

10 CFR 50.54(f)

February 21, 2013

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
11555 Rockville Pike
Washington, DC 20555-0001

Subject: **Docket Nos. 50-361 and 50-362**
30-Day Response to Request for Additional Information Regarding the
Recommendation 9.3 Communications Assessment
San Onofre Nuclear Generating Station, Units 2 and 3

References:

1. "Communications Assessment Results Requested by NRC Letter, 'Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident,'" dated October 29, 2012
2. NRC Letter, Follow-up Letter on Technical Issues for Resolution Regarding Licensee Communication Submittals Associated with Near-Term Task Force Recommendation 9.3 (TAC No. ME7951), dated January 23, 2013, Accession No. ML13010A162

Dear Sir or Madam:

By letter dated January 23, 2013, the Nuclear Regulatory Commission (NRC) issued Reference 2. The enclosure to that letter identified eight generic technical issues needing resolution to determine the licensee's communications capability regarding a station black-out event. The Staff identified these eight generic issues to provide licensees with an opportunity to supplement the communication assessment submittals associated with Near-Term Task Force Recommendation 9.3. Southern California Edison (SCE) submitted the San Onofre Nuclear Generating Station (SONGS) Communications Assessment (Reference 1) on October 29, 2012. The NRC requested a response to the eight generic technical issues identified in Reference 2 within 30 days from the date of the letter.


Enclosure 2 of this letter supplements Reference 1 and provides SCE's response to the technical issues identified in Reference 2.

This letter makes a new regulatory commitment as well as revises an existing regulatory commitment to add additional clarification. The regulatory commitments are identified in Enclosure 1 of this letter.

If you have any questions or require additional information, please contact Mrs. Deborah Lindbeck, Emergency Planning Manager, at (949) 368-6643.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on 2/21/2013

By: 
Douglas R. Bauder
Site Vice President and Station Manager

Enclosures:

1. List of Regulatory Commitments
2. San Onofre Nuclear Generating Station Response To NRC Tier 1 Near-Term Task Force Recommendation 9.3 Communications Technical Issues For Resolution

cc: E. E. Collins, Regional Administrator, NRC Region IV
R. Hall, NRC Project Manager, San Onofre Units 2 and 3
G. G. Warnick, NRC Senior Resident Inspector, San Onofre Units 2 and 3
B. Benney, NRC Project Manager, San Onofre Units 2 and 3

