

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report No: 50-312/90-16

Docket No: 50-312

License No: DPR-54

Licensee: Rancho Seco Nuclear Generating Station
Sacramento Municipal Utility District
14440 Twin Cities Road
Herald, California 95638-9799


Facility Name: Rancho Seco

Meeting at: Rancho Seco site

Meeting Conducted: October 30, 1990

Prepared by: S. A. Richards, Chief, Reactor Projects Branch

Approved by:


S. Richards, Chief, Reactor Projects Branch

11-15-90
Date Signed

Summary:

A management meeting was held on October 30, 1990, to discuss the status of various activities at Rancho Seco, including Organization and Staffing, Plant Status, Pending Submittals, Decommissioning/Funding, Fuel Disposition, and Proposed Site Uses.

A copy of the licensee's presentation material is attached.

DETAILS1. Meeting ParticipantsNuclear Regulatory Commission

Roy Zimmerman, Director, Division of Reactor Safety and Projects
 Ken Perkins, Deputy Director, Division of Reactor Safety and Projects
 Gregory Yuhas, Chief, Radiological Protection Branch
 Stuart Richards, Chief, Reactor Projects Branch
 Steven Reynolds, Project Manager, NRR

Sacramento Municipal Utility District (SMUD)

Dan Keuter, Assistant General Manager, Nuclear
 Rita Bowser, Fuel Disposition
 Ron Scott, Public Information
 Paul Turner, Nuclear Technical Services Manager
 Charles Linkhart, Nuclear Support Services Manager
 Paul Bender, Nuclear Quality and Assurance Manager
 Ken Miller, Plant Closure/Decommissioning
 Larry Houghtby, Nuclear Security Manager
 Dave Brock, Nuclear Maintenance Manager
 Wally Koepke, Nuclear Quality Control
 Mark Meredith, Nuclear Training Manager
 Steve Redeker, Nuclear Operations Manager
 Jerry Delezenski, Nuclear Licensing
 Taj Kahn, Projects and Commitments
 Mike Bua, Nuclear RP/EP Manager
 Marcia Borter, Environmental Monitoring
 Jim Field, Mechanical Systems
 Dave Price, Nuclear Chemistry Manager
 Jeff Jones, Electrical and I&C Systems
 Shirley Kubo, Engineering Technician
 Don Elliott, Principal Quality Engineer
 Bob Fraser, Principal I&C Engineer
 Betty Lowry, Secretary, AGM
 Debra Barnes, Secretary, Nuclear Licensing
 Marcos Breton, Sacramento Bee Reporter

2. Management Meeting

Mr. Keuter opened the meeting by stating that although Rancho Seco is in the process of being decommissioned, SMUD's focus still remains on ensuring public health and safety, and on compliance with NRC's regulations. Mr. Keuter provided an overview of the Rancho Seco closure strategy and noted that SMUD intends to submit their decommissioning plan by June, 1991. He described a two phase plan for storage of the spent fuel, with the fuel being stored primarily in the spent fuel pool (SFP) until 1998, at which time all the fuel potentially will be transferred to onsite dry cask storage. With the spent fuel in dry storage, Mr. Keuter noted that staffing could be reduced to 50 personnel or less. He then

described a reorganization of the plant staff intended for implementation in 1991, but noted that the reorganization is tied to receipt of various regulatory relief from the NRC. A copy of the 1991 revised organization plan is part of the enclosure to this report. Mr. Keuter then described staffing reductions planned for the next several months. He stated that although 34 licensed operators remain, upon receiving a possession only license (POL), SMUD intends to lay off operators. They desire to maintain 20 licensed operators, and may start a license class if the total were to fall to 15. To maintain 5 shifts, they presently need 10 licensed operators and a licensed operations supervisor.

