December 2014

This version of the Response to a Request for Additional Information and Supplement Regarding the Permanently Defueled Emergency Plan for the San Onofre Nuclear Generating Station Units 1, 2, and 3, and Independent Spent Fuel Storage Installation is the licensee's version submitted by Southern California Edison to the NRC on October 21, 2014, with certain redactions of sensitive information by the staff of the Nuclear Regulatory Commission (NRC) to allow release to the public. The material included within is classified as publicly available information.

The redactions were made to meet the NRC's policy regarding withholding of Personally Identifiable Information (PII).

The following information was redacted by the NRC staff:

Page E1 B-1 of Attachment B to Enclosure 1 of the submittal
Page E1 B-4 of Attachment B to Enclosure 1 of the submittal

SOUTHERN CALIFORNIA EDISON®
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Thomas J. Palmisano
Vice President & Chief Nuclear Officer

October 21, 2014

10 CFR 50.90

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Subject: **Docket No. 50-206, 50-361, 50-362, and 72-041**
Response to Request for Additional Information and Supplement Regarding Permanently Defueled Emergency Plan
Amendment Application Numbers 223, 267, and 252
San Onofre Nuclear Generating Station, Units 1, 2, and 3 and ISFSI

Reference: (1) Letter from Thomas J. Palmisano (SCE) to Document Control Desk (NRC) dated March 31, 2014; Subject: Docket Nos. 50-206, 50-361, 50-362, and 72-041, Amendment Application Numbers 223, 267, and 252, Permanently Defueled Emergency Plan, San Onofre Nuclear Generating Station, Units 1, 2, and 3, respectively, and Independent Spent Fuel Storage Installation (ADAMS Accession No. ML14092A314)

(2) Letter from T. J. Wengert (NRC) to T. J. Palmisano (SCE) dated September 18, 2014; Subject: San Onofre Nuclear Generating Station, Units 1, 2, and 3, and Independent Spent Fuel Storage Installation, Request for Additional Information RE: License Amendment Request for Permanently Defueled Emergency Plan (TAC Nos. MF3841, MF3842, and MF3843)

Dear Sir or Madam:

By letter dated March 31, 2014 (Reference 1), Southern California Edison (SCE) requested a License Amendment Request (LAR) for the proposed Permanently Defueled Emergency Plan (PDEP) for San Onofre Nuclear Generating Station (SONGS), Units 1, 2, 3, and Independent Spent Fuel Storage Installation (ISFSI).

By letter dated September 18, 2014 (Reference 2), the NRC provided a Request for Additional Information (RAI) related to the SCE LAR. The responses to the NRC RAIs are contained in Enclosure 1 to this letter. Some of the responses result in changes to the proposed PDEP submitted with Reference 1, and those changes are identified in the individual responses. In addition, a complete and revised PDEP, which includes all the changes described in the RAI responses, is provided as Enclosure 3 to this letter. In addition to the changes made as a result of the SCE RAI responses, one technical change (discussed in Enclosure 2 to this letter) and minor editorial, punctuation, and capitalization changes have also been made to the PDEP. Changes in the revised PDEP are identified by a revision bar on the right side of the page. The conclusions of the no significant hazards consideration and environmental considerations contained in Reference 1 are not affected by, and remain applicable to, this revised request.

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There are no new regulatory commitments in this submittal. Should you have any questions or require additional information, please contact Ms. Andrea Sterdis at (949) 368-9985.

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

Executed on 10/21/2014

Sincerely,

Enclosure 1: Response to NRC Request for Additional Information (RAI) Regarding Permanently Defueled Emergency Plan
Enclosure 2: Technical Change Discussion for PDEP, Part II, Section I.9 Revision
Enclosure 3: Modified Permanently Defueled Emergency Plan

cc: M. L. Dapas, Regional Administrator, NRC Region IV
T. J. Wengert, NRC Project Manager, SONGS Units 2 and 3
R. E. Lantz, NRC Region IV, San Onofre Units 2 and 3
G. G. Warnick, NRC Senior Resident Inspector, SONGS Units 2 and 3
S. Y. Hsu, California Department of Public Health, Radiologic Health Branch

ENCLOSURE 1

Response to NRC Request for Additional Information (RAI)

Regarding Permanently Defueled Emergency Plan

License Amendment Request

SONGS-RAI-01

The NRC staff's evaluation of the associated exemption request for SONGS dated March 31, 2014 (ADAMS Accession No. ML14092A332), will consider the ability of applicable design-basis accidents to exceed U. S. Environmental Protection Agency (EPA) Protective Action Guides (PAGs) at the site boundary. The statement in the third paragraph of Part I, Section B states, in part, "The analysis of potential radiological impact of an accident in a permanently defueled condition indicates...." It is not clear from the statement if this analysis applies to design-basis accidents only. Please clarify this sentence.

