



SACRAMENTO MUNICIPAL UTILITY DISTRICT ☐ 6201 S Street, P.O. Box 15830, Sacramento CA 95852-1830, (916) 452-3211
AN ELECTRIC SYSTEM SERVING THE HEART OF CALIFORNIA

RJR 85-397

August 12, 1985

DIRECTOR OF NUCLEAR REACTOR REGULATION
ATTENTION HUGH L THOMPSON JR DIRECTOR
DIVISION OF LICENSING
U S NUCLEAR REGULATORY COMMISSION
WASHINGTON D C 20555

DOCKET 50-312
RANCHO SECO NUCLEAR GENERATING STATION
UNIT NO 1
RANCHO SECO LIVING SCHEDULE

The District anticipates that the NRC will soon approve proposed License Amendment 106 - "The Living Schedule Plan for Rancho Seco Nuclear Generating Station". Responding to the request of the NRC Project Manager, Syd Miner, the District is submitting (Attachment I) its most recent Rancho Seco Living Schedule, dated August 9, 1985 and issued as Revision 00. The District will transmit approved Living Schedules to the NRC dated and with new Revision numbers.

Attachment II is a brief summary of Living Schedule changes since the last Living Schedule, dated October 1984. As noted in both Attachments, Rancho Seco is now in Cycle 7, so a number of modifications are shown as completed. The District has listed items as "completed" when Startup has successfully finished testing and upon acceptance by Nuclear Operations. Also, the attached Living Schedule now includes additional items and covers the period from Cycle 7 to mid-Cycle 10.

The District trusts this information will lead to the prompt approval of proposed License Amendment 106. Should you have any further questions, contact Jerry Delezenski at Rancho Seco.

R. J. RODRIGUEZ
ASSISTANT GENERAL MANAGER,
NUCLEAR

Attachments (2)

8508160350 850812
PDR ADOCK 05000312
P PDR

A001
1/9

SACRAMENTO MUNICIPAL UTILITY DISTRICT
RANCHO SECO LIVING SCHEDULE
August 9, 1985
Rev. 00

Attachment 1

Page 1 of 7

LEGEND:

_____ = Scheduled Work

--- = Potential Work

0 = NRC Ordered

C = SMUD Commitment to NRC

* = Completion Tied
to Outage

B = Betterment

R = Non-NRC Regulatory

RFO = Refuel Outage

			CYCLE 7												CYCLE 8												CYCLE 9												CYCLE 10																																			
MOD	DESCRIPTION	TYPE	1985												1986												1987												1988												1989												1990											
			A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O																					
001	Emergency Feedwater Initiation & Control	C													o*																								o*																																			
002	Inadequate Core Cooling - Hot Leg Level & Incore Thermocouples	C	COMPLETE																																																																							
002	Inadequate Core Cooling - RV Level	C													o*																																																											
005	Retention Basin Radmonitors	B													o																																																											
005	Purge Stk W/R Gas Monitor	B													o																																																											
005	Spent Fuel Pool Pad Monitors	B													o																																																											
011	Equipment Qualification	O	COMPLETE																																																																							
013	Safety Grade Anticipatory Reactor Trip	O	COMPLETE																																																																							