Mr. Turner then described the status of the physical plant. He stated that to this point, the layup of the plant has been governed by three goals, those being to control the configuration of the plant, to prevent deterioration of the plant, and to maintain a status that would facilitate plant restoration. Mr. Turner outlined the status of layup activities. Thirty-three of 39 Phase I systems are completely laid up. The remaining six systems are scheduled to be finished by the end of the year, with mostly only paperwork needing to be done. Mr. Keuter commented that once the POL is obtained, SMUD would decide which systems to continue to preserve and which to dismantle or abandon in place based on their asset recovery program. Therefore, numerous systems may never be laid up. A discussion was then held regarding the status of maintenance work. There are presently about 2600 preventative maintenance items, in contrast to about 10,000 items when the plant was operating. The total corrective maintenance backlog stands at about 1150 items. The backlog is trending down and the licensee has a goal of reducing the total to 600 items. The licensee noted that both engineering and maintenance personnel will be laid off as the workload decreases and that those staff reductions are not tied to any regulatory relief requests.

A brief discussion was held regarding the licensee's asset recovery program. No sale of installed equipment is envisioned until the POL is obtained, with the exception of scarce items that might be sold with a "return if needed" clause. The SFP was discussed and it was noted that SFP leakage is down to eight ounces a day of monitored leak. A camera with a monitor in the control room provides a constant readout of SFP level and temperature.

Mr. Bender then reviewed the pending licensing submittals as outlined in the licensee's presentation package, which is enclosed. He stated that the proposed security plan revision would eliminate all vital areas and reduce the security staff to 45. The proposed change to the emergency plan would reduce the EPZ to the site boundary and allow a further staff reduction of 40 personnel. The pending operator training exemption request would greatly reduce what is presently a full power operating plant requalification program. The proposed long term defueled technical specifications would allow SMUD to only have to maintain their operators as certified fuel handlers and would combine the oversight review committees. Mr. Keuter closed the discussion in this area by noting that most destaffing is tied to specific requests for regulatory relief and that as the relief is obtained, staffing reductions will occur.

Mr. Miller described SMUD's review of decommissioning alternatives. Immediate decontamination of the plant has been virtually ruled out due to a lack of funds and the absence of a place to ship the spent fuel for disposal. SMUD has requested an exemption from the NRC's decommissioning funding rule. SMUD is presently contributing to their decommissioning fund at a rate such that 112.8 million dollars will be available at the time that the normal license of the facility would have expired. The dollar amount is based on the NRC minimum funding calculation. Funding will be revised as needed upon approval of the decommissioning plan. The yearly contribution will be increased in 1991 from 2 to 8 million dollars in anticipation that the final estimated cost will be greater than 112.8 million dollars.

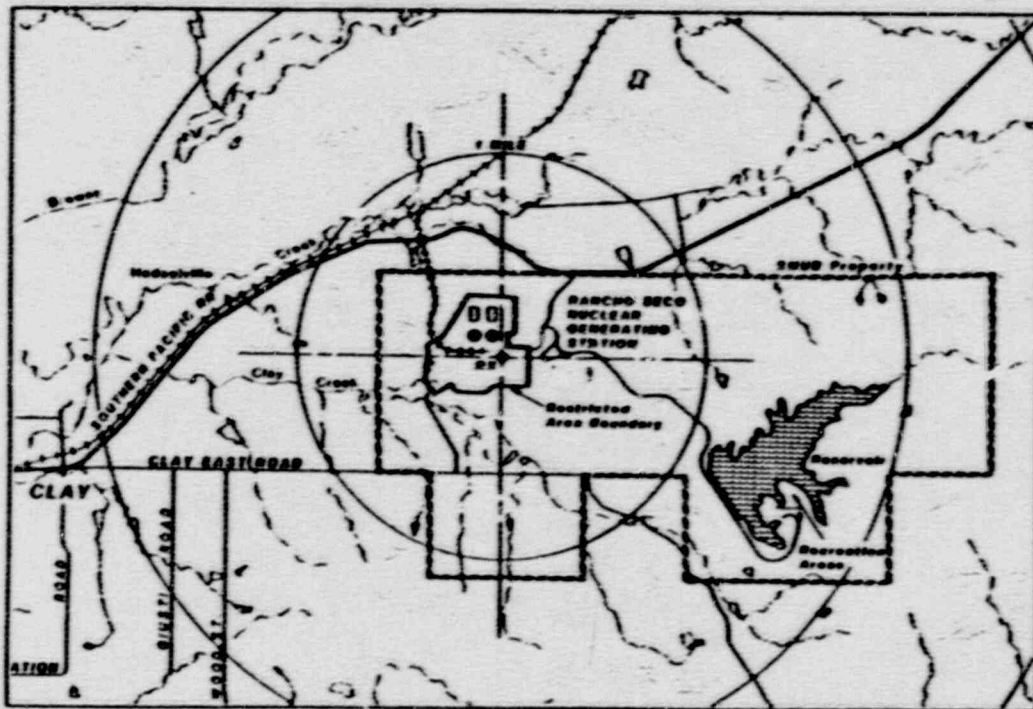
Ms. Bowser described SMUD's spent fuel disposition strategy. SMUD intends to participate with the Department of Energy (DOE) in a demonstration project of dry cask storage. Seventy-two assemblies are planned to be loaded into storage/shipment dry casks during 1992-1993. These casks would be located onsite and would be monitored for two years. Then the remaining assemblies would be likewise placed in dry cask storage in 1995-1998, to await final shipment offsite.

