



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001**

August 23, 2017

MEMORANDUM TO: Anthony H. Hsia, Deputy Director  
Division of Spent Fuel Management  
Office of Nuclear Material Safety  
and Safeguards

FROM: Wendy A. Reed, Ph.D., Chemist **/RA/**  
Renewals and Materials Branch  
Division of Spent Fuel Management  
Office of Nuclear Material Safety  
and Safeguards

SUBJECT: SUMMARY OF AUGUST 4, 2017, MEETING WITH SACRAMENTO  
MUNICIPAL UTILITY DISTRICT TO DISCUSS THE UPCOMING  
SUBMITTAL OF THE APPLICATION FOR RENEWAL OF THE RANCHO  
SECO INDEPENDENT SPENT FUEL STORAGE INSTALLATION  
LICENSE (SNM-2510) (CAC NO. L25233)

Background

On August 4, 2017, a meeting was held in Rockville, MD, between representatives of Sacramento Municipal Utility District (SMUD) and the U.S. Nuclear Regulatory Commission (NRC) to discuss the upcoming submittal of the application for renewal of the Rancho Seco Independent Spent Fuel Storage Installation (ISFSI) license, SNM-2510. The list of meeting attendees is provided in Enclosure 1.

The meeting was noticed on July 18, 2017 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17200A069).

Discussion

The meeting discussion followed the meeting agenda, which is provided in Enclosure 2. SMUD gave a presentation on the planned Rancho Seco ISFSI license renewal application, which is included in Enclosure 3. SMUD plans to request a 40-year period of extended operation and plans to submit the license renewal application in March 2018.

CONTACT: Wendy Reed, NMSS/DSFM  
301-415-7213

The presentation provided information on:

- the licensing history of the Rancho Seco ISFSI, including licensing amendments and overview of the site
- the license renewal application status and schedule, and the major components identified in its scoping evaluation
- information on the aging management review; and
- the pre-application inspections of the dry storage canister confinement boundary and horizontal storage modules, which were carried out in May 2017

SMUD and the NRC staff discussed the following:

- *Scoping evaluation results.* The NRC staff questioned why the transfer cask lifting yolk entry in the table was changed from the previous table presented during the first pre-application meeting. SMUD responded that it was considered auxiliary equipment and was deemed to be out of scope. The NRC asked why the ISFSI approach apron was also determined to be out of scope. SMUD said this is because of the hydraulics present which are able to adjust the height and levelling of the transfer equipment; the licensee is not concerned with differential settlement of the apron.
- *Damaged Fuel Assemblies.* The NRC staff asked about the fuel assemblies that were retrospectively classified as damaged, which was addressed in Amendment No. 3 to License No. SNM-2510. The licensee indicated that it considers the canister loaded with failed fuel to be consistent with the licensing basis with respect to retrievability in the Final Safety Analysis Report, which in turn is based on Interim Staff Guidance-2, *Fuel Retrievability in Spent Fuel Storage Applications*, Rev. 0. NRC staff told Rancho Seco that the basis for retrievability will be confirmed in the review of the renewal application.
- *Pre-Application Inspection.* SMUD presented their preliminary observations to NRC staff. SMUD described the apparatus used to conduct the inspection, including a robotic “crawler” which has a 90 – 120 degree range of motion. The licensee was able to attain a VT-3 level of inspection. As part of the presentation, SMUD showed video footage of the inspection of the dry shielded canister (DSC)/horizontal storage module (HSM) interior, examined after 15 years of in-service time. NRC staff agreed with SMUD’s conclusions that no indications of age related degradation were apparent on steel support structures or the concrete. NRC asked SMUD if the goal of future inspections will be to look at the top of the canister. SMUD replied that it would like to, but the ability to do this is technology dependent. The heat shield prevents the crawler accessing the top of the canister through the upper vent.
- *Neutron Absorbers.* NRC staff asked about the type of Boral that is used at Rancho Seco as a neutron absorber. SMUD replied that the Type 1 Boral is used. NRC staff stated that the NRC is looking at potential Boral degradation issues internally.

As part of the discussion, and at SMUD’s request, NRC staff presented their observations on SMUD’s pre-application inspections held in May 2017. The NRC presentation is included in Enclosure 3. The NRC recommended that the licensee include a color card in its test kit after one of the NRC observers noticed that a color image was not shown on screen, a fact that was not immediately apparent to all conducting the inspection. The NRC staff thought it good

practice that SMUD had a back-up robot present in case of malfunction of the primary crawler. The NRC noted that the MP-187 transfer cask is in excellent condition, and that overall, the inspection was well organized. The NRC staff asked if SMUD was planning on documenting this operational experience, to which SMUD replied that it would be submitted to the Aging Management INPO Database system, which is used to collect and disseminate dry cask storage aging management information.

