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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 85-293

July 16, 1985

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

DOCKET NO. 50-312
LICENSE NO. DPR-54
PROPOSED AMENDMENT NO. 115

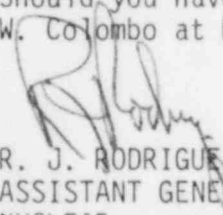
In accordance with 10 CFR 50.59, the Sacramento Municipal Utility District hereby proposes to amend its Operating License DPR-54 for Rancho Seco Nuclear Generating Station Unit No. 1. Per the requirements of 10 CFR 50.92, this Proposed Amendment 115 has been evaluated by a No Significant Hazards Consideration in Attachment 1.

NRC letter dated June 29, 1984, Safety Evaluation for Low Temperature Overpressure Protection, has mandated that several administrative controls be added to Rancho Seco Technical Specifications. These administrative controls will prevent or reduce the likelihood of a Low Temperature Overpressure Incident.

Attachments I and II to this submittal are the No Significant Hazards Consideration Evaluation and the Description of Proposed Changes for Proposed Amendment 115.


Enclosed is a check for \$150.00 as required by 10 CFR 170.21, "Statement of Fees."

Should you have any questions concerning this proposal, please contact Mr. Ron W. Colombo at Rancho Seco Nuclear Generating Station.

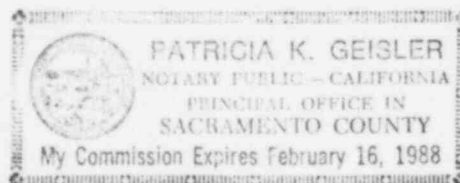

R. J. RODRIGUEZ
ASSISTANT GENERAL MANAGER,
NUCLEAR

Enclosures 2

Subscribed and sworn to before me
this 12th day of July, 1985


Notary Public

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Handwritten notes:
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w/chuck \$150.00
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ATTACHMENT I

NO SIGNIFICANT HAZARDS EVALUATION FOR PROPOSED AMENDMENT 115

Description of Amendment Request

Incidents identified as "pressure transients" have occurred in PWRs where the pressure limit in the Technical Specifications for a given temperature is exceeded. These incidents generally occur at relatively low temperatures where the reactor vessel material toughness is reduced from that which exists at normal operating temperature and where the primary system is completely filled with water. NRC letter dated June 29, 1984, Safety Evaluation for Low Temperature Overpressure Protection, has mandated that several administrative controls be added to Rancho Seco Technical Specifications. These administrative controls will prevent or reduce the likelihood of a Low Temperature Overpressure incident.

- C.1 A dual setpoint has been installed on the EMOV. The low setpoint is manually enabled at 350°F by positioning a key-operated switch in the Control Room. An alarm will sound in the Control Room if the system is not enabled or if the EMOV is not open when the RCS pressure drops below 450 psig.
- C.5 The circuit breakers for the four HPI MOVs shall be opened and tagged. Loop A: SFV-23809, SFV-23811. Loop B: HV-23801, SFV-23812.
- C.3 The makeup tank water level will be maintained less than the high level alarm at 86 inches.
- C.2 The pressurizer water level will be maintained at or below the high level alarm of 220 inches at system pressures above 100 psig and less than the high-high level alarm of 275 inches for pressures less than or equal to 100 psig. These restrictions will not be imposed during RCS draining and filling.
- C.4 The core flood tank discharge valves will be closed and the circuit breaker for the motor operators are racked out before the RCS pressure is decreased to 600 psig.
- C.6 When LTOP is required, only one HPI pump will be operated except during the transition of pumps that will supply reactor coolant pump seals and makeup flow for the RCS.
- C.7 The LTOP pilot actuated relief valve is tested during every plant cooldown to demonstrate its operational capability.

One of the administrative controls calls for the restriction of only having one HPI pump available while in the LTOP mode. During operation the dedicated makeup pump is required to provide makeup flow to the RCS and seal injection to the reactor coolant pumps. Should the makeup pump begin to degrade, it would be necessary to start an HPI pump so that makeup flow and seal injection is provided. This scenario would create a situation where, for a short period of time (10 - 15

seconds), the RCS would be subjected to a slight increase in flow due to two pump flow. This brief transition stage from starting the HPI pump and stopping the makeup pump would not significantly increase the pressurizer level and, therefore, not increase the likelihood of experiencing an overpressure incident.