SCE Response:

The statement concerning the analysis of the potential radiological impact of an "accident" is meant to apply to "design basis" accidents only. The statement will be revised to clarify applicability to design basis accidents only.

PDEP changes in response to SONGS-RAI-01

The PDEP, Part 1, Section B, third paragraph is revised as follows:

> The analysis of the potential radiological impact of ~~an~~ design basis accidents in a permanently defueled condition indicates that any releases beyond the Site Boundary are limited to small fractions of the Environmental Protection Agency (EPA) Protective Action Guide (PAG) exposure levels, as detailed in the EPA's "Protective Action Guide and Planning Guidance for Radiological Incidents," Draft for Interim Use and Public Comment dated March 2013 (PAG Manual). Exposure levels, which warrant pre-planned response measures, are limited to onsite areas. For this reason, radiological emergency planning is focused onsite.

SONGS-RAI-02

Part I, Section C: "Scope"

(1) Please clarify whether the second sentence concerning "postulated accidents" is meant to address design-basis accidents only.

(2) The scope of the plan should also address/include provisions in the plan regarding notification of offsite government agencies concerning the classification of emergency events and the impact of the potential release of radioactive materials to inform decision making by offsite authorities on protective measures, if needed. Please revise the proposed plan, as necessary.

SCE Response:

(1) The phrase "postulated accidents" in the Part 1, Section C, first paragraph, second sentence ("Because there are no postulated accidents...") is referring to postulated "design basis" accidents only. The statement will be revised to clarify applicability to design basis accidents only.

(2) The PDEP will be revised to state that the PDEP provides for notification of offsite government agencies concerning the classification of emergency events, the impact of a potential release of radioactive materials and information on any protective measure, if needed.

PDEP changes in response to SONGS-RAI-02

The PDEP, Part 1, Section C, first paragraph is revised as follows:

> SONGS has developed this PDEP to respond to potential radiological emergencies at the station considering it's permanently shut down and defueled status. Because there are no postulated design basis accidents that would result in off-site dose consequences that are large enough to require off-site emergency planning, the overall scope of this plan delineates the actions necessary to safeguard onsite personnel and minimize damage to property.

The PDEP, Part 1, Section C, second paragraph is revised as follows:

> In addition to the description of activities and steps that can be implemented during a potential emergency, this PDEP also provides a general description of the steps taken to recover from an emergency situation. ~~It also describes the training, drills, planning, and coordination appropriate to maintain an adequate level of emergency preparedness.~~

The PDEP is revised by adding the following after the second paragraph of Part 1, Section C, of the PDEP:

Furthermore the PDEP provides for:

- Identification and evaluation of emergency situations
- Protective measures
- Communications
- Coordination and notification of governmental authorities
- Document review and control
- Emergency Preparedness assessment
- Training of all emergency personnel
- An exercise and drill program
- An emergency recovery phase

SONGS-RAI-03

The NRC staff's evaluation of the associated March 31, 2014, exemption request for SONGS will consider that, in the unlikely event of a beyond design-basis accident resulting in a radiological release due to a postulated zirconium fire, early offsite protective measures could be implemented. Section IV.B.1 of Appendix E to Part 50 of Title 10 of the *Code of Federal Regulations* (10 CFR) still requires that the licensee have the means to determine the magnitude of, and for continually assessing the impact of, the release of radioactive materials. Part II, Section A.1.b, "SONGS Concept of Operations," lists the functions provided by the Emergency Response Organization (ERO). There is no reference to any type of radiological monitoring or dose assessment. Please revise the plan to reflect ERO performance of these specific types of functions, or provide justification for not addressing these functions.

SCE Response:

The PDEP will be revised to include radiological monitoring and dose assessment in the list of functions provided by the ERO.

