4/2/81

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	Docket Nos. 50-275 O.L.
PACIFIC GAS AND ELECTRIC COMPANY	)	50-323 O.L.
	)	
(Diablo Canyon Nuclear Power Plant, Unit Nos. 1 and 2)	)	(Low-Power Test Proceeding)

AFFIDAVITS OF JAMES D. SHIFFER AND JOHN B. HOCH

STATE OF CALIFORNIA)
) ss.
CITY AND COUNTY OF SAN FRANCISCO)

JAMES D. SHIFFER and JOHN B. HOCH , being duly sworn, depose and say:

My name is James D. Shiffer. I am Manager of Nuclear Plant Operations for Pacific Gas and Electric Company (PGandE). I hold a Masters of Science degree in Nuclear Engineering. I am a registered Mechanical Engineer and Nuclear Engineer in the State of California. I have twenty years of nuclear-related power plant experience, ten years of which have been directly related to the Diablo Canyon Power Plant.

My name is John B. Hoch. I am Manager of Nuclear Projects for Pacific Gas and Electric Company (PGandE). I hold a Bachelor of Science degree in Mechanical Engineering. I am a registered Mechanical Engineer and Nuclear Engineer in the State of California. I have over twenty-one years of power plant related experience of which ten years were nuclear related and eight years of which have been directly related to the Diablo Canyon Power Plant.

I. In the matters relating to Joint Intervenors Contention 11 of the ASLB Pre-hearing Conference Order of February 13, 1981;

we attest that:

1. To meet the requirement of item II.E.3.1 of NUREG-0737 PGandE has designed and installed modifications which allow the pressurizer heaters to be powered from the emergency power supply when offsite power is not available.

2. PGandE has considered the safety, regulatory and engineering aspects related to providing power to the pressurizer heaters from the emergency power supply.

3. PGandE's design for providing power to the pressurizer heaters from the emergency power supply is not in violation of GDC-17 since it does not impair the capability of the emergency power supply to fulfill its safety function of "...providing sufficient capacity and capability to assure that (1) specified acceptable fuel design limits and design conditions of the reactor coolant pressure boundary are not exceeded as a result of anticipated operational occurrences and (2) the core is cooled and containment integrity and other vital functions are maintained in the event of postulated accidents," as stated in GDC-17.

   Further, PGandE's design does not violate the GDC-17 requirement that "the onsite electric power supplies, including the batteries, and the onsite electrical distribution system, shall have sufficient independence, redundancy, and testability to perform their safety functions assuming a single failure." Consequently the addition of the pressurizer heaters to the emergency power supply at the time required for heater operation will not degrade the capacity, capability and reliability of these power supplies in violation of GDC-17.

4. The means to provide emergency power supply for the pressurizer heaters is consistent with the positions and clarifications in item II.E.3.1 of NUREG-0737.

5. Documentation which provides a description of the design and method of operation for supplying power to the pressurizer heaters from the emergency power supply has been provided to the NRC staff for review as required by item II.E.3.1 of NUREG-0737.

6. Operating procedures have been written and approved which instruct operating personnel in those operations required for supplying power to the pressurizer heaters from the emergency power supply when required. Further, operating personnel have been trained in the use of these procedures.

II. In the matters related to Joint Intervenors' Contention 13 of ASLB Prehearing Conference Order of February 13, 1981;

   we attest that:

1. Three types of instrumentation are presently installed to provide an indication to operating personnel of the approach of inadequate core cooling (ICC). These include the use of Wide Range Reactor Coolant Pressure, Wide Range Reactor Coolant Temperature, and Core Exit Thermocouples.

2. Operating procedures for the use of the presently installed instrumentation have been modified to incorporate the lessons learned from the TMI incident. These procedures have been approved and are used to instruct operators in the use of the

above ICC instrumentation. These procedures have been specificially prepared to provide instruction for operating personnel to determine the approach of ICC.

3. The ongoing operator training program has been modified and expanded to incorporate the lessons learned from the TMI incident. In particular, training has been included on the use of the presently available instruments and procedures to determine the approach of ICC.

4. The combination of available instruments, procedures, and training program provides the capability of unambigious, easy to interpret indication of and approach to ICC.

5. To fulfill the requirements of item II.F.2 of NUREG-0737, PGandE will install two other types of instrumentation to aid in determining the approach of ICC. This instrumentation includes 1) a Subcooling Margin Meter and 2) a Reactor Vessel Level Instrumentation System (RVLIS), both of which will be installed prior to fuel load. This additional instrumentation will supplement the presently available ICC instrumentation.

6. Procedures for use of the RVLIS and the Subcooling Margin Monitor will be incorporated into the Emergency Operating Procedures. Incorporation of RVLIS into these procedures will be based upon approved guidelines from Westinghouse.

7. Training for use of the procedures and instrumentation related to RVLIS and the Subcooling Margin Monitor will be implemented and completed prior to fuel load.

8. The combination of the above described instruments, procedures, and training will provide assurance that the requirements of item II.F.2 of NUREG-0737, for an unambiguous and easy to interpret indication of ICC, will be met.

John B. Hoch

JOHN B. HOCH

James D. Shiffer

JAMES D. SHIFFER

Subscribed and sworn to before
me this 2nd day of April, 1981

Theodora Cooke

Theodora Cooke, Notary Public in
and for the City and County of
San Francisco, State of California

My Commission expires January 28, 1985