B&W operating experience shows only one startup and cooldown overpressurization incident at low temperature. That incident was not caused by an equipment failure, but was due to a planned operator action required by a procedural error. B&W plants maintain a steam or gas volume in the pressurizer which retards the pressure increase and allows time for operators to take action to terminate the pressure increase prior to exceeding and limits. As a result of this unique operating procedure, B&W plants have a much lower potential for startup and cooldown overpressure transients than other PWRs.

The probability of an LTOP event occurring at Rancho Seco will be decreased from its already infrequent value as a result of actions taken for Cycle 7 operation. Plant Operating Procedures B.2, Plant Heatup and Startup, and B.4, Plant Shutdown and Cooldown, have been revised to include the aforementioned LTOP administrative controls. SPDS equipment will be available in the Control Room in order to provide the operator with immediate feedback on how the plant is responding during heatup and cooldown. Attached is ECN Number A-4887, Revision 2, which describes LTOP modifications that were completed in the 1985 refueling outage. Further LTOP modifications will be performed before Cycle 8 operation. These entail reconfiguring the makeup system so that RCS injection rates will be appropriately limited during plant heatup and cooldown. The total projected cost for all LTOP modifications is expected to be in excess of one million dollars which includes 6,000 engineering manhours.

As a result of starting up with a nonsolid primary system, overpressurization incidents at B&W plants have been infrequent. To further decrease the probability of such an event, plant Technical Specifications have been revised according to the guidelines of NRC letter dated June 29, 1984, Safety Evaluation for Low Temperature Overpressure Protection. All LTOP commitments have been fully addressed by updating the appropriate procedures, installing LTOP alarms and scheduling future makeup system modifications.

BASES FOR NO SIGNIFICANT HAZARDS CONSIDERATION

Determination

The Commission has provided guidance concerning the application of the standards for making a "No Significant Hazards Consideration" determination by providing certain examples (48 FR 14870). The district has reviewed these proposed changes with respect to the examples given and finds that the above technical specification revision can best be categorized by example (ii). Example (ii) states: "A change that constitutes an additional limitation, restriction, or control not presently included in the technical specifications; for example, a more stringent surveillance requirement."

The District believes that this example applies since this amendment deals with new operating restrictions for plant heatup and cooldown.

ATTACHMENT II

Description of Proposed Changes

1. Table of Contents, Page iii, Section 3.2; Added Low Temperature Overpressure Protection (LTOP) system specifications to this section.
2. Page 3-17, Section 3.2; Low Temperature Overpressure Protection (LTOP) system has been included in the section title.
3. Page 3-17, Section 3.2 Applicability; A discussion of how the new LTOP Specification 3.2.2 applies to RCS operation below 350°F has been added.
4. Page 3-17, Section 3.2 Objective; A statement has been added stating, "Specification 3.2.2 defines the necessary conditions for preventing an excessive overpressure transient to occur at low temperatures."
5. Page 3-17, Specification 3.2.1; Specifications 3.2.1, 3.2.2, and 3.2.3 have been renumbered to 3.2.1.1, 3.2.1.2, and 3.2.1.3 respectively.
6. Page 3-17a, Specification 3.2.2; This is an entirely new section which lists six Limiting Conditions for Operation for the LTOP System.
7. Pages 3-18 and 3-18a, Bases; The last four paragraphs are a new addition which describe the Bases for the LTOP System.
8. Page 4-8, Table 4.1-2; Item 13 and footnotes 1 and 2 were placed on the following page.
9. Page 4-8a, Table 4.1-2; Items 13-15 were placed on this page. Footnotes 1 and 2 from Amendment 7 were inadvertently retained on this page and have now been deleted. Footnotes 1 and 2 from Amendment 16 have been inserted along with footnote 3 from Proposed Amendment 115.
10. Page 4-7c, Table 4.1-1; LTOP Instrument Surveillance Requirements (Item 63) has been added to this table.