PDEP changes in response to SONGS-RAI-03

The PDEP, Part II, Section A.1.b is revised as follows:

A Assignment of Responsibility

1. Concept of Operations

b. SONGS Concept of Operations

During an emergency, the ERO replaces the normal station organization. The ERO provides the following functions:

- Control and operation of the station
- Mitigation of the emergency condition
- Protection of station personnel
- Emergency event classification
- Radiological monitoring and dose assessment
- Emergency notifications to Federal, State and local agencies
- Coordination of emergency support for fire fighting, security, and rescue/first aid

SONGS-RAI-04

Planning Standards cited in Part II reflect statements as exempted. For clarification purposes, please consider adding the phrase "as exempted" following planning standard number.

SCE Response:

The words "as exempted" will be added after the stated Planning Standard number (which is in a box at the beginning of each Part II section of the PDEP) for which a change was requested in the SONGS exemption requests. This applies to sections A, C, D, E, F, G and J

In addition, for clarity a reference to the NRC approval document will also be included in the PDEP (i.e., as exempted in Reference 11). Because the exemptions are not yet approved, a placeholder will be included in the PDEP, Reference section to identify the letter and date of the NRC Safety Evaluation that approved the exemptions. In addition, a request was originally submitted to exempt Section J Planning Standard (i.e., 50.47(b)(10)) in its entirety. However, based on the SCE response to an RAI concerning the exemption request, as well as SONGS-RAI-26, SCE has included a modified planning standard for Part II, Section J. For completeness, this revision to the PDEP (the inclusion of the modified planning standard) is shown in the below changes.

PDEP changes in response to SONGS-RAI-04

The following PDEP, Part II, Sections are revised as follows:

A. Assignment of Responsibility

Planning Standard 50.47(b)(1) (as exempted in Reference 11) – Primary responsibilities for emergency response by the nuclear facility licensee and by State and local organizations have been assigned, the emergency responsibilities of the various supporting organizations have been specifically established, and each principal response organization has staff to respond and to augment its initial response on a continuous basis.

C. Emergency Response Support and Resources

Planning Standard 50.47(b)(3) (as exempted in Reference 11) – Arrangements for requesting and effectively using assistance resources have been made and other organizations capable of augmenting the planned response have been identified.

D. Emergency Classification System

Planning Standard 50.47(b)(4) (as exempted in Reference 11) – A standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee.

E. Notification Methods and Procedures

Planning Standard 50.47(b)(5) (as exempted in Reference 11) – Procedures have been established for notification, by the licensee, of State and local response organizations and for notification of emergency personnel by all organizations; the content of initial and follow-up messages to response organizations has been established.

F. Emergency Communications

Planning Standard 50.47(b)(6) (as exempted in Reference 11) – Provisions exist for prompt communications among principal response organizations to emergency personnel.

G. Emergency Public Information

Planning Standard 50.47(b)(7) (as exempted in Reference 11) –The principal points of contact with the news media for dissemination of information during an emergency are established in advance, and procedures for coordinated dissemination of information to the public are established.

J. Protective Response

Planning Standard 50.47(b)(10) (as exempted in Reference 11) – A range of protective actions has been developed for emergency workers and the public. ~~An exemption for offsite protective actions was granted for this Planning Standard and associated elements.~~

The PDEP, Part III, Appendix I is revised to include the following reference:

11. NRC letter from [date and title of exemption approval letter].

SONGS-RAI-05

Part II, Section B references Appendix 3 for a listing of active and in-force letters of agreement. Please submit copies of applicable letters of agreement applicable to this proposed plan for NRC staff review.

SCE Response:

The PDEP, Part III, Appendix 3 lists the following organizations:

- Saddleback Memorial Medical Center, San Clemente Campus
- Mission Hospital
- Air Methods Corporation
- Commanding Officer, Marine Corps Base, Camp Pendleton
- Orange County Fire Authority

However, subsequent to the PDEP LAR submittal, SCE has decided to use Tri-City Medical Center in lieu of Saddleback Memorial Medical Center when the PDEP becomes effective. The other four organizations remain unchanged. The PDEP will be revised to reflect this change.

Copies of the letters of agreement that are active and in-force for the Organizations listed above (with Tri-City Medical Center replacing Saddleback Memorial Medical Center) are provided in Attachment A to this Enclosure.

