Rancho Seco

Post Shutdown Decommissioning Activities Report

Amendment 1

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1.0 Introduction

In accordance with the results of a public referendum on June 6, 1989, the Sacramento Municipal Utility District (SMUD) decided to permanently shut down the Rancho Seco Nuclear Generating Station. Accordingly, on August 29, 1989, SMUD notified the U.S. Nuclear Regulatory Commission (NRC) of its intent to seek amendments to the Rancho Seco operating license to decommission the facility. The Commission acknowledged the notification on November 27, 1989 [Ref. 1].

On March 20, 1995, the NRC issued Rancho Seco's Decommissioning Order. The Order authorized SMUD to decommission Rancho Seco in accordance with the Decommissioning Plan, submitted to the NRC in May 1991 [Ref. 2]. The Decommissioning Plan described SMUD's intention to place Rancho Seco into safe-storage for the remainder of its originally licensed operating life, in 2008. After safe-storage, SMUD would begin decontamination and dismantlement activities, resulting in the termination of Rancho Seco's 10 CFR 50 license. Deferring decontamination and dismantlement activities until 2008, would allow SMUD additional time to accumulate funds sufficient to complete decommissioning.

In 1996, the NRC amended its regulations for decommissioning nuclear power reactors. The intent of the new regulations is to provide licensees with simplicity and flexibility in implementing the decommissioning process. A major change from the past regulations is that licensees no longer need to have an approved decommissioning plan prior to performing major decommissioning activities. Licensees can now conduct major decommissioning activities under 10 CFR 50.59.

Under the new rule, power reactor licensees who have permanently ceased operation of their facility must submit a Post-shutdown Decommissioning Activities Report (PSDAR) to the NRC. Because SMUD had an NRC-approved Decommissioning Plan prior to the effective date of the new rule, the Decommissioning Plan is considered to be the PSDAR. In accordance with 10 CFR 50.82, the PSDAR must include:

1. A description of planned decommissioning activities
2. A schedule for completing those activities
3. An estimate of expected costs
4. A discussion of whether existing environmental impact statements bound the environmental impacts of the proposed actions.

This PSDAR supersedes the original Decommissioning Plan, and provides the information required in 10 CFR 50.82.

Currently, Rancho Seco's systems are in Custodial-SAFSTOR. Rancho Seco's 493 spent fuel assemblies are stored in the spent fuel pool. Systems and equipment not needed to support spent fuel storage are shut down and abandoned in place. SMUD maintains sufficient staff to support spent fuel storage and meet NRC regulatory requirements. SMUD intends to transfer spent fuel from the spent fuel pool to dry storage at an onsite Independent Spent Fuel Storage Installation (ISFSI).

Since submitting the original Decommissioning Plan, SMUD has continued to evaluate various alternatives for decommissioning Rancho Seco, including accelerating certain decommissioning activities. On January 9, 1997, the SMUD Board of Directors approved an "incremental decommissioning" project for Rancho Seco. Incremental decommissioning began in early-1997, and is expected to last at least three years.

Incremental decommissioning involves performing some decommissioning activities now instead of waiting until 2008, as originally described in the PSDAR (i.e., the originally approved Decommissioning Plan). In accordance with 10 CFR 50.82, SMUD provided written notification to the NRC [Ref. 3] regarding SMUD's intent to begin incremental decommissioning. SMUD will use the decommissioning funds accumulated to-date, as well as future collections, to accomplish incremental decommissioning. Current estimates are that the total cost to terminate Rancho Seco's 10 CFR 50 license will be $441 million (1995 dollars).

2.0 SITE DESCRIPTION

The Rancho Seco Nuclear Generating Station is located in Sacramento County, in the State of California, 25 miles southeast of the City of Sacramento, and 26 miles northeast of the City of Stockton (see Figure 2-1).

The plant site is located on 2,480 acres of flat to rolling terrain. The Sierra Nevada Mountain Range is located to the east, with the Pacific Coast Range to the west. The site elevation is approximately 165 feet and is surrounded by range land, primarily used for cattle grazing. Also on the site is a SMUD owned Solar Power Generating Facility and Rancho Seco Lake, which is used for recreational purposes and was used as a back-up water supply for the plant emergency cooling and fire systems. The decommissioning activities associated with the plant are not intended to affect the operation of the solar facility, and will have a negligible impact on the lake.

The five-mile radius surrounding the plant is a low-population area, primarily farmland, with few tourist attractions. State Route 104 is on the northern boundary of the site and connects with State Route 99 and Interstate Route 5 to the west and State Route 88 to the east.

2.1 Topography

The plant site's rolling terrain is not directly intersected by any streams; however, drainage from higher levels is well defined and intercepts with run-off streams at lower levels. The plant's grade level of approximately 165 feet above sea level allows excellent drainage without danger of flooding. The elevation of the site acreage varies from 130 feet to 280 feet above sea level and drainage along natural gullies varies from 2 to 6 percent.

2.2 Geology

Major geologic formations at the site include a basement complex of granitic and metamorphic rocks overlaid by about 1,500 to 2,000 feet of tertiary or older sediments, in turn overlain by the Pliocene Laguna Formation. Geological exploration suggests faultless sediments.

2.3 Hydrology

Surface run-off is directed off site through a series of drains to the site outfall at the southwest boundary. The combined run-off and outfall empty through a site canal to Clay Creek. Clay Creek conducts the drainage to Hadselville Creek which empties into Laguna Creek. Average annual flows for Hadselville and Laguna Creeks are 3,000 and 13,000 acre-ft/yr, respectively. The creeks flow intermittently and are normally dry from June to November. However, due to site outfall, they now flow (in part) year round.

The site outfall is nearly all dilution water from Folsom South Canal maintained at a rate sufficient to ensure compliance with 10 CFR 50, Appendix I. The outfall discharge will continue based on SMUD needs. Laguna Creek empties into the Mokelumne River which drains into the Sacramento River 20 miles south of the city of Sacramento. The Sacramento River discharges into the Pacific Ocean through the San Francisco Bay.

Groundwater underlies the site at approximately 150 feet below the surface. Site wells presently provide water for plant domestic needs. Groundwater in the area occurs under free or semi-confined conditions as part of the Sacramento Valley Groundwater Basin. The water is stored primarily in the Mehrten Formation. The cities of Galt and Lodi are the nearest communities of size with public groundwater supplies, and most likely draw water from the Mehrten Formation.

2.4 Climatology

Rancho Seco climate is typical of the Great Central Valley of California. Rainy winter, but fair summer, spring, and fall are characteristic. Midwinter is noted for heavy fog that may last for several days.

Severe weather at Rancho Seco occurs primarily as thunderstorms. The average year has five thunderstorms with the majority occurring in the spring.

The average monthly temperature at the site from November to October is 62°F, with an 80°F maximum in July and a 40°F minimum in January. A temperature of 90°F or higher may be expected 80 days per year. The highest reported temperature for the area was 115°F. A minimum temperature of 32°F or less should occur 20 days per year, with 15°F being the lowest reported temperature.

Precipitation in the Great Central Valley is concentrated in a rainy season from October to May. The mean annual total for Sacramento is 17.87 in. and 13.37 in. for Stockton. Both have monthly maximum values in December, showing 3.24 in. at Sacramento and 2.66 in. at Stockton. Snow and sleet are rare.

Humidity at Sacramento is greatest during winter and is at its lowest during summer. In January, the average humidity is 85%. July humidity average is 54%.

2.5 Meteorology

Winter winds are generally from the south or southeast over the Rancho Seco region. Precipitation may accompany southerly winds.

In summer, cooler maritime air flows toward the warm valley air. The dominant westerly flow pours into the valley and diverges south into the San Joaquin Valley and north into the Sacramento Valley.

Based upon wind data, the maximum persistence of the wind is from the southwest.

2.6 Seismology

The nearest fault system, the Foothill Fault System, is approximately 10 miles east of Rancho Seco and has been inactive since the Jurassic Period, about 135 million years ago. Large earthquake shocks have been produced by active faulting along the Hayward and San Andreas Faults, 70 to 89 miles west of the site, and along faults beyond the Sierra Nevada Range, 80 miles to the east.