Enclosure 1 List of Regulatory Commitments

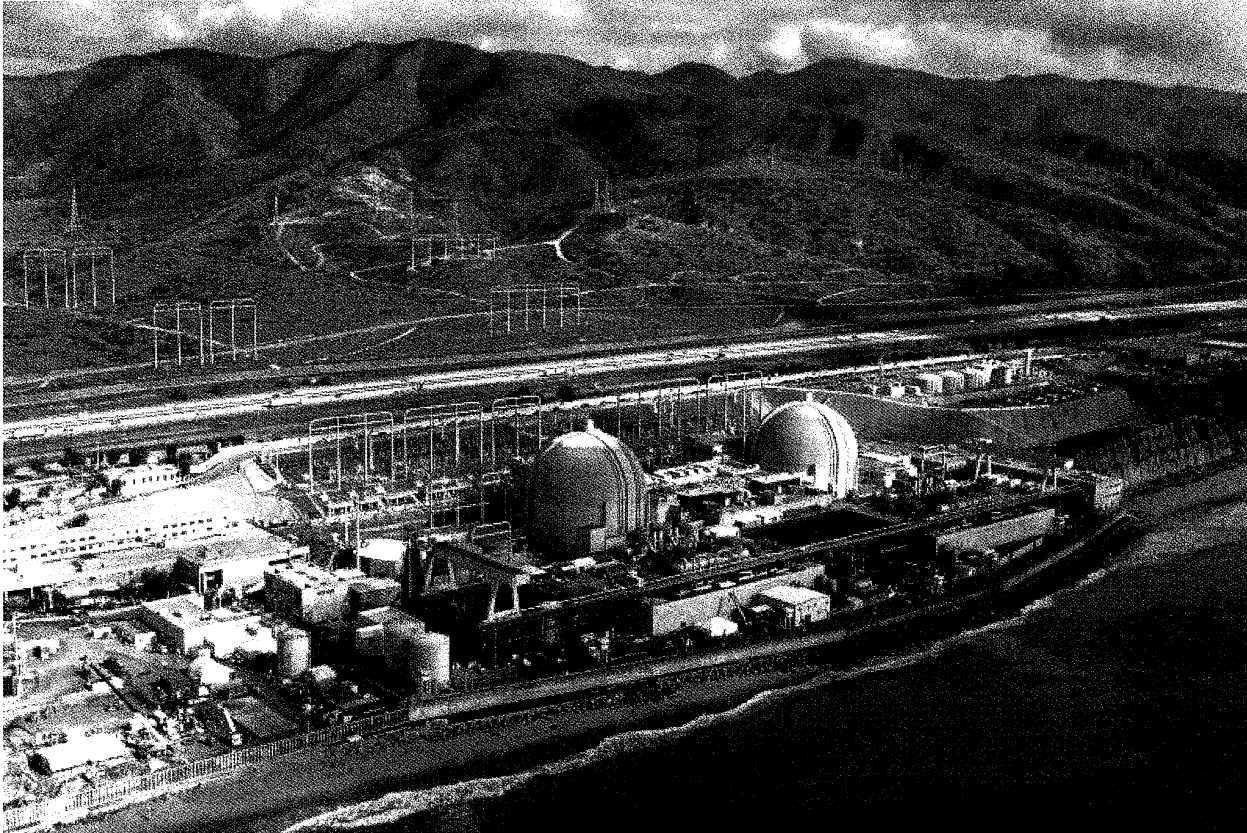
This table identifies actions discussed in this letter for which Southern California Edison commits to perform. Any other actions discussed in this submittal are described for the NRC's information and are not commitments.

Commitment	Action Type		Scheduled Due Date
	One-Time	Sustainable	
<i>New Commitment:</i> Deploy six extra batteries apiece for use by the satellite phones in the Technical Support Center (one phone) and the Operations Support Center (one phone) to support satellite phone operation for 24 hours.	X		6/30/13
⁽¹⁾ <i>Revised Commitment:</i> Evaluate the following item as identified in the San Onofre Nuclear Generating Station Communications Assessment and implement actions based upon the results of that evaluation. <ul style="list-style-type: none"> Establish programmatic controls for the potential communications enhancements including <u>procedures</u>, <u>fuel availability for 24-hours</u>, <u>maintenance</u>, <u>storage</u>, <u>testing</u>, <u>inventory checks</u> and training requirements. <p>Note that some of these specific items may be adjusted as evaluation under the FLEX initiative continues.</p>	X		12/31/2016

⁽¹⁾ The revised commitment above is a revision to Reference 1 Enclosure 1 Commitment 3 Bullet 5. The changes/clarifications are flagged for visibility.

Enclosure 2

SAN ONOFRE NUCLEAR GENERATING STATION RESPONSE TO NRC TIER 1 NEAR-TERM TASK FORCE RECOMMENDATION 9.3 COMMUNICATIONS TECHNICAL ISSUES FOR RESOLUTION



February 15, 2013

TABLE OF CONTENTS

Background	2
Generic Technical Issue 1	2
Generic Technical Issue 2	4
Generic Technical Issue 3	4
Generic Technical Issue 4	5
Generic Technical Issue 5	6
Generic Technical Issue 6	6
Generic Technical Issue 7	7
Generic Technical Issue 8	7

Background

On March 12, 2012, the Nuclear Regulatory Commission (NRC) issued a letter entitled, "Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident." In part, the request for information asked licensees to assess their current communications systems and equipment during a large scale natural event and loss of all alternating current power. On October 29, 2012, Southern California Edison (SCE) responded to the NRC's request for information regarding communications. On January 23, 2013, the NRC identified eight generic technical issues to be resolved prior to completing its review.