Mr. Delezenski then reviewed possible future site uses including plant repowering with natural gas and other possible industrial or research uses. No final decision has been made. Mr. Keuter summarized SMUD's presentation and reiterated that public health and safety remain the top priority, however, staffing reductions will occur as regulatory relief and workload permit.

RANCHO SECO

Nuclear Generating Station

NRC REGION V BRIEFING



- Organization/Staffing
- Plant Status
- Pending Submittals
- Decommissioning Funding
- Fuel Disposition
- Proposed Site Uses

OCTOBER 30, 1990



SMUD

SACRAMENTO MUNICIPAL UTILITY DISTRICT

**RANCHO SECO NUCLEAR GENERATING STATION
NRC BRIEFING
OCTOBER 30, 1990**

AGENDA

ORGANIZATION/STAFFING

PLANT STATUS

PENDING SUBMITTALS

DECOMMISSIONING/FUNDING

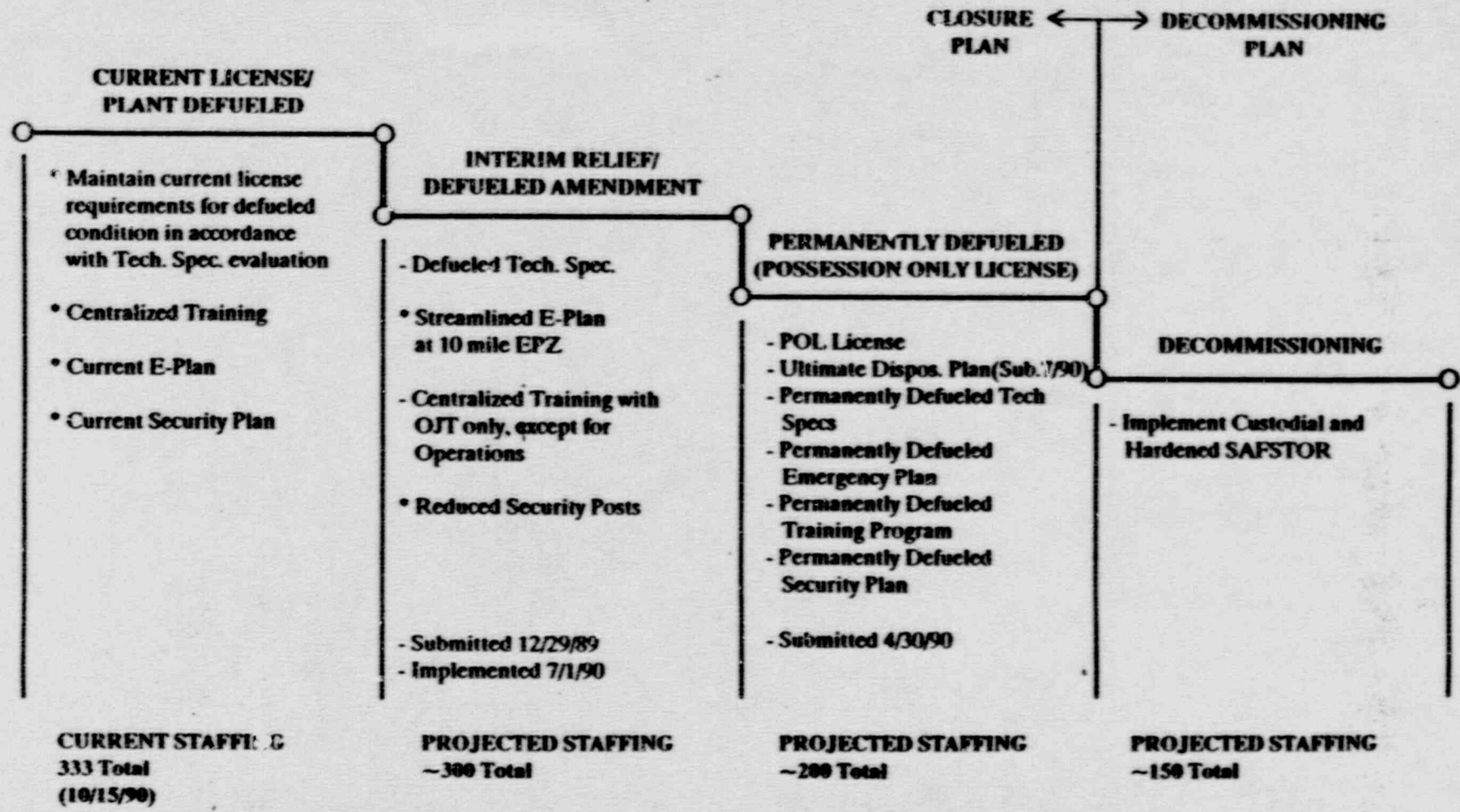
FUEL DISPOSITION