There is no reason to anticipate fault propagation in the vicinity of the site. Shocks along distant faults will result in earthquake shaking, but no ground accelerations greater than 0.05 g should occur during the decommissioning period because of the nature of the foundation material underlying the site and because of the distance to the nearest active faulting.

2.9 Plant Description

The Rancho Seco is a single generating unit designed and constructed by Bechtel Power Corporation, with a pressurized water reactor (PWR) supplied by Babcock and Wilcox Company (B&W). The Nuclear Steam Supply System (NSSS) was capable of a thermal output of 2,772 megawatts. The unit had a net electrical power output of 913 megawatts.

The NSSS consisted of two independent primary coolant loops (each of which contain two reactor coolant pumps and a steam generator), an electrically heated pressurizer, and connecting piping. The system is housed within the Reactor Building.

Major station structures include: two cooling towers, Reactor Building, Fuel Storage Building, Administration Building, Auxiliary Building, Training and Records Building, Nuclear Service Electrical Building, radioactive waste Interim Onsite Storage Building, security buildings, warehouses, tank farm, two spray ponds, two retention basins, switchyard, and assorted general support buildings.

The station is located in a low lying portion of the site, 1/2 mile from the site boundaries and adjacent public roadways. The site layout is shown in Figure 2-2. A brief description of structures relevant to decommissioning is given below:

- **Reactor Building** - a radiologically controlled building that is a domed, post-tensioned concrete, cylindrical structure containing the nuclear reactor and associated equipment.

- **Turbine Building** - supports the turbine generator, houses equipment and systems necessary for the operation of the turbine generator, and supports the gantry crane.

- **Spray Ponds** - stored the nuclear service raw water inventory and provided cooling for nuclear service cooling water system and two of the four emergency diesel generators. Currently abandoned, the two spray ponds are located north of the cooling towers.

- **Auxiliary Building** - contains the Control Room, Technical Support Center, chemistry laboratories, Controlled Area access control, as well as systems and equipment that were necessary to support nuclear reactor operation. A portion of the building is radiologically controlled.

- **Fuel Storage Building** - a radiologically controlled building where the 493 spent fuel assemblies are stored in the spent fuel pool.

- **Cask Support Facility** - formerly housed two of the four emergency diesel generators and their support systems. All of the generators have been sold for salvage. (The other two diesel generators were located in the Auxiliary Building.) The interior of the building has been converted to an ISFSI support facility.

- **Nuclear Services Electrical Building** - houses batteries, switchgear, electrical buses, motor control centers, and control and monitoring electronics.

- **220 kV Switchyard** - connects the plant with the off-site transmission system; major inter-tie between SMUD and adjacent utilities.

- **Tank Farm** - a radiologically controlled area located north of the Reactor Building that contains various storage tanks, pumps, and heat exchangers for plant systems.

- **Cooling Towers** - two hyperbolic, natural draft, circulating water cooling towers; each is 425 ft high and 315 ft in diameter at the bottom.

- **Interim On Site Storage Building** - a concrete, two-story building located west of the cooling towers that provides on-site storage of dry contaminated waste.

- **Training and Records Building** - a five-story office building attached to the Auxiliary Building.

- **Personnel Access Portal** - provides normal site access through a concrete, two-story building located in the northeast corner of the site. A portion of this building contains the industrial area control point. Pedestrian and vehicular traffic is controlled and processed through this building.

- **Retention Basins** - two concrete ponds that provide temporary diversion of plant effluent and collect discharges from the Regenerant Hold Up Tanks (RHUTs) prior to off-site discharge.

- **Independent Spent Fuel Storage Installation** - Designed to provide interim dry storage of 100% of Rancho Seco's spent fuel assemblies in a NUHOMS transportable storage system. The ISFSI is located west of the current Industrial Area.