On January 30, 2013, SCE participated in a conference call (NRC discussion) with the NRC staff to clarify issues specific to the San Onofre Nuclear Generating Station communications submittal and received concurrence that no additional information was needed for Generic Technical Issues 2, 4, 5, and 8 and agreed on SCE's approach for Issues 1, 3, 6 and 7. The following contains SCE's response to the NRC's Request for Information, dated January 23, 2013.

Note: References to "existing commitments" refer to commitments identified in San Onofre's correspondence accompanying the submittal of San Onofre's Communications Assessment on October 29, 2012 (Reference 1).

Generic Technical Issue 1

The staff identified that licensees need to discuss how the power for the equipment analyzed is expected to be available, and how the planned communications enhancements are expected to be maintained. The following areas were identified:

A. A detailed description of how power will be maintained for (1) planned or potential enhancements to the communication links and (2) existing equipment analyzed to be available.

1. The number of replacement batteries expected to be needed for a 24-hour duration, per the Nuclear Energy Institute (NEI) 12-01 "Guideline for Assessing Beyond Design Basis Accident Response Staffing and Communications Capabilities".

San Onofre Response:

Existing equipment analyzed to be available:

San Onofre's existing sound powered phones do not require batteries and are expected to be available throughout the event (reference: Reference 1 Appendix B Section 3).

Potential Enhancements to Replacement Battery Supply:

San Onofre is currently evaluating an enhancement to the hand held radios (see Existing Commitment 3 Bullet 4). Specifically, SCE committed to evaluate the installation of portable generator(s) to ensure a continued power supply for in-plant satellite phone system, PAX/PBX, and 800 MHz repeaters. The hand held radios rely on the 800 MHz radio system, which will lose power

after the battery system discharges in approximately 30 minutes (reference: Reference 1 Section 11.1.6 and Appendix A Section 5.1.6). If a generator is installed to power the 800 MHz repeaters, the handheld radios will require 57 charged replacement batteries to operate for a 24 hour period without the need to charge additional batteries. This is based on 8 hours of talk time per battery, 3 batteries per radio, and 19 radios as identified in Reference 1 Appendix A, 4.1.6.

Handheld satellite phones were identified as a potential enhancement for the field/offsite monitoring teams and the Joint Information Center (JIC). The phones for these functions will reside in or in close proximity to team vehicles and will be equipped with charging capability as previously identified in the assessment (Reference 1, Section 11.1.3, 11.1.4, Appendix A 5.1.4, and Appendix B Section 3). Since power will be provided through the use of wall or vehicle chargers, satellite phones for the above communication links will not require replacement batteries.

2. Generator availability to charge batteries without offsite equipment for a duration of 24 hours.

San Onofre Response:

Potential Enhancement for Generators to Charge Batteries:

No enhancements are planned to install generators for the purpose of charging communication equipment batteries. As stated above, SCE committed to evaluate the installation of portable generator(s) to ensure a continued power supply for in-plant satellite phone system, PAX/PBX, and 800 MHz repeaters.

3. A description of how ancillary equipment supports operations for a 24-hour duration (e.g., adequacy of fuel supplies for the generators; and the minimum number of battery chargers expected to be necessary).

San Onofre Response:

Potential Enhancement to Required Ancillary Equipment:

Portable satellite phones are capable of 24-hour use without the need for charging stations (see responses to Generic Technical Issue 1, A-1 and 2, above).

The evaluation of hand held radio batteries as described above does not credit the use of charging stations (see Generic Technical Issue 1, A-1 above).

San Onofre committed to evaluate the installation of a portable generator and to evaluate associated programmatic controls (see Existing Commitment 3, Bullets 4 and 5). The associated evaluation of programmatic controls specifically identified addressing fuel needs. SCE will clarify the programmatic controls commitment to identify that fuel supplies support operations for a 24-hour duration (see revised commitment in Enclosure 1 of this submittal).

Generic Technical Issue 2

The use and function of the planned enhancements for the improvement of communications.

