MAY 24 1983

DISTRIBUTION
Document Control 50-508
NRC PDR
L PDR
NSIC
PRC System

LB#3 Reading
JLee
AVietti
Jordan, IE
Taylor, IE
Attorney, OELD
ACRS (16)

Docket Nos.: 50-508

Mr. R. L. Ferguson
Managing Director
Washington Public Power Supply System
Post Office Box 968
Richland, Washington 99352

Dear Mr. Ferguson:

Subject: CE Owners Group Study on Depressurization and Decay Heat Removal Capability of CE Plants Without PORVs

The CE Owners Group (CEOG) and the NRC staff met in Bethesda, Maryland, on Wednesday, January 12, 1983 and discussed the status of the efforts to address the ACRS concern and staff questions on the CE plant without pressurizer PORVs. The meeting was structured to exchange information and suggestions between the CEOG and NRC staff. A number of calculations were presented by the CEOG and the staff. The staff agreed to send their comments to the CEOG and all applicants and licensees involved, including San Onofre Units 2 and 3, Waterford 3, CESSAR 80, WNP 3, and Palo Verde Units 1, 2 and 3. Enclosure 1 contains the staff comments in this regard.

During the April 4, 1983, Commission meeting on the above subject, the schedules currently proposed by the CEOG members were discussed. The Commission expressed concern that the schedules for the submittal of PRA and other plant specific information for Waterford (August 15, 1983) and Palo Verde (September 15, 1983) are excessive. As a result of the Commission's concern, we now intend to make our decision regarding the need for PORVs in the plants based on all information received by June 30, 1983. Thus, you should ensure that the necessary information has been submitted to the NRC staff by this date if you wish it to be considered in our decision-making process.

Sincerely,

Original signed by:
Thomas M. Novak

Thomas M. Novak, Assistant Director
for Licensing
Division of Licensing

8306080378 830524
PDR ADOCK 05000508
A PDR

Enclosure: As stated

cc: See next page

OFFICE	DL:LB#3	DL:LB#3	DL:AD/L				
SURNAME	AVietti/yt	GWKnighton	TMNovak				
DATE	5/13/83	5/12/83	5/20/83				

Mr. R. L. Ferguson
Managing Director
Washington Public Power Supply System
P. O. Box 968
3000 George Washington Way
Richland, Washington 99352

cc: Nicholas S. Reynolds, Esq.
DeBevoise & Liberman
1200 Seventeenth St., NW
Washington, DC 20036

G. E. Doupe, Esq.
Washington Public Power Supply System
3000 George Washington Way
Richland, Washington 99352

Nicholas D. Lewis, Chairman
Energy Facility Site Evaluation Council
820 East Fifth Avenue
Olympia, Washington 98505

Mr. Kenneth W. Cook
Washington Public Power Supply System
P. O. Box 1223
Elma, Washington 98541

Resident Inspector/WPPSS 3/5
c/o U.S. Nuclear Regulatory Commission
P. O. Box 545
Elma, Washington 98541

Regional Administrator - Region V
U.S. Nuclear Regulatory Commission
1450 Maria Lane
Suite 210
Walnut Creek, California 94596

Mr. Eugene Rosolie, Director
Coalition for Safe Power
410 Governor Building
408 Southwest Second Avenue
Portland, Oregon 97204

STAFF COMMENTS ON CE OWNERS GROUP STUDY ON DEPRESSURIZATION AND DECAY HEAT REMOVAL CAPABILITY OF CE PLANTS WITHOUT PORVs

1. The CEOG is calculating the ability of a hypotentical pressurizer PORV to mitigate a total LOFW accident by accomplishing feed and bleed. The PORV size, for this study, was arrived at based on a loss of all feedwater scenario where offsite power is retained, reactor trip occurs on low SG level, and the RCPs operate for 10 minutes before being manually tripped. This scenario leads to a PORV larger than the Dresser PORVs that are used in other PWR Plants. A PORV of this size may cause difficulties in controlling RCS pressure. The CEOG should not just consider this scenario when arriving at a PORV size and operator action time. The CE Owners Group should consider a spectrum of initiating LOFW events. The overall conclusion regarding the PORV should not be based on more, extremely limiting, scenario; but must consider other, perhaps more likely scenarios. If a large PORV is warranted to achieve feed and bleed, multiple smaller PORVs should be examined to replace the larger PORV for acceptable RCS pressure control.

2. The LOFW scenarios should evaluate the capability of the auxiliary pressurizer spray system for accident mitigation. A comparison should be made of the capabilities of the auxiliary pressurizer spray system to hypothetical PORV in terms of preventing or delaying core uncovery.

3. The SGTR calculations should be expanded to assess the systems performance, operator actions and overall offsite consequences, should the PORV be used early in the event to depressurize the RCS. The calculations presented at the meetings only showed an assessment of early use of the auxiliary pressurizer spray systems.

4. The SGTR calculations should be expanded to assess the systems performance, operator actions and overall offsite consequences, should there be multiple ruptures in both steam generators, and assuming the use of a PORV depressurizing the RCS to stop the leaks and to establish feed and bleed early in the event to stop secondary releases. The calculations presented at the 1/12/83 meeting only showed the use of the auxiliary pressurizer spray after a multiple SGTR accident.

5. There are uncertainties in the codes in terms of determining flow distribution in RCS. The recovery times are dependent on the hydraulic characteristic of the system. The effects on PORV size and operator action time should be addressed in the study.

6. The scenarios considered in the CEOG study should reflect the current emergency response guidelines rather than taking credit for depressurization concurrent with the RCS cooldown.

7. In the SGTR and LOFW studies the CEOG should investigate the effects of an early loss of RCP flow as a result of the loss of offsite power concurrent with either the initiating event or with the reactor and turbine trip.

8. CEOG study should consider a SGTR concurrent with a MSLB and analyze it with either the PORV or APS available for accident mitigation.

9. The SGTR calculations should consider a limiting single active failure concurrent with the accident to assess potential radiological consequences. For CE plants without block valves upstream of the SG atmospheric steam dump valves (ADVs), the consequences of a stuck open ADV should be examined since the current procedures instruct the operator to manually open these valves early in the event.