



SACRAMENTO MUNICIPAL UTILITY DISTRICT ☐ 6201 S Street, P.O. Box 15830, Sacramento, CA 95813; (916) 452-3211
AN ELECTRIC SYSTEM SERVING THE HEART OF CALIFORNIA

RJR 85-326

July 9, 1985

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

DOCKET 50-312
RANCHO SECO NUCLEAR GENERATING STATION
UNIT NO. 1
SUPPLEMENT 1 TO NUREG-0737, REQUIREMENTS FOR EMERGENCY RESPONSE CAPABILITIES,
(G.L. 82-33) COMPLETED ITEMS

In our submittals of April 15, July 20, 1983 and February 2, 1984 the District proposed an implementation schedule for those post-TMI related items set forth in Supplement 1 to NUREG-0737. The Commission then confirmed the District's commitments in an order dated February 21, 1984. Attachment 1 is an update of those Supplement 1 items which were completed as scheduled at the end of the just completed refueling outage for Cycle 7.

For item number 3b, of the Supplement 1 schedule, a detailed implementation schedule was submitted on September 14, 1984 for the Reg. Guide 1.97 changes. Several of the changes were already a part of a modification or integrated into a related modification as part of the District's Living Schedule and were also due for completion by the end of the refueling outage for Cycle 7. Although the Commission has not yet issued a Safety Evaluation Report (SER) for our Reg. Guide 1.97 schedule, an update is being provided (Attachment 2) showing those items which the District has completed. Those items yet to be completed are listed with the basis for their proposed completion dates. The items shown as additions to the Living Schedule will be incorporated in the next Living Schedule update.

For item 5, the District has installed the Interim Data Acquisition and Display System (IDADS) to meet the data requirement capabilities for the Emergency Response Facilities (ERF). Attachment 3 provides a status and brief description of the IDADS. Furthermore, the District is developing additional modifications to further improve and enhance IDADS capabilities.

8507150505 850709
PDR ADOCK 05000312
F PDR

A003
1/1

July 9, 1985

The attached documents are an updated status of the District's previous commitments for the implementation of Supplement 1 of NUREG-0737. The schedule for implementing proposed modifications is determined using the District's Living Schedule process. Should you have any questions or comments, please feel free to contact Jerry Delezenski at Rancho Seco.



R. J. RODRIGUEZ
ASSISTANT GENERAL MANAGER,
NUCLEAR

Attachments



ATTACHMENT 1

LICENSEE'S COMMITMENTS ON SUPPLEMENT 1 TO NUREG-0737

| TITLE | REQUIREMENT | LICENSEE'S COMPL. SCHED. (OR STATUS) |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| 1. Safety Parameter Display System (SPDS) | 1a Submit a safety analysis and an Implementation Plan to the NRC. | Complete |
| | 1b SPDS fully operational and operators trained. | Complete |
| 2. Detailed Control Room Design Review (DCRDR) | 2a Submit a program plan to the NRC | Complete |
| | 2b Submit a summary report to NRC including a proposed schedule for implementation | 12/31/85 |
| 3. Regulatory Guide 1.97 - Application to Emergency Response Facilities | 3a Submit a report to the NRC describing how the requirements of Supplement 1 to NUREG-0737 have been or will be met | Complete |
| | 3b Implement (installation or upgrade) requirements | Detailed schedule submitted 9/14/84 |
| 4. Upgrade Emergency Operating Procedures (EOPs) | 4a Submit a Procedures Generation Package to the NRC | Complete |
| | 4b Implement the upgraded EOPs | Complete |
| 5. Emergency Response Facilities | 5a Technical Support Center fully functional | Complete |
| | 5b Operational Support Center fully functional | Complete |
| | 5c Emergency Operations Facility fully functional | Complete |

The District's Living Schedule currently embodies a majority of the Reg. Guide 1.97 changes as part of several scheduled modifications. The Reg. Guide 1.97 items and their associated Living Schedule modifications are listed below in Section A.

Section B lists those additional Reg. Guide 1.97 variables that the District will include in its next update to the Living Schedule.