A. A description of the use of the planned enhancements.

- 1. A discussion of whether each planned enhancement identified is only to be used for maintaining the communication link identified, or if it is expected to be shared among other communication links.**
- 2. A general description of the planned enhancement and how the equipment will be integrated.**
- 3. The title and general description of the procedure that will be developed and used by plant personnel to describe protocols for shared usage of communication capabilities.**

San Onofre Response:

The potential enhancements identified (reference: Existing Commitment 3) will solely be used for maintaining the communication link and are not shared. In concurrence with the NRC discussion, no additional information is needed for this Generic Technical Issue response.

Generic Technical Issue 3

The protection of the new equipment purchased as a planned enhancement as well as the protection of existing communications equipment analyzed as being available.

A. A discussion of how the existing equipment analyzed to be available and enhancements to these communication links as well as associated ancillary equipment will be stored in a manner that is protective from a large scale natural event.

- 1. A description of pre-identified areas that are considered protective for existing equipment and whether new equipment will be stored in a similar location. The title and brief description of a procedure for new communications equipment storage is acceptable, if this procedure is planned to be developed in the future; or a statement that this will be completed in alignment with NRC Order EA-12-049.**

San Onofre Response:

Location of Existing Equipment Analyzed to be Available:

In Reference 1, Appendix B, Section 2, San Onofre identified the location of existing communications equipment. The credited locations meet the “reasonably protected” criteria. The “reasonably protected” criteria is identified in Reference 1, Section 7.0, 11.5.1, and Appendix B.

Storage of Potential Enhancements:

In Reference 1, San Onofre committed to evaluate programmatic controls (see Existing Commitment 3, Bullet 5). Based on the results of the potential enhancements evaluation, SCE will develop procedures for storage of the enhancements in alignment with NRC Order EA-12-049 (see revised commitment in Enclosure 1 of this submittal).

2. Equipment stored offsite should have an analysis of duration to set-up this equipment for use.

San Onofre Response:

Existing offsite equipment analyzed to be available does not require setup. Equipment being evaluated for installation off-site will be kept in an operating configuration which will not require setup for use (Reference 1, Appendix A Section 5.1 and 5.3). In concurrence with the NRC discussion, no additional information is needed for this Generic Technical Issue response.

3. The analysis demonstrates that the existing equipment that is expected to be available will be functional.

San Onofre Response:

SCE maintains emergency communications equipment under procedures guiding surveillance and testing as identified under Section 11.5.4 of Reference 1. In concurrence with the NRC discussion, no additional information is needed for this Generic Technical Issue response.

Generic Technical Issue 4

The programmatic controls for the use of the new equipment purchased as a planned enhancement.

A. A description of planned proceduralization and training for the use of these planned enhancements. It is acceptable to provide the title and description of a new procedure for new communications equipment.

- 1. A description of any credited manual actions and their procedures.**
- 2. A description of any maintenance for this equipment, including operability testing.**
- 3. A description of any periodic inventory checks.**
- 4. A description of planned staff training.**

San Onofre Response:

San Onofre's communications assessment (Reference 1) identifies potential enhancements. As part of the evaluation, San Onofre committed to establish programmatic controls (reference:

Existing Commitment 3, Bullet 5). SCE will clarify the programmatic controls commitment to identify inventory checks (see revised commitment in Enclosure 1 of this submittal).

Generic Technical Issue 5

A discussion on what assumptions are used as part of the Communications Assessment.

A. A description of the assumptions used for the submitted Communications Assessment Summary, and technical justification for any differences from the assumptions within NEI 12-01, Sections 2.2 “Assumptions Common To Both Assessments” and 2.4 “Assumptions For Communications Assessment”.

San Onofre Response:

San Onofre described the assumptions in its original communication assessment and took no exceptions to NEI 12-01 (Reference 1, Section 5.0). In concurrence with the NRC discussion, no additional information is needed for this Generic Technical Issue response.

Generic Technical Issue 6

How plant personnel will be notified in the event of a large scale natural event that causes a loss of all AC power.

A. A description and title of the procedure for emergency notification of essentially all plant staff within 30 minutes [If applicable to the licensee Emergency Plan].

