

November 30, 2005

MEMORANDUM TO: David Terao, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

FROM: Jack N. Donohew, Senior Project Manager /RA/
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

SUBJECT: SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3 -
RE: CLARIFICATION OF RESPONSES TO NRC BULLETIN 2003-01
WITH RESPECT TO CANDIDATE OPERATOR ACTION (COA) 6
(TAC NOS. MB9610 AND MB9611)

The Nuclear Regulatory Commission (NRC) issued Bulletin 2003-01, "Potential Impact of Debris Blockage on Emergency Sump Recirculation at Pressurized-Water Reactors," on June 9, 2003. Southern California Edison (the licensee) has responded to the bulletin in letters dated August 1, 2003, October 13, 2004, and July 18 and September 8, 2005, for San Onofre Nuclear Generating Station, Units 2 and 3. In the September 8, 2005, letter, the licensee provided additional information that the NRC staff had requested in a telephone call on August 10, 2005, on the following COAs: COA 1a-CE, COA 1b, COA 2, COA 3-CE, COA 4, COA 5, COA 6, COA 7, COA 8-CE, COA 9-CE, COA 10, and COA 11.

By the attached email dated October 19, 2005, the licensee provided additional information on COA 6 to clarify that, although the portion of COA 6 relating to bypassing the refueling water storage tank (RWST) was not adopted, if such a bypass were needed to inject water it would be considered in responding to the loss-of-coolant accident. Also, the licensee identified that such additional bypass injection water could be taken from, for example, the spent fuel pool, the adjacent unit RWST, the condensate, the fire service, or from other available sources.

Docket Nos. 50-361 and 50-362

Attachment: Email Dated October 19, 2005

November 30, 2005

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EMAIL DATED OCTOBER 19, 2005

From: <rainsbjl@songs.sce.com>
To: <jnd@nrc.gov>
Date: 10/19/05 1:37PM
Subject: response re Containment Emergency Sump supplemental questions

Jack

Here is the revised response with the sources of water to the RWST identified

Jack

COA 6 stated: Inject More than One RWST Volume From a Refilled RWST or Bypassing the the RWST.

The portion of COA 6 relating to Injecting More Than One Refueling Water Storage Tank (RWST) Volume From a Refilled RWST was incorporated into SO23-12-11, "EOI Supporting Attachments," Attachment 14, "Recirculation Actuation Signal (RAS) Operation," Step 4a.

The portion of COA 6 relating to Bypassing the RWST was not adopted. Bypassing the RWST for alternate reactor coolant system (RCS) injection would involve a complex valve lineup during a LOCA event. The human failure probability in carrying out this complex task during a LOCA event would be high. Additionally, the distraction this activity represents during a LOCA would represent an error likely situation and should be avoided. The high human failure probability in performing this complex task, and its negative impact on operators' timely response to a LOCA event, together with the unlikelihood of emergency sump failure, would make RWTS bypass a net risk increase. However, if such a bypass were needed to inject water, it would be considered in responding to the LOCA.

Such additional bypass injection could take its source from, for example, the Spent Fuel Pool, adjacent unit RWST, Condensate, Fire service, or other available sources. This would provide water in containment to assist RCS cooling, and some to the failed RCS. As this is beyond Design Basis Accident design and extremely unlikely it would be undesirable, for reasons stated above, to explicitly include this response (and potential water sources) in any of the operators' response procedures.

CC: <rainsbjl@songs.sce.com>