PROPOSED SITE USES

SUMMARY

ORGANIZATION/STAFFING

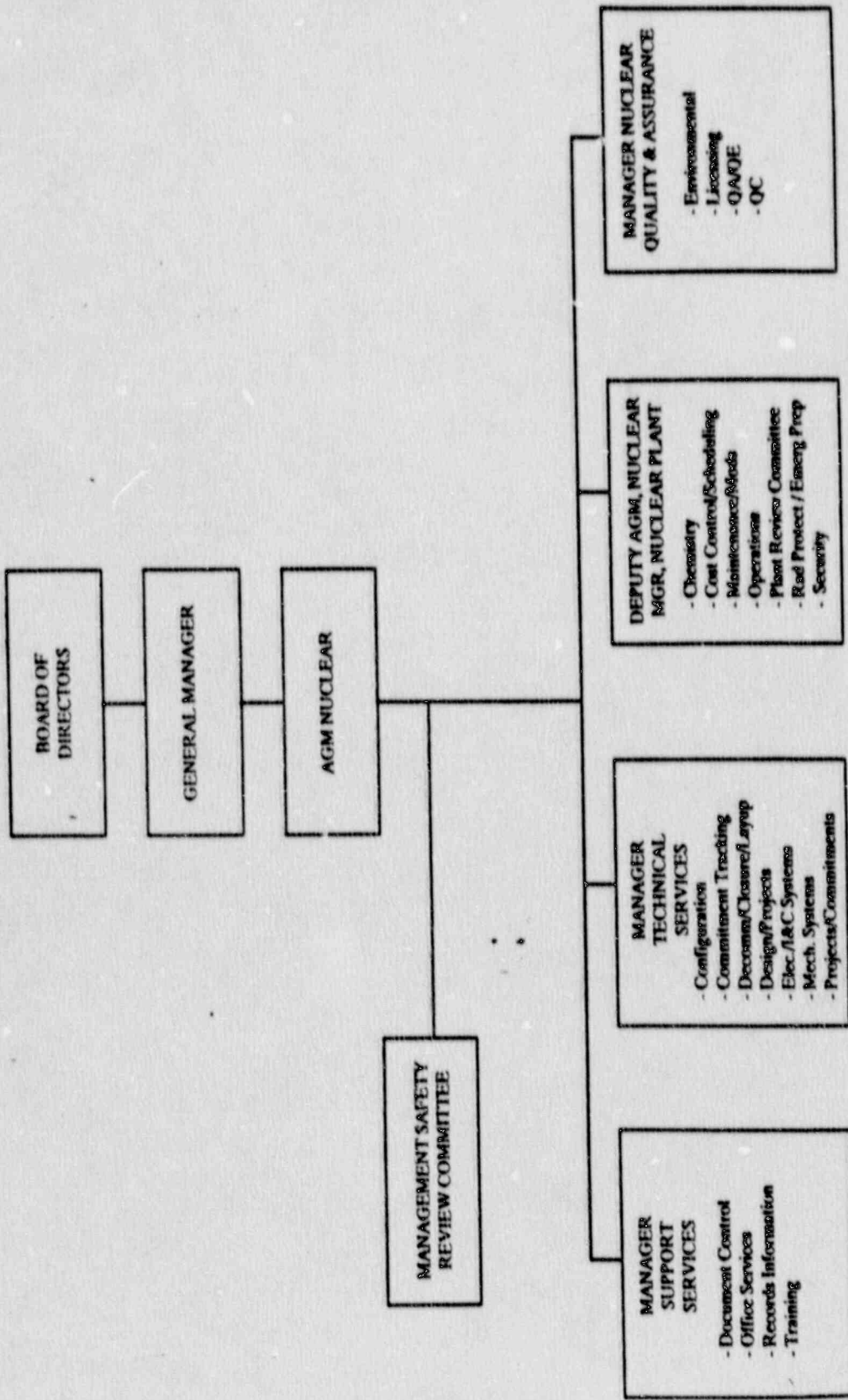
RANCHO SECO CLOSURE STRATEGY



• Implemented/Received

RANCHO SECO ORGANIZATION

5075
R.2



1991 NUCLEAR ORGANIZATION

OFFICE OF
AGM - NUCLEAR

STAFF
SUPPORT

DEPUTY AGM,
NUCLEAR



- Mechanical
- Electrical
- Instruments & Controls
- Scheduling

- Radiation Protection
- Chemistry
- Emergency Planning
- Effluents
- General Employee Training

- Operations
- Security
- Operator Training

- Quality
- Licensing
- Environmental Monitoring
- Administrative

- Mechanical
- Electrical / Instruments
- Projects
- Decommissioning

KEY PROJECTED STAFFING

OF POSITIONS

<u>AREAS</u>	INTERIM	POL	DECOM
AGM NUCLEAR	15	13	3
QUALITY/LICENSING	32	16	12
SITE SUPPORT	45	24	18
MAINTENANCE	69	38	38
NUCLEAR PLANT	98	66	49
TECH SERVICES	42	25	22

OPERATIONS STAFFING

(10-15-90)