A. Previously Scheduled Variables

The District has already scheduled the following Reg. Guide 1.97 variables intergrated into related modifications as part of the Living Schedule process:

| <u>Variable</u> | <u>Completion</u> | <u>Comments</u> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------------------------------------------|
| 1. Core Exit Temperature(Variable 13) Complete 16 Incore Themocouples will be upgraded to Category 1 requirements. "Inadequate Core Cooling" | Complete | |
| 2. Coolant Inventory (Variable 14) Qualified Hot Leg Level will be installed. "Inadequate Core Cooling" | Complete | |
| 3. Coolant Inventory (Variable 14) Reactor Vessel Level will be installed. "Inadequate Core Cooling" | Cycle 8 start-up | Procurement Difficulties |
| 4. Steam Generator Level (Variable 4) Qualified level indication will be added to the steam generators. "Emergency Feedwater Initiation and Control" | Cycle 9 start-up | 4/28/83 submittal Design Mod for EFIC is extensive |
| 5. Steam Generator Pressure (Variable 5) Qualified pressure indication will be added to the steam generators. "Emergency Feedwater Initiation and Control" | Cycle 9 start-up | 4/28/83 Submittal Design Mod for EFIC is extensive |
| 6. Containment Area Radiation Radiation Monitor inputs will be added to the SPDS. (Variable 27) "SPDS Upgrade" | Complete | |

| <u>Variable</u> | <u>Completion</u> | <u>Comments</u> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------------|
| 7. Primary System Safety Relief Valve. The accoustic monitoring system will r upgraded to meet the qualification criteria. (Variable 27) "SPDS Upgrade" | Complete | |
| 8. Emergency Ventilation Damper Dampers with qualified Class 1 position switches will be installed. (Variable 66) "TSC and Control Room HVAC" | Complete | |



B. Additions to the Living Schedule

The District will incorporate the following Reg. Guide 1.97 variables into the next Living Schedule update to be listed as "Additional Reg. Guide 1.97 modifications":

| <u>Variable</u> | <u>Scheduled Completion</u> | <u>Comments</u> |
|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------------------------------------------------------------|
| 1. RCS Hot Leg Temperature (Variable 1) Qualified Hot Leg Temperature inputs will be added to the SPDS. | Cycle 8 start-up | RG 1.97 Review not completed in time for incorporation into Cycle 7 refueling outage |
| 2. Pressurizer Level Density (Variable 44) Compensation will be added to the qualified pressurizer level. | Cycle 9 start-up | Qualified RTD's are a long lead procurement item (See note below) |
| 3. Estimation of Atmospheric Stability. The temperature comparison circuitry will be replaced to meet the accuracy criteria. (Variable 83) | July 1986 | Pending negotiations with NRC Region V & Meteorological Staff |
| 4. SPDS Upgrade (All Category 1 Variables). Upgrade seismic, separation, power supplies and redundancy of the SPDS. | Cycle 9 start-up | Schedule is resource limited due to extensive modification required |

NOTE: This schedule was originally section VI of SMUD's Regulatory Guide 1.97 Postion Rev. 1 submitted September 14, 1984 and is a status update. No items have been added or deleted nor has there been any schedular changes. Earlier completion of item B.2 maybe possible where improvement in equipment delivery permits.

ATTACHMENT 3

IDADS STATUS REPORT

The District's Interim Data Acquisition and Display System (IDADS) has passed its acceptance test and has been turned over to Nuclear Operations. All NCRs have been dispositioned and all ECNs have been closed out. Plant operators and emergency response personnel have been trained in the use of IDADS.

IDADS provides enhanced operator functions and meets the requirements for Emergency Response Facilities (ERF). The major functions provided by IDADS are: Scan and display of several thousand plant inputs, alarm annunciation and logging, history storage and retrieval, trending, graphics display, offsite dose radiation monitoring, and reactivity calculations.

Plant inputs enter the system from the following sources: Bailey Multiplexer, MODCOMP Multiplexer, Remote Multiplexer (ANATEC REMUX), and General Atomics Radiation Monitoring System.

IDADS includes the following equipment:

Computer Room: (2) MODCOMP 7870 CPUs (one for data acquisition, one for operator interface), (2) 300 megabyte disk drives, (2) magnetic tape drives, multiplex interface devices, line printer.

Control Room: (2) color display terminals, alarm printer, (3) 6-pen trend recorders.

Technical Support Center: (5) color display terminals, high-resolution graphics display terminal, line printer, (3) 6-pen trend recorders.

Assembly Points: color display terminal

Emergency Operations Facility: MODCOMP Classis II/75 CPU, (2) 67 megabyte disk drives, (2) magnetic tape drives, alarm printer, line printer, (5) color display terminals, high-resolution graphics display terminal, (3) 6-pen trend recorders.