



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

June 28, 2012

Mr. Peter T. Dietrich  
Senior Vice President and Chief Nuclear Officer  
Southern California Edison Company  
San Onofre Nuclear Generating Station  
P.O. Box 128  
San Clemente, CA 92674-0128

SUBJECT: SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3 –  
CLOSEOUT OF NRC BULLETIN 2011-01, "MITIGATING STRATEGIES" (TAC  
NOS. ME6481 AND ME6482)

Dear Mr. Dietrich:

On May 11, 2011, the U.S. Nuclear Regulatory Commission (NRC) issued Bulletin 2011-01, "Mitigating Strategies" (Agencywide Documents Access and Management System (ADAMS) Accession No. ML111250360), to all holders of operating licenses for nuclear power reactors, except those that have permanently ceased operation and have certified that fuel has been removed from the reactor vessel. The purpose of the bulletin was to obtain a comprehensive verification that licensees' mitigating strategies to maintain or restore core cooling, spent fuel cooling, and containment following a large explosion or fire were compliant with Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.54(hh)(2).

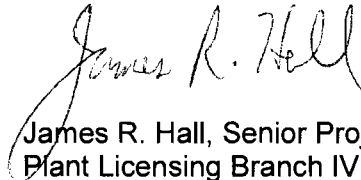
The bulletin required two sets of responses pursuant to the provisions of 10 CFR 50.54(f). By letters dated June 10 and July 7, 2011, and supplemented by letter dated December 28, 2011 (ADAMS Accession Nos. ML11168A078, ML11227A283, and ML11364A060, respectively), Southern California Edison Company, the licensee for San Onofre Nuclear Generating Station, Units 2 and 3, provided its responses to the bulletin. Portions of the letters dated July 7 and December 28, 2011, contain sensitive unclassified non-safeguards information (security-related) and have been withheld from public disclosure.

The NRC staff has reviewed the information submitted by the licensee and concludes that its response to the bulletin is acceptable. As summarized in the enclosure, the NRC staff verified that the licensee provided the information requested in the bulletin and no further information or actions under the bulletin are requested.

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If you have any questions, please contact me at 301-415-4032 or via e-mail at [Randy.Hall@nrc.gov](mailto:Randy.Hall@nrc.gov).

Sincerely,

A handwritten signature in black ink that reads "James R. Hall". The signature is written in a cursive style with a large, looping initial "J".

James R. Hall, Senior Project Manager  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-361 and 50-362

Enclosure:  
As stated

cc w/encl: Distribution via Listserv

SUMMARY OF REVIEW OF LICENSEE'S RESPONSES TO

NRC BULLETIN 2011-01, "MITIGATING STRATEGIES"

SOUTHERN CALIFORNIA EDISON

SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3

DOCKET NOS. 50-361-AND 50-362

1.0 INTRODUCTION

On May 11, 2011, the U.S. Nuclear Regulatory Commission (NRC) issued Bulletin 2011-01, "Mitigating Strategies" (Agencywide Documents Access and Management System (ADAMS) Accession No. ML111250360), to all holders of operating licenses for nuclear power reactors, except those that have permanently ceased operation and have certified that fuel has been removed from the reactor vessel. The bulletin required two sets of responses pursuant to the provisions of with Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.54(f). The first responses were due 30 days after issuance of the bulletin. By letter dated June 10, 2011 (ADAMS Accession No. ML11168A078), Southern California Edison (SCE, the licensee), provided its response to this first set of questions (first response) for San Onofre Nuclear Generating Station, Units 2 and 3 (SONGS, 2 and 3). The second responses were due 60 days after issuance of the bulletin. By letter dated July 7, 2011 (ADAMS Accession No. ML11227A283), the licensee provided its response to this second set of questions (second response). In response to an NRC staff request for additional information (RAI) dated November 30, 2011 (ADAMS Accession No. ML113220296), the licensee, by letter dated December 28, 2011 (ADAMS Accession No. ML11364A060), provided additional information. Portions of the letters dated July 7 and December 28, 2011, contain sensitive unclassified non-safeguards information (security-related) and have been withheld from public disclosure. As summarized below, the NRC staff has verified that the licensee provided the information requested in the bulletin.