QUALIFICATION	CREW A	CREW B	CREW C	CREW D	CREW E	ADMIN STAFF	TOTAL
SRO	3	3	3	2	2	11	24
RO	1	2	1	2	3	1	10
NLO	3	2	3	3	2	0	13

	PLANT STATUS	
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SYSTEM LAYUP

- * **CONTROLLED BY PROCEDURE TSAP-4124,
"PLANT LAYUP CONTROL"**

- * **PURPOSE AND INTENT:**
 - **CONTROL CONFIGURATION**
 - **PREVENT DETERIORATION**
 - **FACILITATE RESTORATION**

- * **COORDINATED BY COGNIZANT SYSTEM ENGINEER**

- * **SYSTEM LAYUP PACKAGE INCLUDES 50.59 DETERMINATION**

- * **COMPLETE PHASE I LAYUPS BY ~ 12/31/90**

SYSTEM LAYUP STATUS
(11/01/90)

*** OF 84 SYSTEMS:**

- LAYUP MEETINGS COMPLETE 84**
- PUNCHLISTS COMPLETE 84**
- WORK PACKAGES ISSUED 84**
- SYSTEMS LAID UP 33/39**
- TOTAL % LAYUP ACTIVITIES COMPLETE ~ 85%**

	<p>PENDING SUBMITTALS</p>	
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PENDING SUBMITTALS