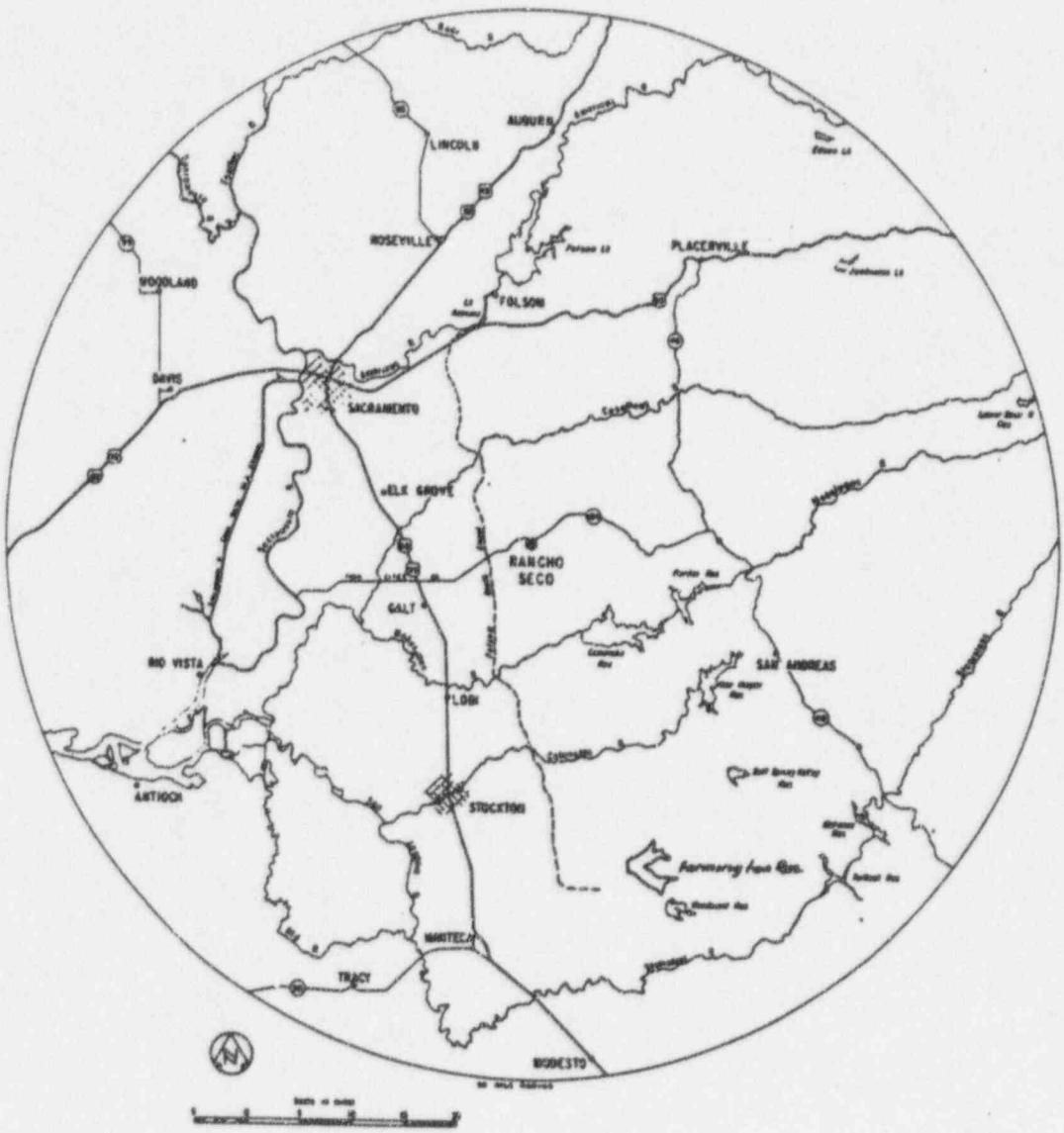

FIGURE 2-1
GENERAL AREA MAP

SMUD
SACRAMENTO MUNICIPAL UTILITY DISTRICT

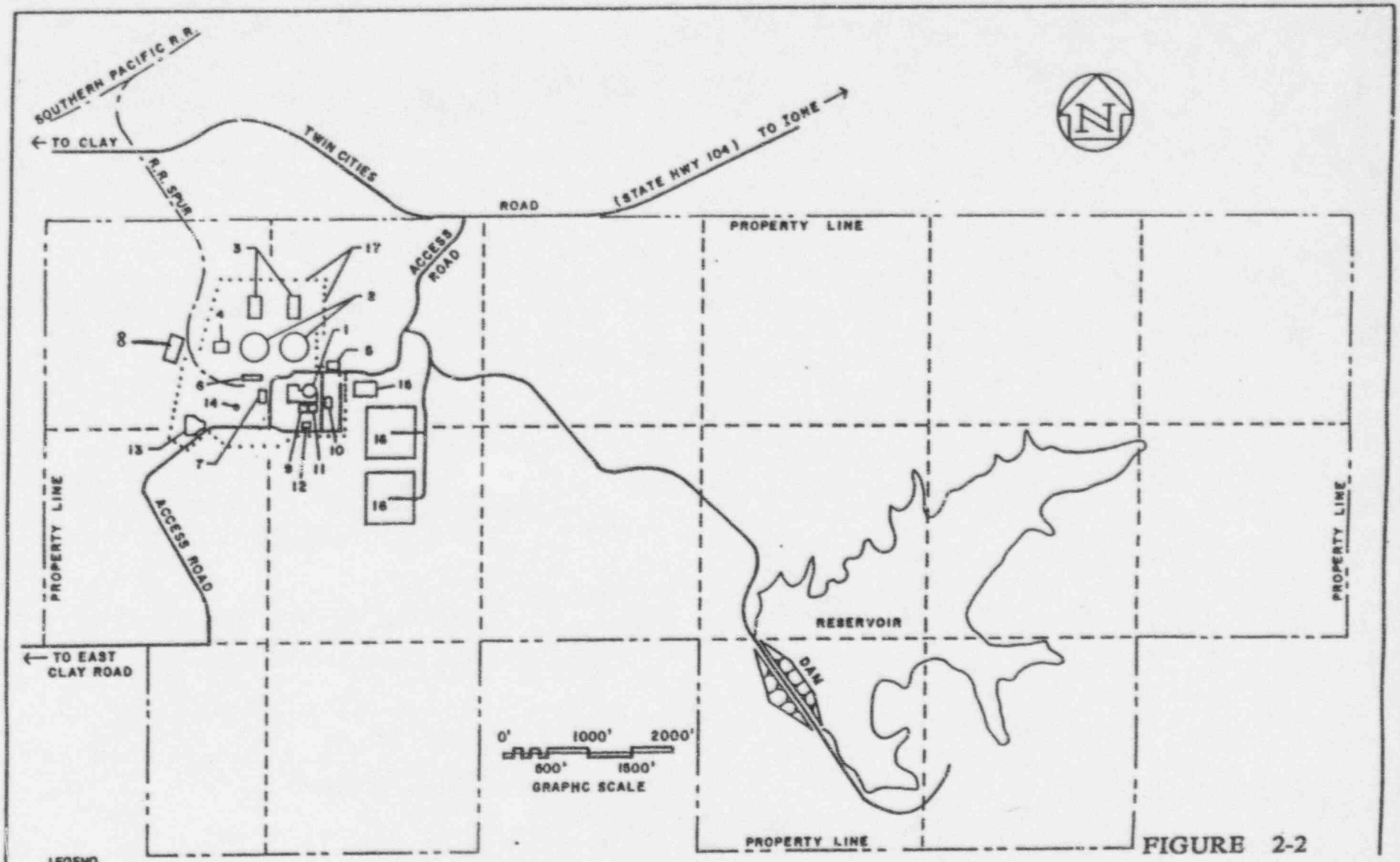

FIGURE 2-2

SMUD OWNED LAND & RANCHO SECO LAYOUT

SMUD

SACRAMENTO MUNICIPAL UTILITY DISTRICT

3.0 OVERVIEW OF DECOMMISSIONING ACTIVITIES

3.1 Decommissioning Alternative Selected

In the original decommissioning plan, SMUD proposed to decommission Rancho Seco using SAFSTOR, with Deferred-DECON. SMUD contemplated two subcategories of SAFSTOR. Custodial-SAFSTOR, with fuel stored in the spent fuel pool; and Hardened-SAFSTOR, after the spent fuel is moved to dry storage. SAFSTOR would be followed by Deferred-DECON beginning about 2008 and being completed by 2011. The completion of Deferred-DECON assumes the availability of a Southwest Compact LLW disposal facility by 2008.

Maintaining Rancho Seco in SAFSTOR until 2008 allows additional time to accumulate sufficient funds to complete decommissioning. Since submitting the original Decommissioning Plan in May 1991, the cost to decommission Rancho Seco has continued to escalate. The primary reasons for the escalating costs include the rising low-level waste disposal cost projections for the Southwest Compact, and increasing facility maintenance and staff costs. In response, SMUD has continued to review options for decommissioning Rancho Seco.

It was determined that a reduction in the long term risk and costs associated with safely maintaining radioactive systems at Rancho Seco can be realized by implementing some decommissioning activities starting in 1997, instead of waiting until 2008. These activities include the dismantling of lower level contaminated portions of the plant (e.g., Auxiliary Boiler, Auxiliary Steam System, High and Low Pressure Turbines, etc.), and disposing of the lower level radioactive waste now. This process is called incremental decommissioning because SMUD will periodically evaluate the progress, and continue with the project incrementally, as long as it is advantageous to do so. Incremental decommissioning is possible because alternative waste disposal options may now be available.

Although incremental decommissioning performs selected tasks earlier than originally planned, it does not significantly affect SMUD's original strategy for decommissioning Rancho Seco. Final site decommissioning will occur as originally planned, between 2008 and 2011. SMUD will conduct incremental decommissioning in accordance with the NRC's Decommissioning Rule, Rancho Seco's 10 CFR 50 license, and approved plant procedures.

In incremental decommissioning, staff will survey plant components to determine the contamination level. Non-contaminated material can be free-released for asset recovery or disposal at an offsite landfill. Contaminated material will be prepared for onsite or offsite decontamination, if required, and subsequently shipped to a disposal site.

3.2 Major Decommissioning Activities

Custodial-SAFSTOR

Rancho Seco systems are currently in Custodial-SAFSTOR. The reactor is completely defueled with all 493 spent fuel assemblies stored in the spent fuel pool. Maintenance is performed on systems/structures needed to support spent fuel pool cooling, security, building services, environmental and radiological monitoring, and fire protection. Except for incremental decommissioning, decontamination activities are generally limited to those necessary to maintain exposures as low as is reasonably achievable (ALARA).

Systems and components required to support spent fuel storage and Custodial-SAFSTOR are maintained in accordance with Technical Specification requirements. Systems and equipment no longer needed are either shut down and abandoned in place, or removed from the site as part of the asset recovery or incremental decommissioning programs. Abandoned systems are monitored and maintained, as needed, to control radioactivity. Support systems, including portions of the liquid and gaseous radwaste systems, water supply, sewage, electrical distribution, etc. are maintained, as needed. Other systems and structures useful for decommissioning activities are also maintained.

Hardened-SAFSTOR

Prior to placing Rancho Seco into Hardened-SAFSTOR, the spent nuclear fuel will be placed into dry storage at the onsite ISFSI. SMUD intends to maintain Rancho Seco's spent fuel in dry storage in a NUHOMS transportable storage system (i.e., a system licensed both for dry storage under 10 CFR 72, and for transportation under 10 CFR 71). The spent fuel will remain at the ISFSI until transferred to a DOE facility.

The spent fuel pool, and associated support systems, will be drained and the water processed. Contaminated walls, grates, and associated components will be cleaned or stabilized, as needed, to prevent the spread of contamination. Systems previously required to support spent fuel pool cooling will be abandoned.

Areas that do not require routine access will be locked and secured. Areas containing radioactive materials or other contamination will be secured to prevent accidental intrusion, and make deliberate intrusion very difficult. Shielding will be added, where necessary, to maintain radiation exposure to plant personnel ALARA.

