



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064**

December 15, 1999

EA 99-242

Harold B. Ray, Executive Vice President
Southern California Edison Co.
San Onofre Nuclear Generating Station
P.O. Box 128
San Clemente, California 92674-0128

SUBJECT: NOTICE OF VIOLATION (NRC INSPECTION REPORT 50-361; 50-362/99-12)

Dear Mr. Ray:

This refers to Southern California Edison Co.'s (SCE) letter dated November 12, 1999, regarding an apparent violation described in NRC Inspection Report 99-12, issued October 15, 1999. The inspection report described an apparent violation related to the San Onofre Nuclear Generating Station (SONGS), Unit 3, emergency diesel generators (EDG) and battery chargers. Our October 15 letter stated that the NRC was considering escalated enforcement action and asked you to respond in writing to the apparent violation or request a predecisional enforcement conference. SCE chose to provide a written response.

The apparent violation involved aligning EDG 3G003 to a malfunctioning automatic voltage regulator, rendering the EDG inoperable, and subsequently removing from service a battery charger in the opposite safety train. Because the inoperability of the EDG was a condition that was not immediately recognized by operations personnel, actions required by the plant's Technical Specifications when the battery charger was removed from service were not taken. Specifically, on June 23, 1999, with EDG 3G003 inoperable and the battery charger in the opposite safety train out of service, Technical Specification 3.0.3 required the initiation of a plant shutdown.

SCE discovered the misalignment of the EDG on June 25, 1999, and promptly realigned it to an operable automatic voltage regulator. In investigating this incident, SCE identified the fact that during the time the EDG was inoperable, a battery charger in the opposite safety train had been removed from service, unknowingly placing the unit in a condition requiring entry into Technical Specification 3.0.3. SCE reported this information to the NRC in Licensee Event Report (LER) 99-006 on July 26, 1999.

In its November 12, 1999, response to the inspection report, SCE admitted the apparent violation, attributing it to an inadequate equipment status control program and inadequate knowledge of equipment status on the part of control room operators. Specifically, although SONGS operations personnel knew that automatic voltage regulator B was inoperable and had entered this information in the Equipment Deficiency Mode Restraint system, there was no indication of this at the EDG 3G003 local control panel, where the automatic voltage regulator selector switch is located. In addition, a control room operator had authorized the alignment of EDG 3G003 to the malfunctioning voltage regulator, and control room operators did not

recognize this condition during routine control board monitoring despite a warning tag on the control room board indication for the selected automatic voltage regulator.

Based on NRC's review of the information developed during the inspection and the information that you provided in your response to the inspection report, the NRC concludes that a violation of NRC requirements occurred. The violation is cited in the enclosed Notice of Violation, and the detailed circumstances surrounding it are described in the inspection report and in SCE's Licensee Event Report.

In evaluating the severity level of this violation, the NRC considered actual and potential safety consequences, including risk information. There were no actual consequences since the plant did not experience a loss of off-site power during the time EDG 3G003 and battery charger 3B001 were inoperable. SCE performed a quantitative risk analysis and determined that the incremental increase in risk from the time the plant should have entered Technical Specification 3.0.3 to the time EDG 3G003 was made operable was low, on the order of a $7.4E-7$ increase in core damage probability. SCE stated in its November 12, 1999, letter that the event was of "very small risk significance" and concluded that it would be appropriate to classify the violation at Severity Level IV and to treat it as a Non-Cited Violation.

In the event of a loss of off-site power, the EDGs provide electrical power to safety-related equipment to assure the plant is capable of achieving a safe shutdown; the battery chargers maintain station batteries fully charged so that there is a constant source of power to vital instrumentation and controls. Had there been a loss of off-site power with the plant in the configuration it was in on June 23, 1999, operators would have been challenged to maintain electrical power to safety-related equipment and to the battery chargers.

While the NRC agrees that the estimated, quantitative increase in risk was relatively low, it appears to be within the range of uncertainty for events that would be considered risk significant. In addition, the NRC uses risk information as an input, along with deterministic information, in reaching enforcement decisions. The fact remains that the plant was in a configuration which: 1) was not authorized by the Technical Specifications; 2) reduced defense in depth because important safety equipment in more than one safety train was inoperable; and 3) would have complicated recovery actions had a loss of off-site power occurred. Thus, the NRC has concluded that the violation is appropriately classified at Severity Level III in accordance with Supplement I, example C.1, of the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600.