<u>ACTION</u>	<u>SUBMITTAL DATE</u>
SECURITY PLAN LONG TERM DEFUELED	04/26/90
EMERGENCY PLAN LONG TERM DEFUELED	04/26/90
ANNUAL EXERCISE/ SIREN EXEMPTION	07/24/90
OPERATOR TRAINING PROGRAM EXEMPTION	12/28/89
LONG TERM DEFUELED TECH SPECS PA-182	12/28/89
10 CFR 50.54 (w) INSURANCE EXEMPTION	03/5/90

PENDING SUBMITTALS (CONTINUED)

ACTION

SUBMITTAL DATE

**POSSESSION-ONLY
LICENSE PA-184**

04/26/90

**ANNUAL OPERATING
FEE EXEMPTION
REQUEST 10 CFR 171**

04/11/90

**DECOMMISSIONING
FINANCIAL PLAN &
FUNDING PERIOD INTERIM
EXEMPTION REQUEST**

07/24/90

DECOMMISSIONING/FUNDING

DECOMMISSIONING ALTERNATIVES

*** RE-REVIEWING ALTERNATIVES**

- **DECON**
- **SAFSTOR**
- **ENTOMB**

*** DEVELOPING SPECIFIC COST ESTIMATES FOR DECOMMISSIONING ALTERNATIVES**

*** FINAL ALTERNATIVE SELECTION BASED ON**

- **OCCUPATIONAL AND PUBLIC HEALTH & SAFETY**
- **LEAST IMPACT TO RATE-PAYERS**