Major activities during Hardened-SAFSTOR include:

1. Maintaining and monitoring the ventilation exhaust and liquid waste collection systems in buildings containing significant amounts of radioactivity.[1] Other than liquid waste systems, no radioactive liquid systems will be in service.

2. Performing maintenance on required support systems, such as area lighting, general use buildings, ventilation, and liquid waste collection.

3. Maintaining a 24-hour staff.

4. Continuing routine radiological inspections of contaminated buildings.

5. Maintaining the structural integrity of buildings.

6. Maintaining the radiation protection program, Radiological Environmental Monitoring Program, Technical Specification surveillance program, fire protection program, quality assurance program, general employee training program, and other 10 CFR required programs.

SMUD will retain sufficient staff to maintain required systems, and provide radiological surveillance to ensure that radioactivity is not spread from the plant to the site or the environment.

Incremental Decommissioning

Incremental decommissioning involves the dismantlement, decontamination, and disposition of selected systems and components containing low levels of radioactive contamination. Plant components will be surveyed to determine the contamination level. Non-contaminated material can be free-released for asset recovery or disposal at an offsite landfill. Contaminated material will be prepared for onsite or offsite decontamination, if required, and subsequently shipped to a disposal site.

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1 Significant contamination is contamination that exceeds the levels in NRC Regulatory Guide 1.86 "Termination of Operating Licenses for Nuclear Reactors," Sections C.2.b and 3.a [Ref. 4].

The general approach to incremental decommissioning will be to define an incremental work scope of approximately one year duration. SMUD management will measure the project's effectiveness and define additional increments, if it is advantageous to do so. The evaluation and decision to perform additional increments will be made periodically, typically through the annual budgeting process.

LLW will be packaged for transport in accordance with applicable NRC and Department of Transportation (DOT) regulatory requirements.

The following is typical of how incremental decommissioning will be implemented:

1. Starting with the secondary plant, identify the most appropriate systems, equipment, and components for removal and disposal.

2. Develop detailed target module work packages to implement in accordance with established plant procedures.

3. Open and disassemble systems and components, as required to confirm contamination levels and curie content.

4. Solicit bids for all necessary outside equipment and services to perform the work activities, including radwaste disposal containers, transportation services, and disposal/burial services.

5. Decontaminate and/or package for shipment for disposal.

6. Ship radwaste for disposal.

7. Periodically evaluate project effectiveness.

Deferred-DECON

At the end of SAFSTOR, SMUD will begin Deferred-DECON. During Deferred-DECON, the remaining radioactive material at the site will be reduced to acceptable levels such that the NRC can terminate Rancho Seco's 10 CFR 50 license.

During Deferred-DECON, systems and components not dispositioned during incremental decommissioning (e.g., reactor vessel, primary system components, and other highly radioactive components) will be removed, characterized, processed, and packaged for disposal. Decontamination of plant structures may be completed concurrent with equipment removal.

Major activities during Deferred-DECON include:

1. Preparing project plans and dismantlement work packages.
2. Conducting radiological surveys of plant components and work areas.
3. Determining the most effective decontamination methods to be used.
4. Determining component removal sequences based on accessibility, safety, material handling restrictions, and ALARA considerations.
5. Isolating systems to be dismantled from operating plant systems.
6. Installing required temporary services (e.g., electrical, liquid radwaste processing).
7. Determining the best method for large vessel (e.g., reactor vessel, pressurizer, steam generators, reactor coolant pumps, etc.) removal and transportation.
8. Storing Greater-than-Class-C (GTCC) radwaste at the ISFSI until DOE and SMUD make arrangements for its ultimate disposal. Storing GTCC at the ISFSI will require additional licensing under 10 CFR 72.
9. Conducting a final site survey in accordance with the NRC-approved license termination plan.

3.3 Forecast Decommissioning Schedule

The forecast schedule dates for major decommissioning activities include:

Description	Forecast Schedule Dates
• Prepare procedures for incremental decommissioning	Completed
• Incremental decommissioning preparation & planning	1996 - 1997
• Incremental decommissioning decontamination, dismantlement, and waste shipment	1997-1999
• Complete transfer of spent fuel to ISFSI	By 1999

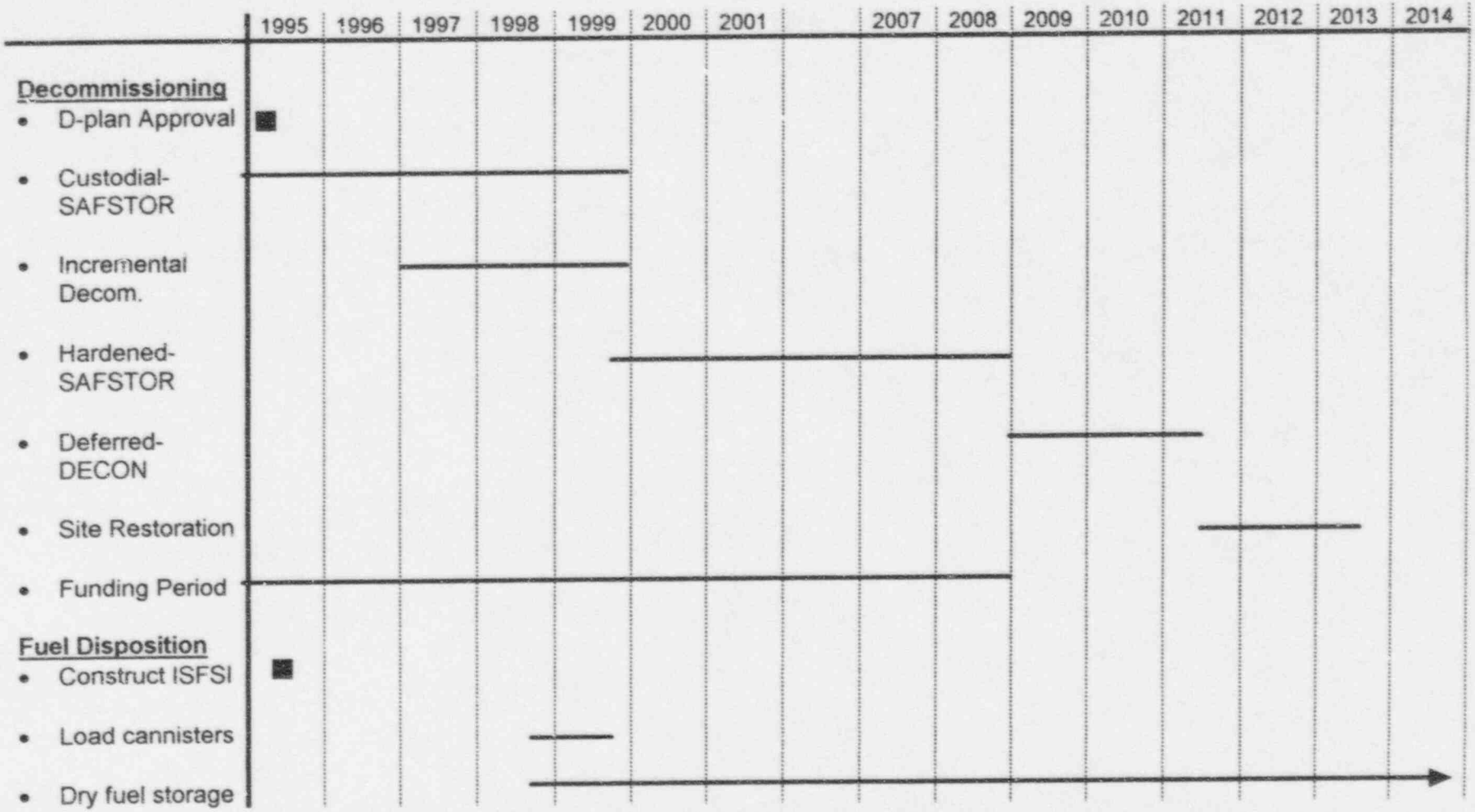
• Spent fuel acceptance by DOE	After 1999
• Start Deferred-DECON	2008
• Complete Deferred-DECON	By 2011
• Perform license termination survey	By 2012
• Terminate Part 50 NRC license	By 2012
• Site restoration[2]	After 2012

A summary schedule forecasting key milestone dates is shown in Figure 3-1.