San Onofre Response:

The public address system is adequate for notification of on-site personnel (in the plant) as identified in Reference 1, Section 11.2. The procedures that describe the use of the public address system are “SO23-VIII-30, Unit 2/3 Operations Leader Duties,” and “SO123-VIII-10, Emergency Coordinator Duties.”

B. A description and title of the procedure for notification of emergency response organization staff (i.e., self-activation) [If applicable].

San Onofre Response:

A plan for self-activation of the emergency response organization (ERO) staff is in place. In the event of a large scale natural disaster, SO123-XV-ERO-1, “Emergency Response Organization (ERO) Standards and Expectations” directs the ERO staff to report to their assigned emergency response facilities.

Generic Technical Issue 7

How communications will be maintained during the period of final implementation of the communication enhancements.

A. Identification and description of the interim actions that will be in place to bridge the gap until all final mitigation strategies being proceduralized are implemented. This also includes equipment protection.

San Onofre Response:

Until final implementation of the communications enhancements, communications will be maintained in the interim through the use of handheld satellite phones and sound powered telephones. Handheld satellite phones described in this section are not credited as part of our final communication enhancement strategies.

Sound powered phones are stored and maintained in accordance with Reference 1 Appendix B, Sections 1 and 2.

San Onofre currently maintains one handheld satellite phone in the Operational Support Center (OSC) and two handheld satellite phones in the Technical Support Center (TSC). These locations are both in the Control Building which is "reasonably protected" from seismic, flooding, and wind (Reference 1, Appendix B, Section 2). These phones are maintained and tested in accordance with San Onofre's procedure SO123-VIII-0.301, "Emergency Telecommunications Testing," and inventoried via San Onofre's procedure SO123-VIII-0.201, "Emergency Plan Equipment Surveillance Program (EPESP)". The phone numbers for use of the satellite phones are listed in the "Emergency Response Telephone Directory" (ERTD).

To ensure at least one handheld phone per facility is available for 24 hours after loss of charging capability, SCE will deploy 6 extra batteries apiece for use by the satellite phones in the TSC (one phone) and the OSC (one phone). Each battery is capable of 3.6 hours of talk time and 30 hours of standby time.

Generic Technical Issue 8

Descriptions are needed regarding how communications will be maintained with the on-site and in-plant response teams and offsite response organizations if their communication links are not expected to be available.

A. A timeline for when the evaluation for site specific improvements for on-site and in-plant response teams will be completed.

San Onofre Response:

Timelines for evaluation of site specific improvements for the on-site and in-plant response teams were provided to the NRC in our previous submittal and therefore, in concurrence with the NRC discussion, no additional information is needed for this Generic Technical Issue response (see Existing Commitment 3).

B. A discussion of the enhancements that are planned for the offsite response organization communication links.

San Onofre Response:

Potential enhancements for the offsite response organization (ORO) communication links are discussed in Reference 1, Section 11.1.1 and 11.3.

To maintain emergency communications that reside at ORO facilities, San Onofre committed to:

- Update its Emergency Response Telephone Directory (ERTD) to include the number for Marine Corps Base Camp Pendleton's satellite phone (see Existing Commitment 2).
- Evaluate the installation of indoor satellite phones (meaning the satellite phones are capable of operation indoors with an external antenna) for those offsite response organizations located within the 25-mile radius affected by the assumed loss of communications infrastructure (see Existing Commitment 3, Bullets 2, 6 and 7).

To maintain the ability to notify and communicate with off-site response organizations, San Onofre committed to evaluate the following (see Existing Commitment 3):

- Obtaining an in-plant satellite phone system and training on its use (reference: Existing Commitment 3 Bullet 1, 2, 3 and 6).
- Modifying the current in-plant phone (PAX) system to allow its use in the control building (reference: Existing Commitment 3 Bullet 3).
- Installing a portable generator with associated programmatic controls (reference: Existing Commitment 3 Bullets 4 and 5).

Therefore, in concurrence with the NRC discussion, no additional information is needed for this Generic Technical Issue response.