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October 1, 1984

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Director, Office of Nuclear Reactor Regulation  
Attention: W. A. Paulson, Acting Chief  
Operating Reactors Branch No. 5  
Division of Licensing  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Gentlemen:

Subject: Docket No. 50-206  
TMI Action Item II.K.3.5, Automatic Trip  
of Reactor Coolant Pumps  
San Onofre Nuclear Generating Station  
Unit 1

- References:
1. Letter, M. O. Medford, SCE, to D. M. Crutchfield, NRC, TMI Action Item, II.K.3.5, Automatic Trip of Reactor Coolant Pumps, April 16, 1984
  2. Letter, D. G. Eisenhut, NRC, to All Licensees with Westinghouse (W) Designed Nuclear Steam Supply Systems (NSSS), Resolution of TMI Action Item II.K.3.5, "Automatic Trip of Reactor Coolant Pumps" (Generic Letter No. 83-10d), February 8, 1983

Reference 1 provided our schedule to respond to the requirements of Reference 2 regarding the need to establish Reactor Coolant Pump (RCP) trip criteria. We indicated that, based upon the previous schedular commitments of the NRC accepted Integrated Living Schedule (ILS), the required evaluation would be completed for San Onofre Unit 1 prior to startup from the Cycle 9 refueling outage, scheduled for approximately July 1, 1986. However, in response to a recent request by the NRC staff regarding our program to meet the subject requirement, the following information is provided.

Our review of the Westinghouse Owner's Group (WOG) effort has indicated that due to the San Onofre Unit 1 design configuration, the results of the WOG effort cannot be generically applied to San Onofre Unit 1. Because the RCP's are powered by the turbine generator, the current San Onofre Unit 1 design provides RCP trip with loss of turbine generator power. We also have an automatic RCP trip upon receipt of a Safety Injection Signal (SIS) which was installed, with NRC concurrence, in response to IE Bulletin 79-06C. However, Reference 2 indicated that the requirements set forth in that letter supersede the actions required in IE Bulletin 79-06C. Therefore, we are in the process of contracting with Westinghouse Electric Corporation to perform a site-specific evaluation for San Onofre Unit 1 to (1) determine if revisions

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are necessary to the Emergency Operating Instructions (EOI's) and (2) assess the continued adequacy of the currently installed RCP trip on SIS, in order to resolve the Automatic RCP Trip issue for San Onofre Unit 1.

Since San Onofre Unit 1 is in the unique situation of having an RCP trip with loss of turbine generator power, the Westinghouse evaluation will analyze the impact of the misdiagnosis of small break loss of coolant accidents (SBLOCA's) as steam generator tube ruptures (SGTR's), with a RCP restart and a subsequent RCP trip. The evaluation will review a spectrum of SBLOCA sizes, RCP restart times and RCP trip times, utilizing the WFLASH model to demonstrate that peak clad temperatures will remain within acceptable levels for the entire range of SBLOCA's, regardless of the assumed RCP status. In order to resolve concerns regarding the use of pressurizer power operated relief valves (PORV's) for primary system pressure control, Westinghouse will also evaluate the scenario of a stuck open pressurizer PORV with SGTR to assess the impact on core cooling. The evaluation of the stuck open PORV is intended to demonstrate that two phase natural circulation is maintained and core cooling is assured.

In accordance with the ILS, the above evaluations are scheduled to be completed prior to startup from the Cycle 9 refueling outage. Consistent with this schedule, it is anticipated that Westinghouse will complete the analyses by May 15, 1985. Based upon the need for our review of the results to determine if any EOI revision is necessary, we currently anticipate a final submittal to you by July 15, 1985. The final submittal will include the results of the Westinghouse effort, our plans regarding any EOI revisions, and the schedule for the revisions.

If you have any questions regarding our plan to resolve the RCP trip issue for San Onofre Unit 1, please let me know.

Very truly yours,

