> – National Incident Management System  <b>NRC</b> - Nuclear Regulatory Commission  <b>PAS</b>- Primary Alarm Station  <b>RWP</b> - Radiation Work Permit  <b>SAR</b> - Safety Analysis Report  <b>SEMS</b> – Standardized Emergency Management System  <b>SMUD</b> - Sacramento Municipal Utility District</p>	<p><b>ALARA</b> -As Low As Reasonably Achievable  <b>Cal-OES</b> – California Office of Emergency Services  <b>CFR</b> - Code of Federal Regulations  <b>EAL</b> - Emergency Action Level  <b>EOC</b> – Emergency Operations Center  <b>EPA</b> - Environmental Protection Agency  <b>EPZ</b> - Emergency Planning Zone  <b>ERO</b> – Emergency Response Organization  <b>IC</b> – Incident Commander  <b>ICS</b> – Incident Command System  <b>ISFSI</b> - Independent Spent Fuel Storage Installation  <b>NIMS</b> – National Incident Management System  <b>NRC</b> - Nuclear Regulatory Commission  <b>PAS</b>- Primary Alarm Station  <b>RSIP</b> – Rancho Seco Implementing Procedure  <b>RWP</b> - Radiation Work Permit  <b>SAR</b> - Safety Analysis Report  <b>SEMS</b> – Standardized Emergency Management System  <b>SMUD</b> - Sacramento Municipal Utility District  <b>Tech Specs</b> - Technical Specifications  <b>TSC</b> – Technical Support Center</p>

**RSLBD-020 Rev. 1 Emergency Plan Reduction in Effectiveness Review**

<b>Tech Specs</b> - Technical Specifications <b>TSC</b> - Technical Support Center	
---	--

This administrative change updates the procedural series designation, replacing Emergency Plan Implementing Procedures with Rancho Seco Implementing Procedures and removing the legacy auxiliary building.
---