SACRAMENTO MUNICIPAL UTILITY DISTRICT
RANCHO SECO LIVING SCHEDULE
August 9, 1985
Rev. 00

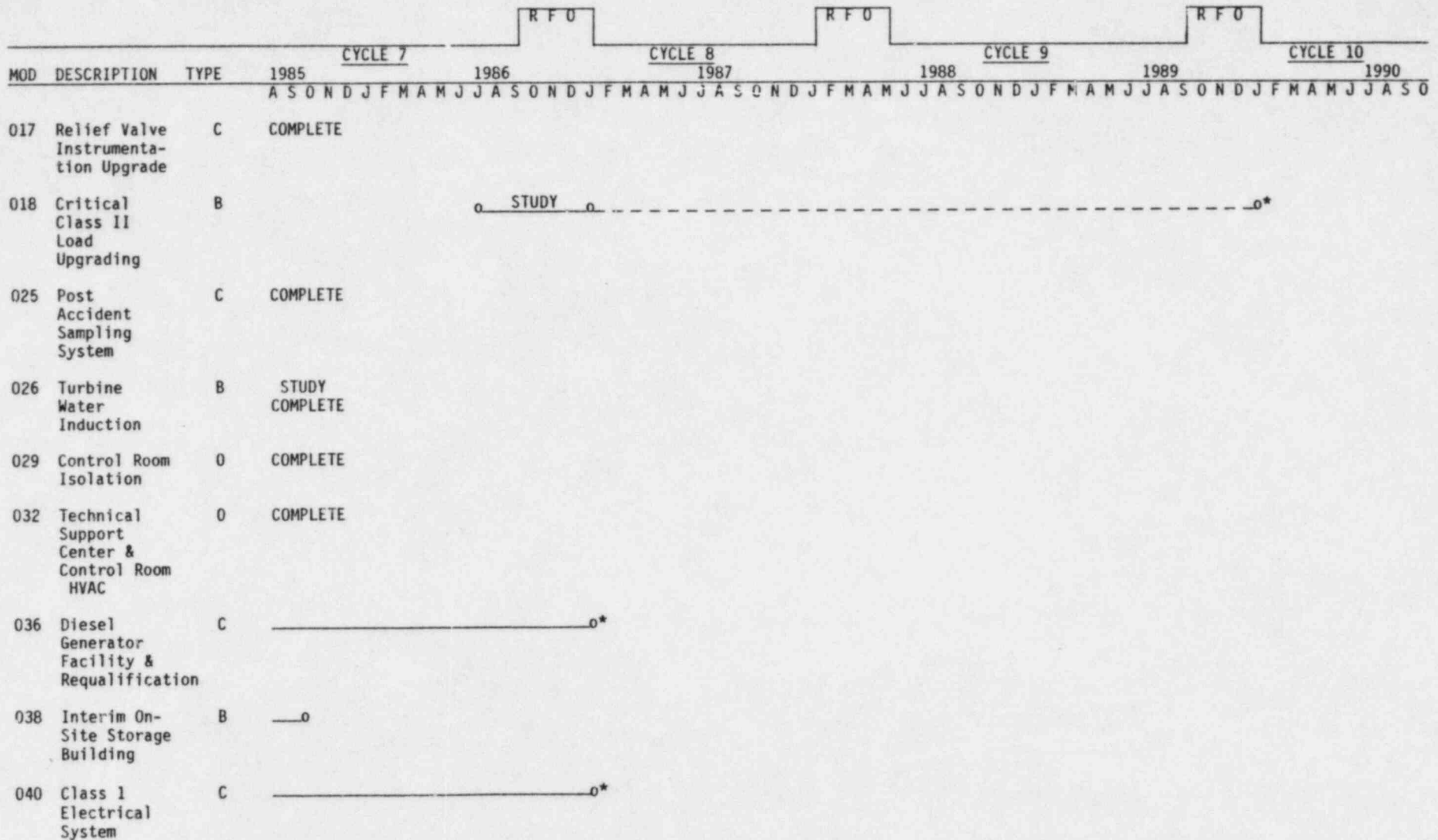
Page 2 of 7

LEGEND:

_____ = Scheduled Work
----- = Potential Work

O = NRC Ordered
C = SMUD Commitment to NRC
* = Completion Tied to outage

B = Betterment
R = Non-NRC Regulatory
RFO = Refuel Outage



SACRAMENTO MUNICIPAL UTILITY DISTRICT
RANCHO SECO LIVING SCHEDULE
August 9, 1985
Rev. 00

LEGEND:

_____ = Scheduled Work
- - - - = Potential Work

O = NRC Ordered
C = SMUD Commitment to NRC
* = Completion Tied
to outage

B = Betterment
R = Non-NRC Regulatory
RFO = Refuel Outage

Page 3 of 7

[illegible]