The NRC staff noted that the American Society of Mechanical Engineers (ASME) cards, which are used to confirm the level of inspection, were not characterized in this case using lighting and distance that represented the conditions of the inspection. SMUD replied that this was because the ASME card could not be placed in the HSM. SMUD intends to use the correct protocol during future aging management inspections.

The NRC staff stressed the importance of a complete application to the licensee. For example, if a component has been determined to be out of scope, the basis for this decision should be made clear.

After SMUD and the NRC representatives completed their discussion, the meeting was opened to public comments and questions.

Marvin Lewis, a private citizen, asked how the cask selection was made for the inspection. The NRC staff reiterated statements made by the licensee in the meeting that the cask selection was based on the greatest in-service time, and that all the casks at Rancho Seco are close in age and heat load. Mr. Lewis also asked if there were any parallels that could be made with other containers in service worldwide. NRC staff answered that the casks at the Calvert Cliffs ISFSI in the U.S. are similar and that they have recently undergone aging management inspections.

### **Action Items/Next Steps**

SMUD stated that, at this time, it did not see the need to hold a third pre-application meeting. SMUD plans to submit the Rancho Seco ISFSI license renewal application in March 2018.

Docket No. 72-11  
CAC No. L25233

Enclosures:

1. Meeting Attendees
2. Agenda
3. Handout – SMUD Presentation on Rancho Seco Specific ISFSI License Renewal  
Handout – NRC Observations from the Rancho Seco ISFSI Inspection

SUMMARY OF AUGUST 4, 2017, MEETING WITH SACRAMENTO MUNICIPAL UTILITY DISTRICT TO DISCUSS THE UPCOMING SUBMITTAL OF THE APPLICATION FOR RENEWAL OF THE RANCHO SECO INDEPENDENT SPENT FUEL STORAGE INSTALLATION LICENSE (SNM-2510) (CAC NO. L25233)  
DOCUMENT DATE: AUGUST 23, 2017

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**ADAMS Accession No.: ML17236A490**

<b>OFC</b>	NMSS/DSFM	NMSS/DSFM	NMSS/DSFM
<b>NAME</b>	WReed	WWheatley via email	JWise for MRahimi via email
<b>DATE</b>	08/22/17	08/23/17	08/23/17

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## MEETING ATTENDEES

Meeting with Sacramento Municipal Utility District (SMUD) to discuss  
the upcoming submittal of the application for renewal of the Rancho Seco  
Independent Spent Fuel Storage Installation license (SNM-2510)

August 4, 2017, 9:00 a.m. – 12:00 p.m.

Wendy Reed	NRC/NMSS/DSFM
John McKirgan	NRC/NMSS/DSFM
Kristina Banovac	NRC/NMSS/DSFM
David Tarantino	NRC/NMSS/DSFM
JoAnn Ireland	NRC/NMSS/DSFM
Antonio Rigato	NRC/NMSS/DSFM
John Wise	NRC/NMSS/DSFM
Bob Tripathi	NRC/NMSS/DSFM
Meraj Rahimi	NRC/NMSS/DSFM
Darrell Dunn	NRC/NMSS/DSFM
Caylee Kenny (via teleconference)	NRC/NMSS/DSFM
Patricia Silva (via teleconference)	NRC/NMSS/DSFM
Yong Kim (via teleconference)	NRC/NMSS/DSFM
Zahira Cruz (via teleconference)	NRC/NMSS/DUWP
Ray Keller (via teleconference)	NRC/Region IV
Dan Tallman	SMUD
Tom Edwards	TN Americas
Karan Mauskar	TN Americas
Ray Phan	TN Americas
Girish Patel	TN Americas
Prakash Narayanan	TN Americas
Don Shaw	TN Americas
Brian Gutherman	Gutherman Technical Services/SMUD
Carlyn Greene (via teleconference)	UxC
Marvin Lewis (via teleconference)	Public
Dennis Williford (via teleconference)	AREVA TN
Paul Plante (via teleconference)	The Yankee Companies
Randall Granaas (via teleconference)	SONGS Fuel
Allen Williams (via teleconference)	ISFSI Aging Management - SONGS

Lisa Matis (via teleconference)	Tetra Tech
Michael Callahan (via teleconference)	Governmental Strategies, Inc.

## MEETING AGENDA

Meeting with Sacramento Municipal Utility District

August 4, 2017

9:00 a.m. – 12:00 p.m. (Eastern Daylight Time)

One White Flint North Building, O-7B4

**Purpose:** Meeting with Sacramento Municipal Utility District (SMUD) to discuss the upcoming submittal of the application for renewal of the Rancho Seco Independent Spent Fuel Storage Installation license (SNM-2510).

**Agenda:**

- Welcome, introductions, and meeting objectives
- SMUD presentation and discussion
- Public questions or comments
- Wrap-up and closing remarks
- Meeting adjourned

HANDOUTS