[2] Extent to be defined in accordance with future SMUD needs.

Figure 3-1

Rancho Seco Milestone Summary Schedule



3.4 Final Site Survey Plan

In decommissioning Rancho Seco, SMUD will safely reduce radioactivity at the site to acceptable levels, thereby allowing release of the site for unrestricted use. In accordance with 10 CFR 50.82, SMUD will submit a license termination plan to the NRC for approval. SMUD will conduct a final site radiological survey on suspected and known contaminated structures, systems, components, equipment, onsite grounds, and adjacent environs upon completion of Deferred-DECON. The objective of the final survey is to demonstrate that residual radioactive levels meet release criteria. The final survey will follow appropriate regulatory requirements for survey methodology, and radiological instrumentation selection.

3.5 Decommissioning Cost Estimate

Based on a recent site-specific cost study for SAFSTOR [Ref. 5], prepared by TLG Services in 1995, the estimated cost to decommission Rancho Seco and terminate the license is $441 million (1995 dollars). SMUD estimates that a three year incremental decommissioning project will result in a savings of approximately $22 million (1996 dollars). Delays in dry fuel storage and the implementation of Hardened-SAFSTOR could be as much as two years beyond the March 1998 date assumed in the 1995 decommissioning cost study. This delay would offset the savings from incremental decommissioning.

The following is a summary of the estimated costs for Rancho Seco's decommissioning, resulting in the termination of the Part 50 license and the release of the site for unrestricted use:

•	Custodial-SAFSTOR (through 1/97)	$ 86.5 Million
•	Preparation for Hardened-SAFSTOR	$ 14.9 Million
•	Hardened-SAFSTOR Dormancy	$ 34.8 Million
•	Deferred-DECON	$301.3 Million
•	Greater-than-Class-C waste disposal	$ 3.8 Million
	Total	$441 Million

3.6 Amount of Available Funds

SMUD has established an external trust fund agreement with Bankers Trust of New York. Because of the premature shutdown of Rancho Seco, collections were allowed to continue throughout the remaining plant operating licensed period (i.e., the year 2008).

SMUD currently makes annual contributions to the external trust fund of approximately $16.5 million. The annual contribution is subject to adjustment based on periodic reviews of the decommissioning cost estimate. SMUD will continue to make annual contributions to the fund until the end of the Rancho Seco operating license in 2008. These contributions are designed to meet the decommissioning funding requirements. SMUD will concurrently request dispersals to fund ongoing decommissioning activities.

3.7 Quality Assurance Controls and Audit Activities

The Rancho Seco Quality Assurance Program for decommissioning is defined in the NRC-approved Rancho Seco Quality Manual (RSQM). SMUD maintains the RSQM in accordance with 10 CFR 50.54(a) ensuring that decommissioning will be accomplished in accordance with the license, applicable codes and standards, and regulatory requirements. In addition to the administrative controls, the RSQM provides an audit program to determine compliance with specified requirements and a corrective action program for any deficiencies.

3.8 Decommissioning Fire Protection Plan

SMUD will maintain the Decommissioning Fire Protection Plan consistent with DSAR, Section 9.7.1. SMUD will assess the fire protection program on a regular basis, and revise it as appropriate throughout the various stages of decommissioning.

4.0 Environmental Review

NUREG-0586 "Final Generic Environmental Impact Statement on decommissioning of nuclear facilities" (GEIS) [Ref. 6], provides a generic environmental assessment of decommissioning a reference nuclear facility. Based on the findings in NUREG-0586, the NRC reached a generic finding of "no significant (environmental) impact." Further, the NRC concluded that licensees need not prepare an additional environmental impact statement, in connection with the decommissioning of a particular nuclear site, unless the impacts of their plant have site-specific considerations significantly different from those studied generically.

Section 4.0 of NUREG-0586 provides a description of a generic PWR of a size and rating larger than Rancho Seco. Specifically, the reference facility is a 1175-MWe Westinghouse PWR,[3] that had operated over its 40 year design life. Rancho Seco is a 913-MWe PWR, designed by Babcock and Wilcox. Although Rancho Seco operated for about 14 years, it accumulated only approximately six full power effective years of reactor operation.

While the design of the facilities and their Nuclear Steam Supply Systems (NSSS) are slightly different, the B&W design includes the same types of major components, buildings, and structures as the reference PWR. Consequently, decommissioning Rancho Seco involves the same types of decommissioning tasks and considerations, and has similar environmental impacts, as the reference facility evaluated in NUREG-0586.

In October 1991, SMUD submitted the "Supplement to Rancho Seco Environmental Report - Post Operating License Stage," [Ref. 7] in support of the proposed Rancho Seco Decommissioning Plan. The supplemental report compares Rancho Seco's decommissioning attributes within those of the reference plant in NUREG-0586. The report concludes that all of the decommissioning attributes identified for Rancho Seco are within the envelope of NUREG-0586, except for the decommissioning cost estimate which is not directly comparable.

Incremental Decommissioning involves dismantling systems, equipment, and components containing low levels of contamination. Staff will package and ship low level waste (LLW) in accordance with applicable NRC and Department of Transportation regulatory requirements.

Given that the environmental impacts analyzed in NUREG-0586 bound those of Rancho Seco, and that incremental decommissioning accounts for only a portion of Rancho Seco's LLW, the environmental impacts of incremental decommissioning fit within the envelope of the environmental effects in NUREG-0586.

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[3] The reference facility is based on the reference facility described in NUREG/CR-0130 "Technology, Safety, and Costs of Decommissioning a Reference Pressurized Water Reactor Power Station. The actual reference facility is the Trojan Nuclear Plant, owned by Portland General Electric.

In addition, SMUD staff conducted an environmental evaluation under the California Environmental Quality Act (CEQA), and determined that implementing incremental decommissioning will not have a significant effect on the environment. Consistent with the applicable provisions of CEQA, SMUD issued a Negative Declaration for the project.

For environmental attributes including estimated radwaste volumes, occupational exposure, and public exposure, the estimated values for the reference plant bound the estimated values for Rancho Seco. Regarding the transportation of decommissioning wastes, NUREG-0586 states that there is no need for further technical evaluation beyond that for transportation of existing radioactive material.

5.0 REFERENCES

1. Letter from Thomas E. Murley to David Boggs, "Closure of Rancho Seco Nuclear Generating Station," November 27, 1989.

2. Rancho Seco Nuclear Generating Station Proposed Decommissioning Plan, May 20, 1991.

3. Letter from Steve Redeker to Seymour Weiss, "Rancho Seco Decommissioning Schedule Change," January 29, 1997.

4. Regulatory Guide 1.86 "Termination of Operating Licenses for Nuclear Reactors," June 1974.

5. Decommissioning Evaluation for the Rancho Seco Nuclear Generating Station, TLG Services, Inc., August 1995.

6. NUREG-0586 "Final Generic Environmental Impact Statement on decommissioning of nuclear facilities," August 1988.

7. "Supplement to Rancho Seco Environmental Report - Post Operating License Stage," October 1991.

10 CFR 50.59/72.48/71.107(c) DETERMINATION

DOCUMENT NO. PSDAR REV. 1 CHANGE NOTICE _____ PAGE 1 OF 13

1.0 X 10 CFR 50.59 SCREENING X 10 CFR 72.48 SCREENING _____ 10 CFR 71.107 SCREENING

1.1 License/Technical Specification Review

1.1.1 The change, test or experiment being reviewed:

Does___ Does Not X require (1) a change to the Facility Licenses, or (for 10 CFR 71 Package design changes), (2) a change to the Conditions specified in the NRC approval for a 10 CFR 71 Package (Refer to 10 CFR 71.107(c)). [State reasons for answer. Include references to the PDTS and License sections reviewed. Use continuation sheets as necessary.]