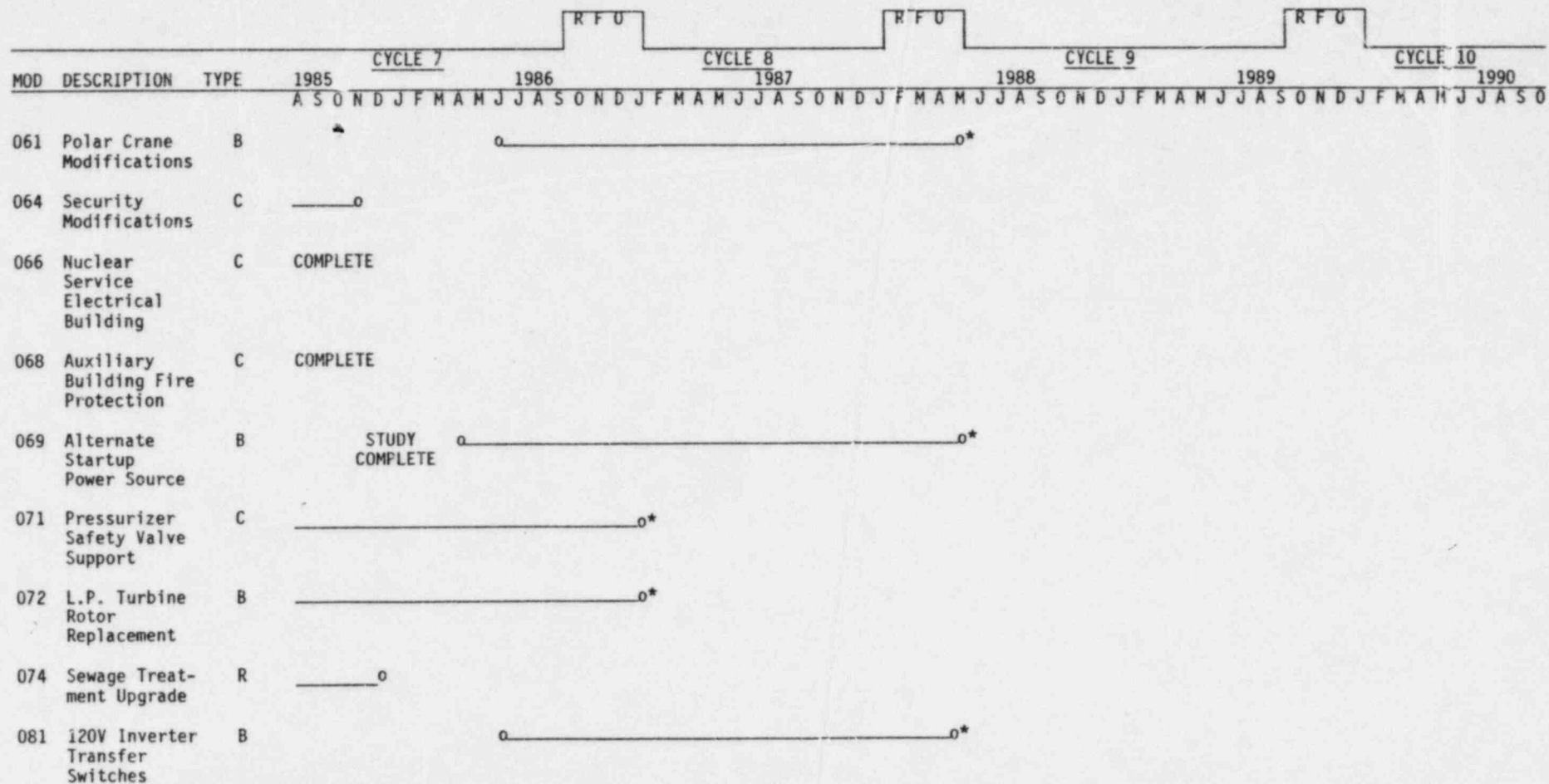
SACRAMENTO MUNICIPAL UTILITY DISTRICT
RANCHO SECO LIVING SCHEDULE
August 9, 1985
Rev. 00