2.0 BACKGROUND

On February 25, 2002, the NRC issued EA-02-026, "Order for Interim Safeguards and Security Compensatory Measures" (ICM Order) (ADAMS Accession No. ML020510635). Section B.5.b of the ICM Order required licensees to develop specific guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities using readily available resources (equipment and personnel) that can be effectively implemented under the circumstances associated with the loss of large areas of the plant due to explosions or fire.

By letter dated July 26, 2007 (ADAMS Accession No. ML072060010), the NRC staff issued its safety evaluation (SE) to document the final disposition of information submitted by the licensee regarding Section B.5.b of the ICM Order. Along with the SE, the staff issued a conforming license condition to incorporate the B.5.b mitigating strategies into the licensing basis.

Enclosure

On March 27, 2009, the NRC issued 10 CFR 50.54(hh)(2) as a new rule, in order to capture the B.5.b mitigating strategies and related license conditions as regulatory requirements for both current and future licensees. At that time, licensee compliance with the conforming license conditions was sufficient to demonstrate compliance with 10 CFR 50.54(hh)(2) (74 FR 13926; March 27, 2009) so no further actions were required on the part of current licensees.

### 3.0 30-DAY REQUEST

In order to confirm continued compliance with 10 CFR 50.54(hh)(2), the bulletin requested that licensees address the following two questions within 30 days of issuing the bulletin:

1. Is the equipment necessary to execute the mitigating strategies, as described in your submittals to the NRC, available and capable of performing its intended function?
2. Are the guidance and strategies implemented capable of being executed considering the current configuration of your facility and current staffing and skill levels of the staff?

The NRC staff reviewed the licensee's first response to determine if it had adequately addressed these questions.

#### 3.1 Question 1: Availability and Capability of Equipment

In its first response, the licensee confirmed that equipment it needs to execute the 10 CFR 50.54(hh)(2) mitigating strategies is available and capable of performing its intended function. The NRC staff verified that this confirmation covered equipment needed for each of the three phases of B.5.b mitigation strategies. Therefore, the NRC staff concludes that the licensee has adequately responded to Question 1.

#### 3.2 Question 2: Guidance and Strategies Can Be Executed

In its first response, the licensee confirmed that the guidance and strategies it has implemented for 10 CFR 50.54(hh)(2) are capable of being executed considering the current facility configuration, staffing levels, and staff skills. Since the licensee has considered its current facility configuration, staffing levels, and staff skills, and confirmed that it can execute its implemented guidance and strategies, the NRC staff concludes that the licensee has adequately responded to Question 2.

### 4.0 60-DAY REQUEST

The bulletin required a response to the following five questions within 60 days of issuing the bulletin:

1. Describe in detail the maintenance of equipment procured to support the strategies and guidance required by 10 CFR 50.54(hh)(2) in order to ensure that it is functional when needed.

2. Describe in detail the testing of equipment procured to support the strategies and guidance required by 10 CFR 50.54(hh)(2) in order to ensure that it will function when needed.
3. Describe in detail the controls for ensuring that the equipment is available when needed.
4. Describe in detail how configuration and guidance management is ensured so that strategies remain feasible.
5. Describe in detail how you ensure availability of offsite support.

The NRC staff reviewed licensee's submittals to determine if it had adequately addressed these questions. This was accomplished by verifying that the submittals listed equipment, training, and offsite resources that were relied upon to make conclusions in the July 26, 2007, SE or are commonly needed to implement the mitigating strategies.

#### 4.1 Questions 1 and 2: Maintenance and Testing of Equipment

Questions 1 and 2 of the 60-day request required licensees to describe in detail the maintenance and testing of equipment procured to support the strategies and guidance required by 10 CFR 50.54(hh)(2) in order to ensure that it is functional when needed. In its second response, the licensee listed the equipment used to support the 10 CFR 50.54(hh)(2) mitigating strategies which receives maintenance or testing. For each item, the licensee described the maintenance, initial testing, and periodic testing performed, including the frequency and basis for the maintenance or testing activity.

The NRC staff verified that the licensee listed equipment that typically requires maintenance or testing which was relied upon to make conclusions in the SE or commonly needed to implement the mitigating strategies. In its second response, the licensee stated that the portable pumps, fire truck, aerial truck, portable power supplies, hoses, spray nozzles, and communications equipment receive maintenance or testing. In its RAI response dated December 28, 2011, the licensee described how it ensures sufficient fuel for its fire truck, aerial truck, and portable pumps. The licensee also identified other items that support the mitigating strategies that receive maintenance or testing.