See attached

1.2 License Basis Document (LBD) Review [Consider DSAR, ISFSI SAR, SERs, RSQM, E-Plan, Security Plan, REMP, ODCM, PCP (including evaluations for Major Changes to Radioactive Waste Treatment Systems), Decommissioning Fire Protection Plan, CFH Training Program, Decommissioning Plan, PDTS Bases, and Decommissioning Order and associated Environmental Assessment and Safety Evaluation Reports]

The change, test or experiment being reviewed:

1.2.1 Is X Is Not _____ a change to a License Basis Document;
1.2.2 Does X Does Not _____ require a change to a License Basis Document;
1.2.3 Is _____ Is Not X a change to the facility described in any License Basis Document;
1.2.4 Is _____ Is Not X a change to procedures described in any License Basis Document;
1.2.5 Is _____ Is Not X a test or experiment not described in any License Basis Document;
1.2.6 Is _____ Is Not X an abnormal usage of equipment important to safety;
1.2.7 Is _____ Is Not X a major change to a radioactive waste treatment system; and/or
1.2.8 May _____ May Not X require a change to the ISFSI SAR;

(State reasons for answers. Include references to the appropriate DSAR sections evaluated and other License Basis Documents evaluated. Use continuation sheets as necessary.)

See attached

Marking Section 1.1.1 "DOES" for a Facility License change requires a Safety Analysis. Complete Sections 1.2 and 2.0 to provide a basis for the Safety Analysis. Marking Section 1.1.1 "Does", for a 10 CFR 71 Package design change that changes the conditions specified in the NRC's approval, requires NRC approval. Consult with Licensing to complete the screening.

Marking any of the Sections 1.2.1 through 1.2.7 "IS" or "DOES" requires an Unreviewed Safety Question Determination. Complete applicable parts of Sections 2.0, 3.0, 4.0, and 5.0.

Marking Section 1.2.7 "Is" requires inclusion in the 10 CFR 50.59 Determination the Major Change to Radioactive Waste Treatment System evaluation required in PCP Manual Section 2.2.

1.1 License/Technical Specification Review (Continued)

19- Marking Section 1.1.1 "DOES NOT" and Sections 1.2.1 through 1.2.8 "IS NOT" and "DOES NOT" does not require a Safety Analysis or Unreviewed Safety Question Determination (Section 2.0). Complete Sections 3.0, 4.0, and 5.0.

- If the change is (1) a change to or (2) necessitates a change to the RSQM, Security Plan, or E-Plan, the respective, affected LBD responsible Department must perform a 10 CFR 50.54 Evaluation. The Cognizant Individual must include the results of the 50.54 Evaluation in the 50.59/72.48 Determination. Also, a proposed change that requires a change to any LBD must address in the 50.59/72.48 Determination when the LBD change will occur (i.e., before, concurrent with, or after the proposed change).

19- Marking Section 1.2.8 "May" requires completion of Section 2.0, including Sections 2.8 and - 2.9. If Section 1.2.8 is marked "May Not", Sections 2.8 and 2.9 do not apply.

2.0 UNREVIEWED SAFETY QUESTION DETERMINATION

The change, test or experiment being reviewed:

2.1 Does _____ Does Not X increase the probability of occurrence of an accident previously evaluated in the SAR, because:

See attached

(Include reference to the SAR sections evaluated; use continuation sheets as necessary.)

2.2 Does _____ Does Not X increase the consequences of an accident previously evaluated in the SAR, because:

See attached

(Include reference to the SAR sections evaluated; use continuation sheets as necessary.)

2.3 Does _____ Does Not X increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the SAR, because:

See attached

(Include reference to the SAR sections evaluated; use continuation sheets as necessary.)

2.0 UNREVIEWED SAFETY QUESTION DETERMINATION (Continued)

2.4 Does _____ Does Not X increase the consequences of a malfunction of equipment important to safety previously evaluated in the SAR, because:

See attached

(Include reference to the SAR sections evaluated; use continuation sheets as necessary.)

2.5 Does _____ Does Not X create the possibility for an accident of a different type than any evaluated previously in the SAR, because:

See attached

(Include reference to the SAR sections evaluated; use continuation sheets as necessary.)

2.6 Does _____ Does Not X create the possibility for a malfunction of a different type than any evaluated in the SAR, because:

See attached

(Include reference to the SAR sections evaluated; use continuation sheets as necessary.)

2.7 Does _____ Does Not X reduce the margin of safety as defined in the bases for any Technical Specification(s), because:

See attached

(Include reference to the PDTS Sections evaluated; use continuation sheets as necessary.)

2.0 UNREVIEWED SAFETY QUESTION DETERMINATION (Continued)

2.8 Does _____ Does Not X involve a significant increase in occupational exposure because:
(10 CFR 72.48 Determinations only)

See attached

2.9 Does _____ Does Not X involve a significant unreviewed environmental impact.
(10 CFR 72.48 Determinations only)

See attached

19- Marking any statement in Section 2.0 "DOES" requires forwarding the proposed change and the completed 10 CFR 50.59/72.48 Determination to Licensing for a Safety Analysis before processing may continue.

Marking all statements in Section 2.0 "DOES NOT" means no Safety Analysis is required. Complete Sections 3.0, 4.0, and 5.0.

3.0 Cognizant Individual: _____ Department: Licensing DATE: 3/17/97

4.0 Qualified Reviewer: Richard Mannheimer Department: Licensing DATE: 3/17/97

5.0 PRC/MSRC REVIEW: PRC comments incorporated RM 3/17/97

19- If the statements in Sections 1.1 and 1.2 are marked "DOES NOT", "IS NOT", and "MAY NOT", then only a Second Level Qualified Review is required. If the Second Level Qualified Reviewer concurs with the 10 CFR 50.59/72.48/71.107 Determination, the Section 5.2 and 5.3 reviews are not required and should be marked N/A.

19- If any statement in Section 1.2 is marked "IS", "DOES", or "MAY", PRC and MSRC review of the 10 CFR 50.59/72.48 Determination is required. Mark Section 5.1 'N/A'. The PRC completes Section 5.2 and the MSRC completes Section 5.3.

5.1 SECOND LEVEL QUALIFIED REVIEW: N/A DATE: _____

5.2 APPROVED BY PRC: Tom Tucker DATE: 3/17/97

5.3 APPROVED BY MSRC: J.R. Mathis DATE: 3/20/97

Marking any statement in Section 1.2 "IS", "DOES", or "MAY" requires the PRC Coordinator to forward a copy of the 10 CFR 50.59/72.48 package to Licensing.

1.1 License/ Technical Specification Review

1.1.1 Reviewed the Facility License, Technical Specification Sections D3/4.1 through D3/4.7, and the Decommissioning Order.

In March 1995, the NRC approved the Rancho Seco Decommissioning Plan[1], and issued the Rancho Seco Decommissioning Order (Order). Effective August 28, 1996, amendments to the decommissioning rule made the previously NRC-approved Decommissioning Plan the "Post-Shutdown Decommissioning Activities Report" (PSDAR).

This 10 CFR 50.59 evaluates the changes required to revise the Decommissioning Plan to conform to the PSDAR content requirements specified in 10 CFR 50.82 "Application for Termination of License."

The information required in the PSDAR is much less detailed than the information contained in the Decommissioning Plan. As required by 10 CFR 50.82, the PSDAR includes a description of planned decommissioning activities, the schedule of activities through license termination, an estimate of expected costs, and a discussion of whether existing environmental impact statements bound the environmental impacts of the proposed actions.

The PSDAR also includes a discussion of incremental decommissioning. Activities to be conducted during incremental decommissioning were previously evaluated in the 10 CFR 50.59 for the "Incremental Decommissioning Action Plan." Based on that review, incremental decommissioning activities do not involve an Unreviewed Safety Question; however, they do require a change to the Decommissioning Plan.