LEGEND: _____ = Scheduled Work
 - - - - - = Potential Work

Page 4 of 7

O = NRC Ordered
C = SMUD Commitment to NRC
* = Completion Tied
to outage

B = Betterment
R = Non-NRC Regulatory
RFO = Refuel Outage



SACRAMENTO MUNICIPAL UTILITY DISTRICT
RANCHO SECO LIVING SCHEDULE
August 9, 1985
Rev. 00

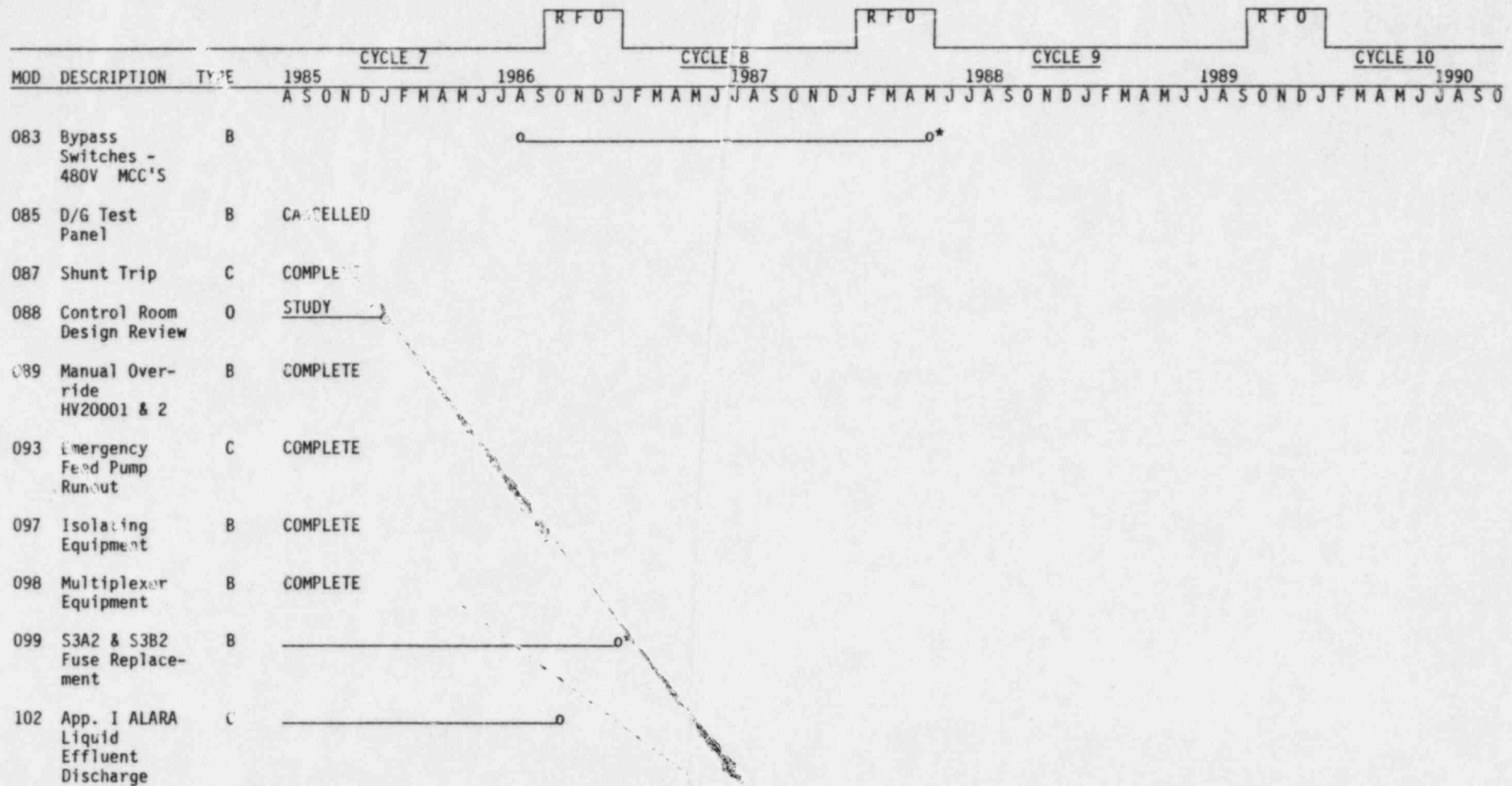
Page 5 of 7

LEGEND:

_____ = Scheduled Work
----- = Potential Work

O = NRC Ordered
C = SMUD Commitment to NRC
* = Completion Tied
to outage

B = Betterment
R = Non-NRC Regulatory
RFO = Refuel Outage



SACRAMENTO MUNICIPAL UTILITY DISTRICT
RANCHO SECO LIVING SCHEDULE
August 9, 1985
Rev. 00

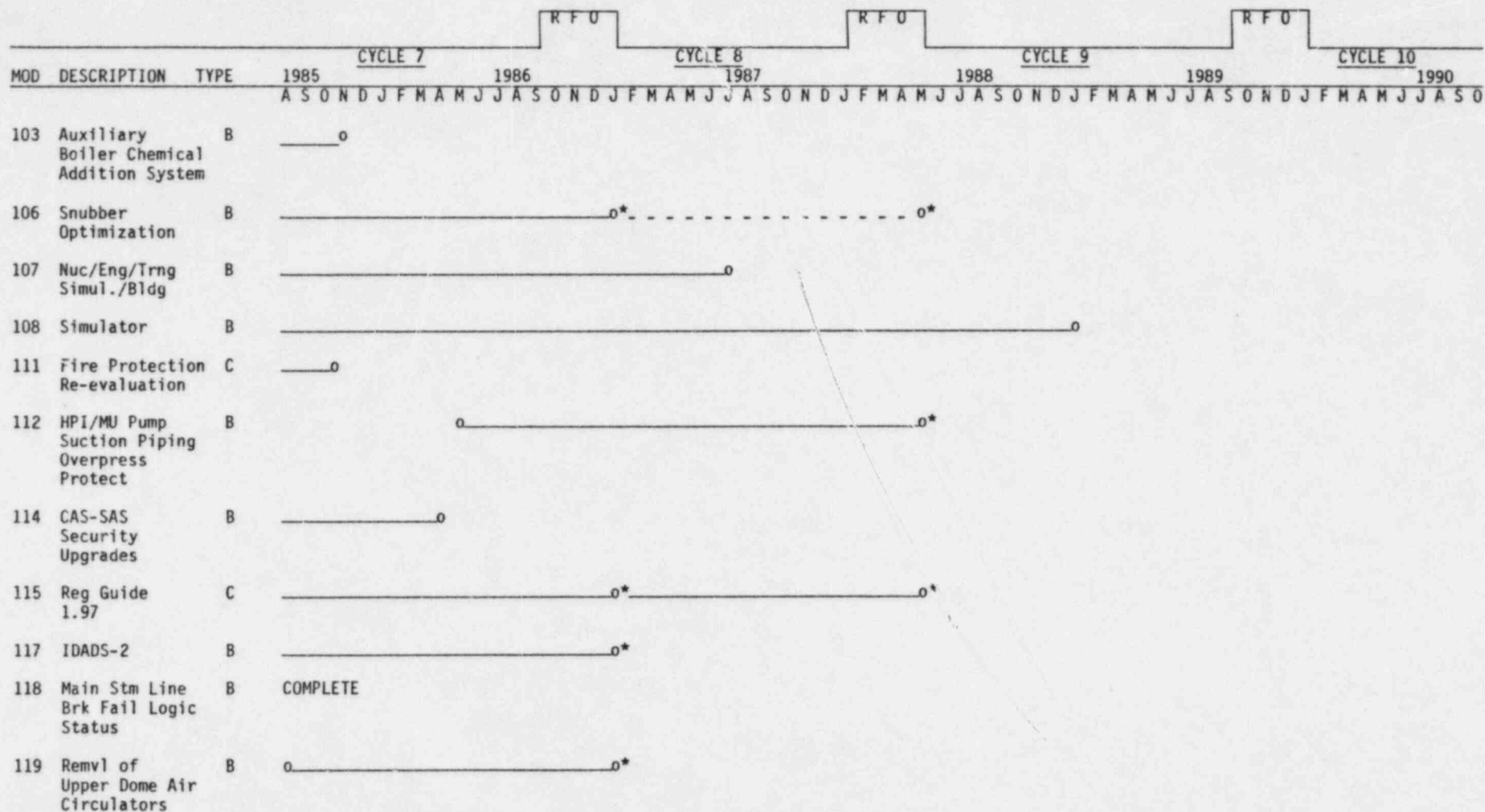
LEGEND:

_____ = Scheduled Work
- - - = Potential Work

O = NRC Ordered
C = SMUD Commitment to NRC
* = Completion Tied
to outage

B = Betterment.
R = Non-NRC Regulatory
RFO = Refuel Outage

Page 6 of 7



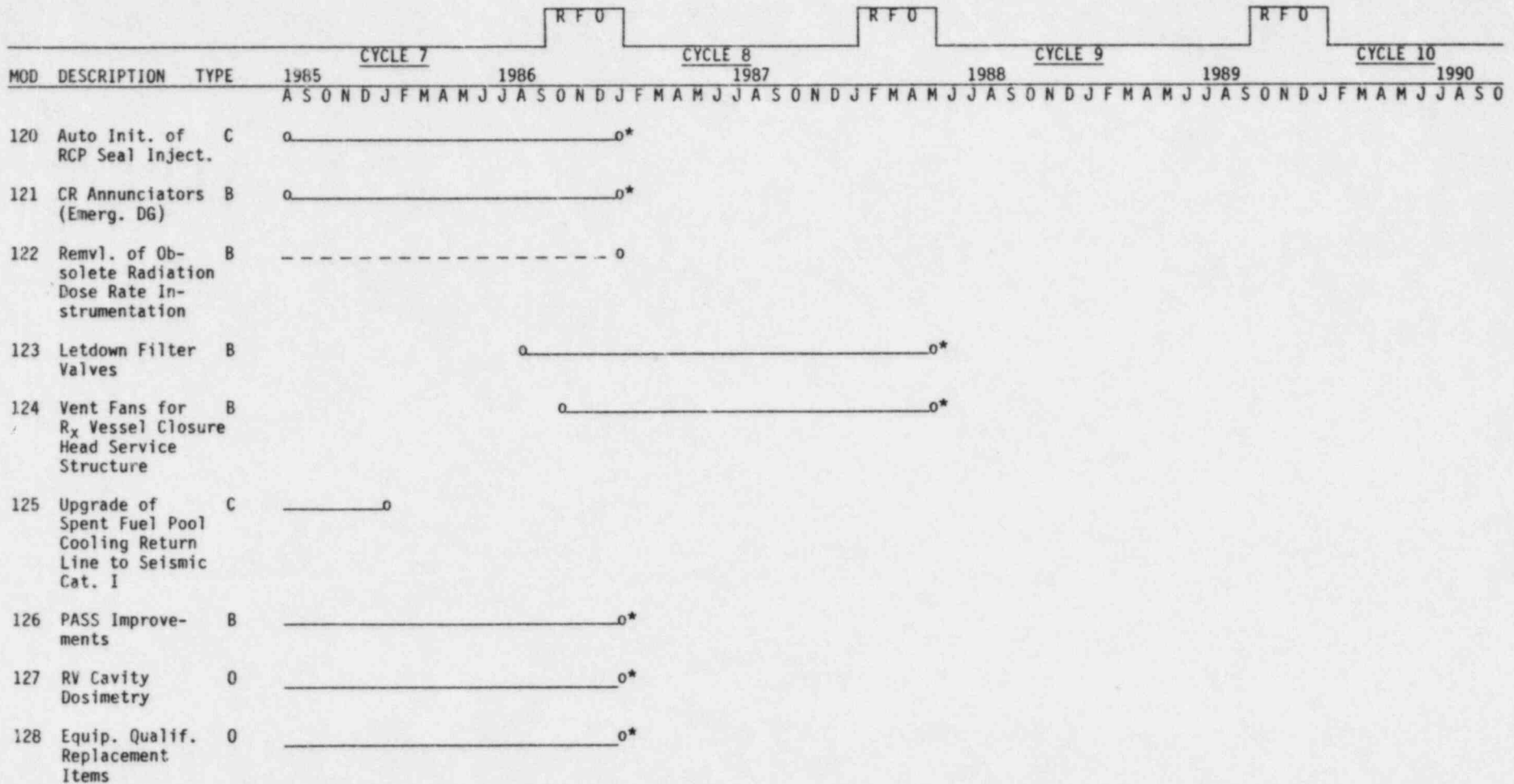
SACRAMENTO MUNICIPAL UTILITY DISTRICT
RANCHO SECO LIVING SCHEDULE
August 9, 1985
Rev. 00

Page 7 of 7

LEGEND: _____ = Scheduled Work
 - - - - - = Potential Work

O = NRC Ordered
C = SMUD Commitment to NRC
* = Completion Tied
 to outage

B = Betterment
R = Non-NRC Regulatory
RFO = Refuel Outage



SACRAMENTO MUNICIPAL UTILITY DISTRICT

LIVING SCHEDULE CHANGES FOR RANCHO SECO MODIFICATIONS

The following is an update of the October 31, 1984 submittal to the NRC. This list includes only those items that have changed since the last submittal.

MOD 002 - INADEQUATE CORE COOLING - HOT LEG LEVEL AND INCORE THERMOCOUPLES

Type: SMUD Commitment

Work was completed during the 1985 refueling outage.

MOD 005 - RETENTION BASIN RADIATION MONITORS

Type: Betterment

The extended completion date reflects the revised forecast for the completion of this item.

MOD 005 - PURGE STACK WIDE RANGE GAS MONITOR

Type: Betterment

This additional item reflected an increase in the scope of MOD 005, and most physical work was completed during the 1985 refueling outage. Tech spec and procedures must be completed. Interlock with automatic release termination must be completed.

MOD 011 - EQUIPMENT QUALIFICATION

Type: NRC Order

Work was completed during the 1985 refueling outage.

MOD 013 - SAFETY GRADE ANTICIPATORY REACTOR TRIP

Type: NRC Order

Work was completed during the 1985 refueling outage.

MOD 017 - RELIEF VALVE INSTRUMENTATION UPGRADE

Type: SMUD Commitment

Work was completed during the 1985 refueling outage.

MOD 025 - POST ACCIDENT SAMPLING SYSTEM

Type: SMUD Commitment

The work committed to be done by the end of the 1985 refueling outage was completed. The potential work shown previously (i.e. upgrades to the system) has been incorporated into a new modification (#126), scheduled for completion by the end of the Cycle 8 refueling outage.