- **ENVIRONMENTAL IMPACTS**

FINANCIAL PLAN & TRUST AGREEMENT

- * SUBMITTED FINANCIAL STATEMENT TO NRC
ON JULY 24, 1990**

- * FINANCIAL PLAN & TRUST AGREEMENT**
 - DRAFTED**
 - TRUSTEE SELECTED**
 - BOARD APPROVED**

- * REQUESTED FULL FUNDING
INTERIM EXEMPTION**

FUNDING PHASES

- * REQUIRED MINIMUM FUNDING**
 - **BASED ON 2772 MWt REACTOR SIZE**
 - **ESCALATED TO 1990 CONSTANT DOLLARS**

- * SITE SPECIFIC COST ESTIMATE EXPECTED TO BE FILED WITH PROPOSED DECOMMISSIONING PLAN**

- * INDEPENDENT REVIEW OF COST ESTIMATE IN PROGRESS**

- * FINANCIAL PLAN ADJUSTED UPON APPROVAL OF THE DECOMMISSIONING PLAN**

PROPOSED DECOMMISSIONING PLAN

*** DEVELOPMENT IN-PROGRESS**

*** FUNDING**

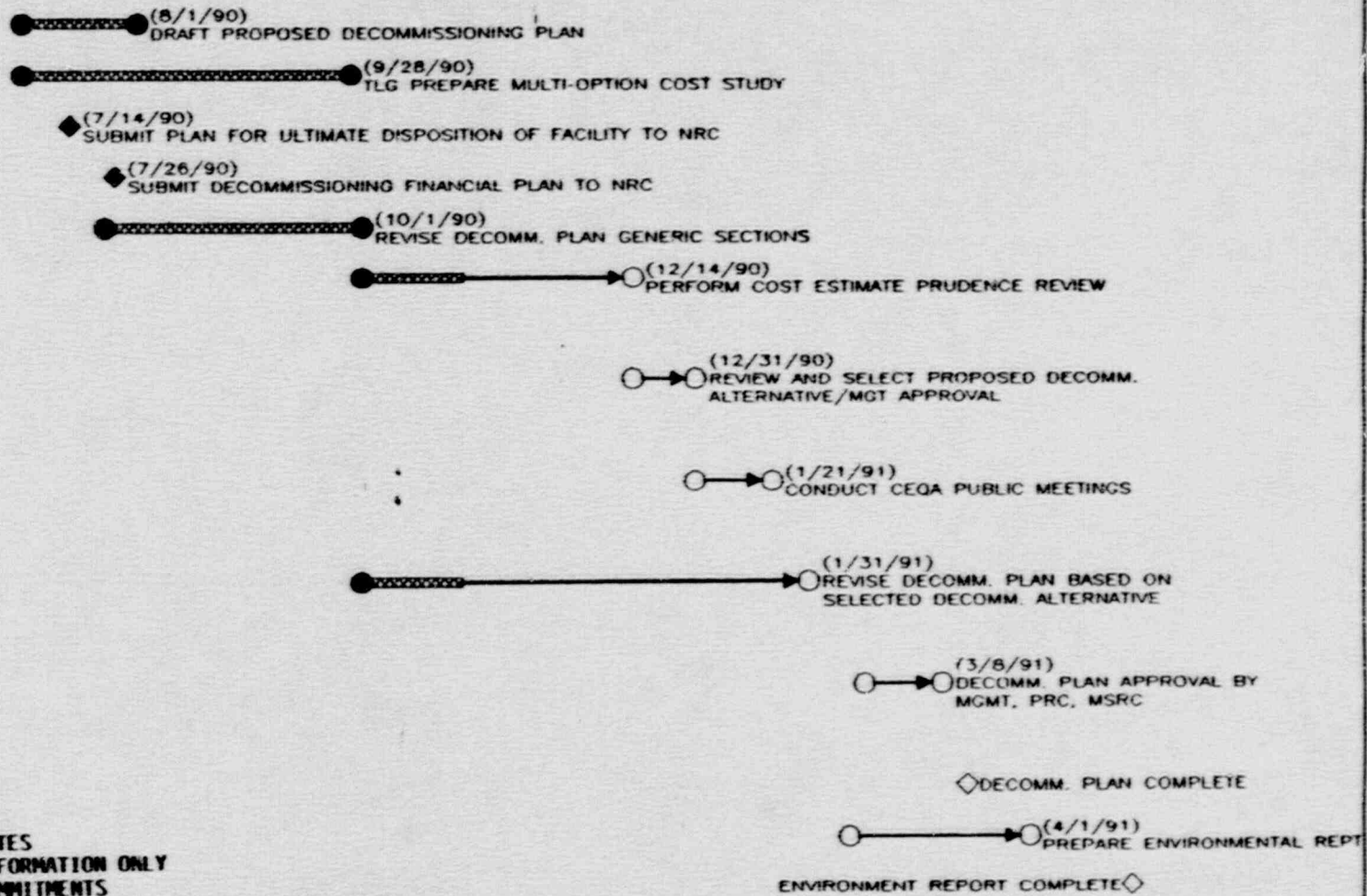
- **LEVEL WILL BE UPDATED BASED ON
SELECTED ALTERNATIVE**
- **SPECIFIC COST ESTIMATE WILL BE ESTABLISHED
WHEN DECOMMISSIONING ALTERNATIVE IS
APPROVED**