In accordance with the Enforcement Policy, a civil penalty with a base value of \$55,000 is considered for a Severity Level III violation. Because your facility has been the subject of escalated enforcement action within the last 2 years,¹ the NRC considered whether credit was due for *Identification* and *Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. As SCE noted in its November 12, 1999, letter, SCE operations personnel discovered the misalignment of the EDG to a malfunctioning

¹On March 16, 1999, a Severity Level III violation was issued to SCE based on the emergency chilled water system being inoperable in excess of the allowed outage time on two different occasions (EA 98-563).

automatic voltage regulator and promptly corrected it. Additional corrective actions taken by SCE included revising procedures to place Equipment Deficiency Mode Restraint tags both in the control room and at local control panels; training operators on this event; and revising procedures to require a review of equipment tags more than 30 days old.

In light of SCE's discovery of this problem, and SCE's corrective actions which are described above, I have been authorized, after consultation with the Director, Office of Enforcement, not to propose a civil penalty in this case. However, significant violations in the future could result in a civil penalty.

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence, and the date when full compliance was achieved is already adequately addressed on the docket in Inspection Report 50-361; 50-362/99-12, in SCE's November 12 letter, and in LER 99-006 dated July 26, 1999. Therefore, you are not required to respond to this letter unless the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, you should follow the instructions specified in the enclosed Notice.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and any response you choose to submit will be placed in the NRC Public Document Room.

Sincerely,

/RA/

Ellis W. Merschoff
Regional Administrator

Docket Nos.: 50-361; 50-362
License Nos.: NPF-10; NPF-15

cc w/Enclosure:

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NOTICE OF VIOLATION

Southern California Edison Co.
San Onofre Nuclear Generating Station

Docket Nos. 50-361; 50-362
License Nos. NPF-10; NPF-15
EA 99-242

During an NRC inspection completed September 21, 1999, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the violation is listed below:

T.S. LCO 3.8.1.b. requires, in part, that two diesel generators each capable of supplying one train of the onsite Class 1E AC Electrical Power Distribution System be operable in Modes 1, 2, 3 and 4. With one diesel generator inoperable, Condition B of T.S. 3.8.1 requires the licensee to declare required features supported by the inoperable diesel generator (e.g., its associated battery charger) inoperable when its redundant required feature is inoperable (i.e., if the other battery charger becomes inoperable).

T.S. LCO 3.8.4 requires, in part, that the Train A, B, C and D DC electrical power subsystems (including battery chargers) be operable in Modes 1, 2, 3 and 4. T.S. 3.8.4 does not provide for more than one battery charger being inoperable.

T.S. LCO 3.0.3 states, in part, that when an LCO is not met and the associated actions are not met or an associated action is not provided (i.e., when more than one battery charger is inoperable), action shall be initiated within 1 hour to place the unit in Mode 3 within 7 hours, Mode 4 within 13 hours and Mode 5 within 37 hours.

Contrary to the above, on June 23, 1999, with SONGS Unit 3 operating in Mode 1, the licensee did not recognize a condition which rendered one diesel generator and more than one battery charger inoperable, and thus did not initiate the actions required by T.S. 3.0.3 to place the unit in Mode 3 within 7 hours and Mode 4 within 13 hours. Specifically, at 1:45 a.m. on June 23, 1999, following a maintenance activity, operators incorrectly aligned EDG 3G003 to Automatic Voltage Regulator (AVR) B, which was inoperable, rendering EDG 3G003 inoperable. At 5:45 a.m. on June 23, 1999, operators removed Train A Battery Charger 3B001 from service for planned maintenance. Because EDG 3G003 was inoperable (although not recognized as such), TS 3.8.1 Action B.2 required that Train B Battery Charger 3B002 be declared inoperable within 4 hours. Therefore, at 9:45 a.m. on June 23, 1999, Battery Chargers 3B001 and 3B002 were both inoperable, an unrecognized condition that required entry into T.S. 3.0.3. This condition existed until 12:00 a.m. on June 25, 1999, a period of 14 hours and 15 minutes, when Battery Charger 3B001 was returned to service. (01013)

This is a Severity Level III violation (Supplement I).

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence, and the date when full compliance was achieved is already adequately addressed on the docket in Inspection Report 50-361: 50-362/99-12, in SCE's November 12, 1999 letter, and in LER 99-006 dated July 27, 1999. However, you are required to submit a written statement or explanation pursuant to 10 CFR 2.201 if the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to respond, clearly mark your response as a "Reply

to a Notice of Violation," and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555 with a copy to the Regional Administrator, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011, and a copy to the NRC Resident Inspector at the SONGS facility within 30 days of the date of the letter transmitting this Notice of Violation (Notice).

If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

If you choose to respond, your response will be placed in the NRC Public Document Room (PDR). Therefore, to the extent possible, the response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

Dated this 15th day of December 1999