MOD 026 - TURBINE WATER INDUCTION PROTECTION

Type: Betterment

The study is complete.

MOD 029 - CONTROL ROOM ISOLATION

Type: NRC Order

Work was completed during the 1985 refueling outage.

MOD 032 - TECHNICAL SUPPORT CENTER AND CONTROL ROOM HVAC

Type: NRC Order

Work was completed during the 1985 refueling outage.

MOD 038 - INTERIM ONSITE STORAGE BUILDING

Type: Betterment

This schedule reflects the forecast for work completion by a contractor.

MOD 040 - CLASS I ELECTRICAL SYSTEM

Type: Commitment

The schedule change reflects a tie-in with the completion of MOD 036, the Diesel Generator facility, at the end of the Cycle 8 refueling outage.

MOD 043 - CATHODIC PROTECTION

Type: Betterment

The start of work is deferred until June 1986 due to District resource limits. Completion is forecasted in July 1987.

MOD 044 - UPGRADE OF REACTOR INTERNALS BOLTING

Type: Betterment

This modification was deferred from the Cycle 8 refueling outage to the Cycle 10 refueling outage in order to coincide with the District's 10-year inspection, and to enable better coordination with other utilities using similar equipment.

MOD 045 - SITE DOMESTIC WATER UPGRADE

Type: Betterment

The start of work was deferred until April 1986 due to District resource limits. Completion is forecasted in June 1987.

MOD 048 - LOW TEMPERATURE OVER-PRESSURIZATION PROTECTION - ALARMS

Type: SMUD Commitment

Work was completed during the 1985 refueling outage.

MOD 058 - COMPONENT COOLING WATER SYSTEM UPGRADE

Type: Betterment

Pending analysis of study results, this MOD may generate additional work. However, this analysis is deferred until April 1986 due to District resource limits. Potential work outlined will not change until study analysis proves otherwise.

MOD 059 - PLANT INTEGRATED COMPUTER SYSTEM

Type: Betterment

The study for this item was completed. The potential work was cancelled and technically integrated into MOD 117, IDADS-2.

MOD 060 - SAFETY PARAMETERS DISPLAY SYSTEM

Type: NRC Order

Work was completed during the 1985 refueling outage.

MOD 061 - POLAR CRANE MODIFICATIONS

Type: Betterment

Deferred from the Cycle 8 to the Cycle 9 refueling outage due to District resource limits. Engineering is forecasted to start in June 1986.

MOD 064 - SECURITY MODIFICATIONS

Type: SMUD Commitment

Work on this modification is scheduled to be complete by the end of November 1985.

MOD 066 - NUCLEAR SERVICES ELECTRICAL BUILDING

Type: SMUD Commitment

Work on this modification was completed.

MOD 068 - AUXILIARY BUILDING FIRE PROTECTION

Type: SMUD Commitment

Work on this modification was completed.

MOD 069 - ALTERNATE START-UP POWER SOURCE

Type: Betterment

The study is complete. This modification was deferred from the Cycle 8 to the Cycle 9 refueling outage due to District resource limits. Engineering is forecasted to start in April 1986.

MOD 071 - PRESSURIZER SAFETY VALVE DISCHARGE PIPING SUPPORTS

Type: SMUD Commitment

The study is complete. The work is changed from potential to approved status with completion tied to the Cycle 8 refueling outage.

MOD 081 - 120VAC INVERTER TRANSFER SWITCHES

Type: Betterment

Work is deferred from the Cycle 8 to the Cycle 9 refueling outage due to District resource limits. Engineering is forecasted to start in July 1986.

MOD 083 - BYPASS SWITCHES FOR 480V MCC'S

Type: Betterment

Work is deferred from the Cycle 8 to the Cycle 9 refueling outage due to District resource limits. The start of engineering is forecasted for August 1986.

MOD 085 - DIESEL GENERATOR TEST PANELS

Type: Betterment

This modification is cancelled due to poor economics of implementation.

MOD 087 - SHUNT TRIP

Type: SMUD Commitment

Work was completed during the 1985 refueling outage.

MOD 088 - MANUAL OVERRIDE OF HV20001/20002

Type: Betterment

Work was completed during the 1985 refueling outage.

MOD 093 - EMERGENCY FEED PUMP RUNOUT

Type: SMUD Commitment

Work was completed during the 1985 refueling outage.

MOD 097 - ISOLATION EQUIPMENT

Type: Betterment

Work was completed during the 1985 refueling outage.

MOD 098 - MULTIPLEXER EQUIPMENT

Type: Betterment

Work was completed during the 1985 refueling outage.