The decommissioning Order is unaffected by these changes because:

1. The Order requirements are not contained in the PSDAR, and

2. The Order is a stand alone document whose requirements have already been incorporated in plant License Basis Documents and implementing procedures.

The decommissioning activities described in the PSDAR are bounded by activities previously evaluated in the Decommissioning Plan, and are consistent with the PDTS and Facility License requirements. The PSDAR does not change the plans

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1 In August 1996, the NRC revised the decommissioning regulations. In accordance with 10 CFR 50.82, the approved Decommissioning Plan is now called the "Post-Shutdown Decommissioning Activities Report" (PSDAR). For the purpose of this review, the term "Decommissioning Plan" refers to the plan originally approved in March 1995. The term "PSDAR" refers to the update to the Decommissioning Plan to comply with the content requirements in 10 CFR 50.82.

or requirements for spent fuel handling or storage. Also, the PSDAR will not increase the curie content of any tank listed in Technical Specification Section 3/4.6, have any impact on sealed sources, or impact the design of the MP-187 transportable/storage cask. Therefore, the PSDAR does not require a change to the PDTS or the Facility License.

1.2 Licensing Basis Document (LBD) Review

Reviewed the Decommissioning Plan, DSAR, Emergency Plan, Fire Protection Plan, Rancho Seco Quality Manual (RSQM), Security Plan, REMP, ODCM, PCP, CFH Training Program, Decommissioning Plan EA and SER, and ISFSI SAR.

1.2.1 **The PSDAR *is* a change to a licensing basis document.**

The PSDAR is a revision to the Decommissioning Plan, and hence a revision to a licensing basis document. The PSDAR complies with the requirements in 10 CFR 50.82.

1.2.2 **This PSDAR revision *does* require a change to a licensing basis document.**[2]

Decommissioning Plan

Effective August 28, 1996, amendments to the decommissioning rule made the Decommissioning Plan the PSDAR. As discussed in Section 1.1.1, the information required in the PSDAR is much less detailed than the Decommissioning Plan.

This 10 CFR 50.59 evaluates the changes made to revise the Decommissioning Plan to conform to the PSDAR content requirements specified in 10 CFR 50.82. Information contained in the Decommissioning Plan that is no longer relevant has been deleted. Although much of the detailed information contained in the Decommissioning Plan is removed, the basic decommissioning strategy remains the same.

Specific decommissioning activities will be reviewed in accordance with 10 CFR 50.59, 72.48, and 71.107(c) to determine whether those activities involve an Unreviewed Safety Question.

As discussed below, certain portions of the Decommissioning Plan will be retained in the DSAR.

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[2] In accordance with 10 CFR 50.82, the Decommissioning Plan is now called the PSDAR. For the purpose of this review, changing a reference in an LBD from "Decommissioning Plan" to "PSDAR" is considered an editorial change, and does not itself require that a change be made to an LBD. Any necessary reference changes will be made when LBDs are revised for other reasons.

Figure 1-1 of the Decommissioning Plan provides an illustration of how various Rancho Seco licensing basis documents are organized, including their relationship to the Rancho Seco license and Technical Specifications. **A revised Decommissioning Plan Figure 1-1 shall be included in DSAR Chapter 12.** The revised figure shows the PSDAR as a lower tier document while the DSAR is the LBD just below the Technical Specifications.

Decommissioning Plan Table 2-1 provides the anticipated status of systems, structures, and major components as Rancho Seco transitions from Custodial-SAFSTOR to Hardened-SAFSTOR. The Rancho Seco "SAFSTOR Program" provides the administrative controls for defining the planned SAFSTOR configuration throughout decommissioning. The SAFSTOR Program defines the latest configuration plan for decommissioning, requires 10 CFR 50.59 reviews for changes to the planned configuration, and provides adequate configuration control to ensure records of plant status are maintained as Rancho Seco progresses through decommissioning. Therefore, deleting Table 2-1 from the PSDAR will not result in a loss in configuration control or recordkeeping as Rancho Seco proceeds with decommissioning.

Decommissioning Plan, Section 7.0 "Quality Assurance Provisions for Decommissioning," states that the Rancho Seco SAFSTOR Quality Manual (RSSQM) defines the SAFSTOR QA program. However, the current Rancho Seco Quality Manual (RSQM) includes the appropriate 10 CFR 50, Appendix B, QA program requirements for decommissioning activities. **Accordingly, the PSDAR references the RSQM, and the RSSQM will not be issued.**

Decommissioning Plan, Section 9.0 "Fire Protection" commits SMUD to submit a separate Fire Protection Plan to the NRC prior to the start of Deferred-DECON. Condition (B) in the decommissioning Order provides the requirements for revising the Fire Protection Plan, and supersedes this commitment. **The PSDAR deletes the commitment to submit a separate Fire Protection Plan to the NRC prior to the start of Deferred-DECON.**

DSAR Chapter 14 discusses the consequences of accidents and conditions considered credible during the permanently defueled mode. The two credible accidents include a fuel handling accident and a loss of offsite power. Decommissioning Plan Section 3.4 supplements the DSAR accident analysis by analyzing credible accidents during decommissioning (i.e., during SAFSTOR and DECON). The accident analysis in the Decommissioning Plan concludes that credible accidents during decommissioning at Rancho Seco are bounded by the accident analysis in NUREG-0130 "Technology, Safety, and Costs of Decommissioning a Reference PWR."

Since the PSDAR will supersede the Decommissioning Plan, **an updated accident analysis from Decommissioning Plan Sections 3.4.1 and 3.4.3 shall be included in DSAR Chapter 14.**

DSAR

A review of DSAR Chapters 1, 2, 5, 7, 8, 9, 11, 12 and 14 showed that the changes to the PSDAR will not affect the description of any functional system described in the DSAR. Any specific work activities that could affect the description of systems in the DSAR will be addressed in separate 10 CFR 50.59 / 72.48 / 71.107(c) Determinations.

Emergency Plan

A review of the Emergency Plan, Section 3 "Emergency Classification Overview" showed that the changes to the PSDAR will not affect the emergency classifications or require a change to the Emergency Plan.

Fire Protection Plan

SMUD will maintain the Decommissioning Fire Protection Plan consistent with DSAR Section 9.7.1. The changes to the PSDAR will not result in any changes to the Decommissioning Fire Protection Plan that require prior NRC approval.

Quality Manual

A review of the RSQM showed that the changes to the PSDAR will not require a change to the QA Program, as described in the RSQM.

Safety Evaluation Report for the Decommissioning Plan

Safety Evaluation Report (SER) Section 2.2.2, page 8, states that SMUD will maintain the certified fuel handler (CFH) training program during Hardened-SAFSTOR. Prior to Hardened-SAFSTOR, SMUD intends to place Rancho Seco's spent fuel into dry storage in a NUHOMS transportable storage system (i.e., a system licensed both for dry storage under 10 CFR 72, and for transportation under 10 CFR 71). Once all of the fuel is in dry storage at the ISFSI, there will no longer be a need to maintain the CFH training program. Accordingly, after the fuel is in dry storage in the transportable storage system, the CFH training program will be replaced by ISFSI training program. The ISFSI training program will meet the training requirements in 10 CFR 72, Subpart I.

Other Licensing Basis Documents

The changes to the Decommissioning Plan are those required so that the PSDAR content conforms with the requirements specified in 10 CFR 50.82. In addition, a review of the Security Plan, REMP, ODCM, PCP, CFH Training Program, and ISFSI SAR determined that the changes to the PSDAR does not affect these LBDs. The PSDAR is consistent with the Decommissioning Plan Environmental Assessment.

1.2.3 **This PSDAR revision *is not* a change to the facility described in any licensing basis document.**

The changes to the Decommissioning Plan are those required so that the PSDAR content conforms with the requirements specified in 10 CFR 50.82. The PSDAR does not authorize any additional activities than those previously evaluated in the Decommissioning Plan. Any specific work activities that could affect plant configuration will be addressed in separate 10 CFR 50.59 / 72.48 / 71.107(c) Determinations.