*** ENVIRONMENTAL REPORT**

- **SEPARATE DOCUMENT**
- **BASED ON GENERIC GUIDANCE
ADDRESSES SITE SPECIFIC DIFFERENCES**

RANCHO SECO 020-PERMANENT CLOSURE/DECOMMISSIONING MILESTONES Oct 29, 1990

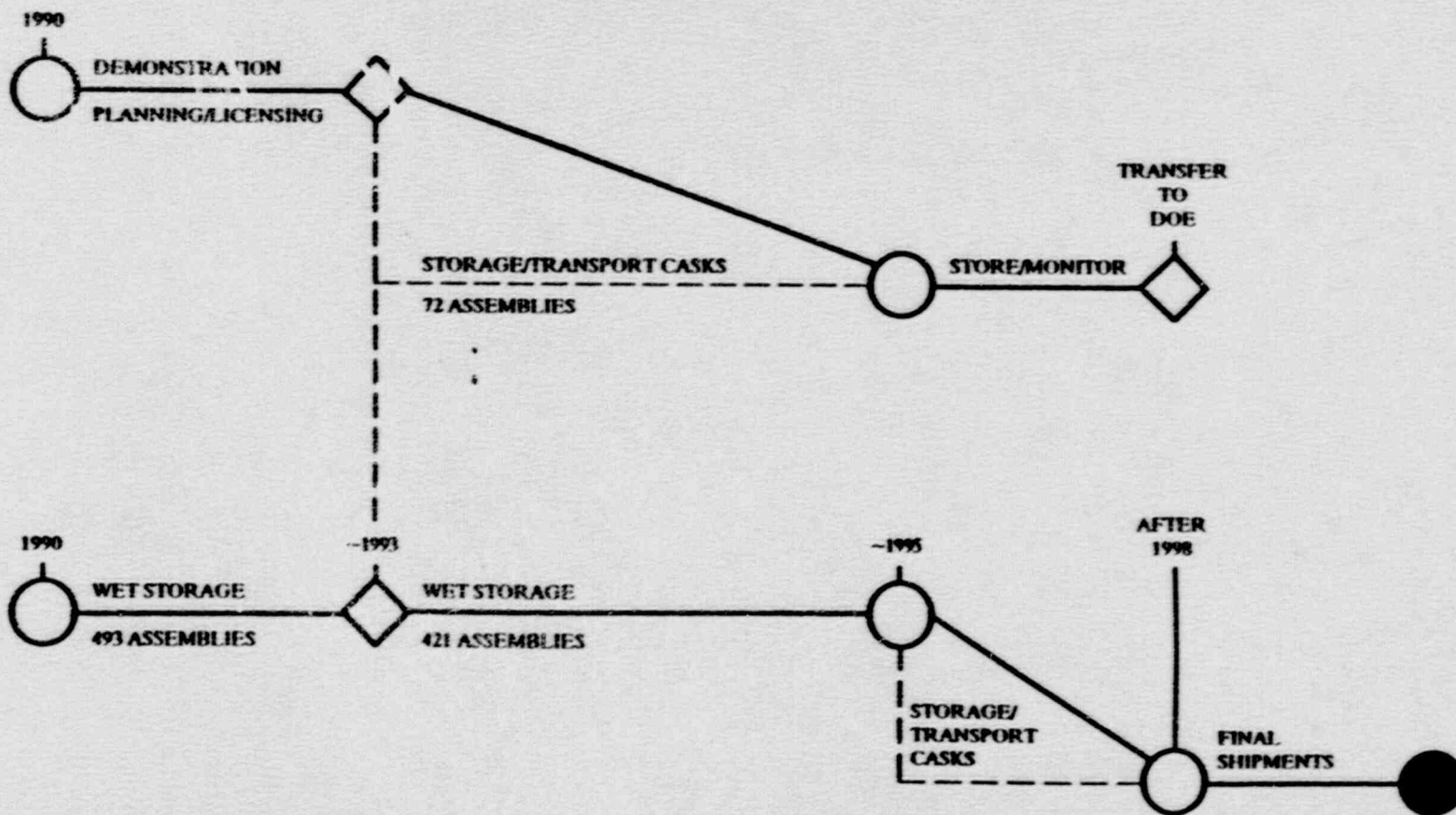
1990						1991						
Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun



ALL DATES
FOR INFORMATION ONLY
NOT COMMITMENTS

	<p>FUEL DISPOSITION</p>	
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SPENT FUEL DISPOSITION STRATEGY WITH DOE COMMITMENT



	<p>PROPOSED SITE USES</p>	
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POSSIBLE SITE USES

- * REPOWERING/POWERING**
- * RESEARCH**
- * WASTE DISPOSAL**
- * INDUSTRIAL**
- * RECYCLING**

POWER SUPPLY PROPOSALS

- * **RECEIVED 94 PROPOSALS**
- * **DEVELOPED SHORT-LIST OF 28 PROPOSALS**
- * **600 MW GAS-FIRED
RANCHO SECO CONVERSION**
- * **PUBLIC WORKSHOPS TO EVALUATE COST,
ENVIRONMENTAL WEIGHTING FACTORS. OPTIONS
INCLUDE:**
 - **MAXIMIZING RENEWABLES**
 - **MINIMIZING RATES**
 - **MAXIMIZING DIVERSITY**

SUMMARY

SUMMARY OF REQUESTED ACTIONS

- * MAINTAINING HEALTH AND SAFETY OF THE PUBLIC**
- * REDUCING SCOPE OF WORK ACTIVITIES AND RELATED STAFFING APPROPRIATE WITH REGULATORY RELIEF**
- * MINIMIZING COSTS TO OPERATE AND MAINTAIN RANCHO SECO**