MOD 099 - S3A2 & S3B2 FUSE REPLACEMENTS

Type: Betterment

Work is deferred from the Cycle 7 to the Cycle 8 refueling outage due to District resource limits.

MOD 102 - APPENDIX "I" LIQUID EFFLUENT DISCHARGE

Type: SMUD Commitment

The study is complete. Work status has changed from potential to approved. The completion is scheduled for October 1986.

MOD 103 - AUXILIARY BOILER CHEMICAL ADDITION SYSTEM

Type: Betterment

The completion of this MOD is extended until the end of September 1985. The work is non-outage.

MOD 106 - SNUBBER OPTIMIZATION

Type: Betterment

Work changes from potential to approved for Phase I (RCP snubbers), with completion at the end of the Cycle 8 refueling outage. The balance remains as potential work.

MOD 107 - NUCLEAR ENGINEERING/TRAINING/SIMULATOR BUILDING

Type: Betterment

Work changes from potential to approved, and the completion is forecast for September 1987. This project combines previously separate facilities for Nuclear Engineering and training buildings.

MOD 108 - SIMULATOR

Type: Betterment

The District is pursuing installation of the Simulator. This work changes from potential to approved, with completion scheduled for January of 1989.

MOD 111 - FIRE PROTECTION PROGRAM - APPENDIX "R" RE-EVALUATION

Type: SMUD Commitment

The completion of this modification is extended until October 1985.

MOD 115 - REG. GUIDE 1.97

Type: SMUD Commitment

The study is complete. The implementation will be in both the Cycle 8 and Cycle 9 refueling outages.

ADDITIONS TO THE LIVING SCHEDULE SINCE OCTOBER 31, 1984

The following modifications have been added to the Living Schedule since October 31, 1984.

MOD 112 - HPI/HU PUMP SUCTION PIPING OVERPRESSURE PROTECTION

The start of engineering was delayed until after the completion cut-off date for engineering for Cycle 8. Tentative start is May 1986.

MOD 114 - CAS-SAS SECURITY UPGRADES

Type: Betterment

This modification is forecast for completion in April 1986. The work is non-outage.

MOD 117 - IDADS-2

Type: Betterment

This modification is scheduled to coincide with the Cycle 8 refueling outage.

MOD 118 - MAIN STEAM LINE BREAK FAILURE LOGIC STATUS

Type: Betterment

This modification has been completed.

MOD 119 - REMOVAL OF UPPER DOME AIR CIRCULATORS

Type: Betterment

This modification is scheduled for completion in the Cycle 8 refueling outage.

MOD 120 -- AUTO INITIATION OF RCP SEAL INJECTION

Type: SMJD Commitment

Completion is scheduled for the end of the Cycle 8 refueling outage.

MOD 121 - CONTROL ROOM ANNUNCIATORS [EMERGENCY DIESEL GENERATORS]

Type: Betterment

Completion is scheduled for the end of the Cycle 8 refueling outage.

MOD 122 - REMOVAL OF OBSOLETE RADIATION DOSE RATE INSTRUMENTATION

Type: Betterment

Construction work is non-outage, to be performed in two stages. The first stage was completed during the 1985 outage. The potential for additional work exists as the control philosophy is reviewed and equipment is updated. Completion of the second stage is shown at the end of the Cycle 8 refueling outage. However, additional study may require an adjustment in the scheduled completion due to scope change(s).

MOD 123 - LETDOWN FILTER VALVES

Type: Betterment

Completion is tied to the end of the Cycle 9 refueling outage.

MOD 124 - VENT FANS FOR REACTOR VESSEL CLOSURE HEAD SERVICE STRUCTURE

Type: Betterment

Completion is tied to the end of the Cycle 9 refueling outage.

MOD 125 - UPGRADE OF SPENT FUEL POOL COOLING SYSTEM
RETURN LINE TO SEISMIC CATEGORY I

Type: SMUD Commitment

Completion is scheduled for December 1985.

MOD 126 - POST ACCIDENT SAMPLING SYSTEM IMPROVEMENTS

Type: Betterment

Completion is tied to the end of the Cycle 8 refueling outage.

MOD 127 - REACTOR VESSEL CAVITY DOSIMETRY

Type: NRC Order

The completion of this item is tied to the end of the Cycle 8 refueling outage.

MOD 128 - EQUIPMENT QUALIFICATION REPLACEMENT ITEMS

Type: NRC Order

The completion of this item is tied to the end of the Cycle 8 refueling outage.