1.2.4 **This PSDAR revision *is not* a change to procedures described in any licensing basis document.**

The Decommissioning Plan and PSDAR are not procedures. Therefore, the changes to the PSDAR are not changes to procedures described in any LBD.

1.2.5 **This PSDAR revision *is not* a test or experiment not described in any licensing basis document.**

The Decommissioning Plan changes are those required to conform with the PSDAR content requirements now specified in 10 CFR 50.82. These changes do not constitute or authorize testing or experimenting with any plant systems or equipment.

1.2.6 **This PSDAR revision *is not* an abnormal use of equipment important to safety.**

The Decommissioning Plan changes are those required to conform with the PSDAR content requirements now specified in 10 CFR 50.82. These changes are administrative and do not involve the usage of equipment important to safety. Any specific work activities that could affect the usage of equipment important to safety will be addressed in separate 10 CFR 50.59 / 72.48 / 71.107(c) Determinations.

1.2.7 **This PSDAR revision *is not* a major change to the radwaste treatment system.**

The Decommissioning Plan changes are those required to conform with the PSDAR content requirements now specified in 10 CFR 50.82. These changes are administrative and do not involve any changes to a radwaste treatment system. Any specific work activities that could constitute a major change to a radwaste treatment system will be addressed in separate 10 CFR 50.59 / 72.48 / 71.107(c) Determinations.

1.2.8 **This PSDAR revision *may not* require a change to the ISFSI SAR.**

The PSDAR was developed in accordance with the requirements in 10 CFR 50.82, and does not affect the 10 CFR 72 SAR. The PSDAR addresses 10 CFR 50 decommissioning activities, and does not address 10 CFR 72 activities associated with fuel storage at the ISFSI.

2.0 Unreviewed Safety Question Determination

Reviewed DSAR Chapter 14, Decommissioning Plan (PSDAR) Section 3.4, Incremental Decommissioning Action Plan 10 CFR 50.59 Determination, the PDTS bases, Decommissioning Plan SER, and the ISFSI SAR.

2.1 This Decommissioning Plan revision is intended to meet the requirements in 10 CFR 50.82 regarding the content of a PSDAR. The information required in the PSDAR is much less detailed than the information contained in the Decommissioning Plan. Accordingly, the PSDAR deletes a substantial portion of the Decommissioning Plan.

The Decommissioning Plan changes are administrative and do not authorize, or change, any activities that will affect nuclear safety that were not previously analyzed in the Decommissioning Plan. Therefore, the PSDAR will not affect any safety-related systems, impact the analysis of any accidents previously evaluated in DSAR Chapter 14, or increase the probability of occurrence of an accident previously evaluated in the DSAR or the Decommissioning Plan.

As discussed in Decommissioning Plan Section 3.4, credible decommissioning accidents are within the safety assessments in NUREG-0130 "Technology, Safety, and Costs of Decommissioning a Reference PWR." An updated version of the accident analysis contained in Decommissioning Plan Sections 3.4.1 and 3.4.3 will be retained in DSAR Chapter 14. Any specific decommissioning activities that could affect nuclear safety will be addressed in separate 10 CFR 50.59 / 72.48 / 71.107(c) Determinations.

2.2 DSAR Chapter 14 discusses the consequences of accidents and conditions considered credible during the permanently defueled mode. The two credible accidents include a fuel handling accident and a loss of offsite power. Decommissioning Plan Sections 3.4.1 and 3.4.3 supplement the DSAR accident analysis by analyzing credible accidents during decommissioning (i.e., during SAFSTOR and DECON). The Decommissioning Plan accident analysis concludes that credible accidents during decommissioning at Rancho Seco are bounded by the accident analysis in NUREG-0130 "Technology, Safety, and Costs of Decommissioning a Reference PWR."

Although the PSDAR deletes a substantial portion of the Decommissioning Plan, the changes are administrative and do not authorize, or change, any activities that will affect nuclear safety that were not previously analyzed in the Decommissioning Plan. Therefore, the PSDAR does not affect any safety-related systems, impact the analysis of any accidents previously evaluated in Chapter 14 of the DSAR, or increase the consequences of an accident previously evaluated in the DSAR or the Decommissioning Plan.

As discussed in Decommissioning Plan Section 3.4, credible decommissioning accidents are within the safety assessments in NUREG-0130 "Technology, Safety, and Costs of Decommissioning a Reference PWR." An updated version of the accident analysis contained in Decommissioning Plan Sections 3.4.1 and 3.4.3 will be retained in DSAR Chapter 14.

2.3 The Decommissioning Plan changes are administrative and do not involve the usage of equipment important to safety not previously analyzed in the Decommissioning Plan. Any specific decommissioning activities that could affect the usage of equipment important to safety will be addressed in separate 10 CFR 50.59 / 72.48 / 71.107(c) Determinations.

Although the PSDAR deletes a substantial portion of the Decommissioning Plan, the changes are administrative and do not authorize, or change, any activities that will affect nuclear safety that were not previously analyzed in the Decommissioning Plan. Also, the PSDAR does not affect any safety-related systems, or impact the analysis of any accidents previously evaluated in DSAR Chapter 14 or Decommissioning Plan Sections 3.41 or 3.4.3. Therefore, the PSDAR does not increase the probability of occurrence of a malfunction of equipment important to safety than previously evaluated in the DSAR or Decommissioning Plan.

2.4 Although the PSDAR deletes a substantial portion of the Decommissioning Plan, the changes are administrative and do not authorize, or change, any activities that will affect nuclear safety that were not previously analyzed in the Decommissioning Plan. Also, the PSDAR does not affect any equipment important to safety, or impact the analysis of any accidents previously evaluated in DSAR Chapter 14 or Decommissioning Plan Sections 3.4.1 or 3.4.3. Accordingly, the PSDAR does not increase the consequences of a malfunction of equipment important to safety than previously analyzed in the DSAR or Decommissioning Plan.

2.5 Although the PSDAR deletes a substantial portion of the Decommissioning Plan, the changes are administrative and do not authorize, or change, any activities that will affect nuclear safety. As discussed in Decommissioning Plan Section 3.4, credible decommissioning accidents are within the safety assessments in NUREG-0130 "Technology, Safety, and Costs of Decommissioning a Reference PWR." An updated version of the accident analysis contained in Decommissioning Plan Sections 3.4.1 and 3.4.3 will be retained in DSAR Chapter 14. Accordingly, the PSDAR does not create the possibility of an accident of a different type than previously evaluated in the DSAR or Decommissioning Plan.

2.6 This PSDAR revision is administrative and does not authorize, or change, any activities that will affect nuclear safety. As discussed in Decommissioning Plan Section 3.4, credible decommissioning accidents are within the safety assessments

in NUREG-0130 "Technology, Safety, and Costs of Decommissioning a Reference PWR." An update to the accident analysis in Decommissioning Plan Sections 3.4.1 and 3.4.3 will be retained in DSAR Chapter 14. Accordingly, the PSDAR does not create the possibility for a malfunction of a different type than previously evaluated in the DSAR or Decommissioning Plan.

2.7 The decommissioning activities described in the PSDAR are consistent with the PDTS and Facility License requirements. The Decommissioning Plan changes are in accordance with 10 CFR 50.82, are administrative, and do not authorize changes or activities that were not previously evaluated in the Decommissioning Plan. Thus based on a review of the PDTS bases, the PSDAR does not affect nuclear safety or the margin of safety defined in any Technical Specification bases.

2.8 The Decommissioning Plan changes are administrative, are associated only with 10 CFR 50 related decommissioning activities, and do not authorize any activities that will impact dry fuel storage. Therefore, the PSDAR will not cause a significant increase in occupational exposure associated with activities at the ISFSI.

2.9 Rancho Seco decommissioning activities will not impact dry fuel storage. The PSDAR is only associated with 10 CFR 50 related decommissioning activities. The environmental impacts associated with activities at the ISFSI have been evaluated in environmental analyses conducted in accordance with 10 CFR 72 requirements. Therefore, the PSDAR revision will not result in significant unreviewed environmental impacts for the ISFSI.