The NRC staff verified that the licensee described the process used for corrective actions. The licensee stated in its second response that its 10 CFR Part 50, Appendix B, corrective action program is used to document equipment failure, establish priorities, and perform trending, with the exception of vehicles, pagers, and security communications equipment. The licensee also described its corrective actions process for vehicles, pagers, and security communication systems.

Based on the above, the NRC staff concludes that the licensee has provided the information requested by Questions 1 and 2.

#### 4.2 Question 3: Controls on Equipment

Question 3 of the 60-day request required licensees to describe in detail the controls on equipment, such as inventory requirements, to ensure that the equipment is available when needed. A list of inventory deficiencies and associated corrective actions to prevent loss was also requested.

The NRC staff verified that the licensee described its process for ensuring that B.5.b equipment will be available when needed. In its second response, the licensee identified the equipment included in its inventory, the inventory frequency, storage requirements, and items verified. Items verified include proper quantity, location, and accessibility of equipment. The licensee also stated that at the time of its second response, there were no outstanding inventory deficiencies that would render the strategies not viable.

The NRC staff verified that the licensee inventoried equipment which was relied upon to make conclusions in the SE or commonly needed to implement the mitigating strategies. The second response specifically states that the following items are included in the inventory: fire truck, aerial truck, portable pumps, portable power supplies, hoses, communications equipment, spray nozzles, tools, instruments, and connectors. In its RAI response, the licensee described its inventory requirements for firefighter turnout gear. The licensee also identified other items that support the mitigating strategies that are inventoried.

Based on the above, the NRC staff concludes that the licensee has provided the information requested by Question 3.

#### 4.3 Question 4: Configuration and Guidance Management

Question 4 of the 60-day request required licensees to describe in detail how configuration and guidance management is assured so that the strategies remain feasible.

The NRC staff verified that licensee described its measures to evaluate plant configuration changes for their effects on the mitigating strategies and to ensure its procedures are current. In its second response, the licensee stated that plant configuration changes are procedurally evaluated against the licensing basis, which includes the B.5.b mitigating strategies. The licensee stated that the design change process requires a review of affected procedures and that procedural controls include appropriate regulatory references to ensure sustainability of the mitigating strategies.

The NRC staff verified that the licensee described measures it has taken to validate the procedures or guidelines developed to support the mitigating strategies. In its second response, the licensee stated that the "mitigating strategies were validated by walkdowns, engineering evaluations and/or table top reviews" and they were revalidated by walkdowns in 2011.

The NRC staff verified that the licensee described the training program implemented in support of the mitigating strategies and how its effectiveness is evaluated. In its second response, the licensee identified the training provided to its operations personnel, emergency response organization, fire department, and other personnel. The licensee also identified the frequency with which each type of training is provided and the methods for training evaluating.

Based on the above, the NRC staff concludes that the licensee has provided the information requested by Question 4.

#### 4.4 Question 5: Offsite Support

Question 5 of the 60-day request required licensees to describe in detail how offsite support availability is assured.

The NRC staff verified that licensee listed the offsite organizations it relies upon for emergency response, including a description of agreements and related training. The NRC staff compared the list of offsite organizations that the licensee provided in its second response with the information relied upon to make conclusions in the SE. The licensee stated that it maintains agreements with these offsite organizations, which are reviewed annually, and that these agreements were current at the time of its second response. The licensee also described the training and site familiarization it provides to these offsite organizations. The licensee stated that it reviewed its corrective action program and found no issues involving lapsed agreements related to offsite support for B.5.b events.

Based on the above, the NRC staff concludes that the licensee has provided the information requested by Question 5.

#### 5.0 CONCLUSION

As described above, the NRC staff has verified that the licensee has provided the information requested in Bulletin 2011-01. Specifically, the licensee responded to each of the questions in the bulletin as requested. The NRC staff concludes that the licensee has completed all of the requirements of the bulletin and no further information or actions under the bulletin are needed.

- 2 -

If you have any questions, please contact me at 301-415-4032 or via e-mail at [Randy.Hall@nrc.gov](mailto:Randy.Hall@nrc.gov).

Sincerely,

/RA/

James R. Hall, Senior Project Manager  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-361 and 50-362

Enclosure:  
As stated

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**ADAMS Accession No. ML12179A210**

**\*SE memo dated**

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