PDEP changes in response to SONGS-RAI-05

The PDEP, Part III, Appendix 3 is revised as follows:

Organization/Agreement Type

~~Saddleback Memorial Medical Center, San Clemente Campus~~ Tri-City Medical Center

Mission Hospital

Air Methods Corporation

Commanding Officer, Marine Corps Base, Camp Pendleton

Orange County Fire Authority

SONGS-RAI-06

Since events classified at SONGS as an Alert are based on a radioactive release, please explain why the Radiation Protection Coordinator is part of the "supplemental" ERO, rather than required to report to the Command Center within 2 hours of declaration of an Alert.

SCE Response:

Based on this RAI, as well as SONGS-RAI-08, part b, SONGS-RAI-18, and SONGS-RAI-29, SCE has re-evaluated the need to maintain an individual qualified in radiation protection (RP) as part of the on-shift ERO. An RP Technician will be added to the on-shift organization to perform the tasks of radiological monitoring and to assist with determining radioactive release status. Shift personnel will be capable of assessing and classifying events without any assistance from the on-call or supplemental ERO.

The RP Coordinator will be changed from a supplemental responder to an augmented responder.

In addition, in developing the revision to the PDEP in response to this RAI, SCE noted that the title "Plant Operator" in Section B.1, Section B.2, Table B-1 and Section D.1 was not consistent with the title used in the Permanently Defueled Technical Specifications (PDTS) currently under review by the NRC. Therefore, the title will be revised to be consistent with the PDTS (i.e., Certified Operator). Furthermore, Table B-1 uses an undefined acronym (i.e., PAs). This acronym will be spelled out.

PDEP changes in response to SONGS-RAI-06

The PDEP, Part II, Section B.1 is revised as follows:

b. ~~Plant~~ Certified Operator, performs system and component manipulations and basic radiation surveys as needed.

The PDEP, Part II, Section B.1 is revised to add the following:

d. Radiation Protection Technician performs radiological assessment and radiation protection duties.

The PDEP, Part II, Section B.2, first paragraph is revised as follows:

The Shift Manager is the on-shift individual who declares the initial emergency classification and assumes the role of Emergency Director upon event declaration and has the authority and responsibility to immediately and unilaterally initiate any emergency actions. If the Shift Manager is unavailable or incapacitated for any reason the ~~Plant~~ Certified Operator will assume duties until another Shift Manager arrives.

The PDEP, Part II, Section B.5 is revised to add the following:

The Emergency Response Organization (ERO) is responsible for implementing the actions described in this Emergency Plan. The ERO is made up of shift personnel (described in section B.1), augmented by the Duty ERO Coordinator, Radiation Protection Coordinator and supplemental positions described below.

The Duty ERO Coordinator and Radiation Protection Coordinator shall report to the Command Center within 2 hours of declaration of an Alert classification or at the discretion of the Shift Manager for other events. The supplemental ERO is activated at the discretion of the Emergency Director and/or the Duty ERO Coordinator.

a. Duty ERO Coordinator

The Duty ERO Coordinator reports to the Emergency Director. The responsibilities of the Duty ERO Coordinator when implementing the PDEP include:

- Report to the Command Center and assist Emergency Director with assessment, mitigation and communications tasks.
- Assist the Emergency Director to supplement the emergency staff as deemed necessary.
- Coordinate supplemental personnel and resource to support for emergency response.

b. Radiation Protection Coordinator

The Radiation Protection Coordinator reports to the Duty ERO Coordinator. The responsibilities of the Radiation Protection Coordinator when implementing the PDEP include:

- Monitor personnel accumulated dose
- Advise the Emergency Director concerning Radiological EALs
- Augment the emergency staff as deemed necessary
- Establish Radiological Controls
- Perform Dose Assessment
- Establish and maintain communications as desired by the Emergency Director
- Maintain a record of event activities

NOTE: Above Radiation Protection Coordinator description moved up from supplemental. Remaining paragraphs renumbered.

The PDEP, Part II, Section B.5.c, second paragraph is revised to the following:

Additional RPTs are called as needed to support emergency response. They may be provided through a services contract.

The PDEP on-shift staffing table (Table B-1) and the Emergency Response Organization figure (Figure B-1) are revised as follows:

Note: This table also shows the addition of a note indicating which shift personnel perform mitigative actions in response to SONGS-RAI-08.

Table B-1: ERO Minimum Staffing Requirements

Functional Area	Major Tasks	Emergency Positions	Shift Staffing	Augmented Staffing
1. Plant Operations and Assessment of Operational Aspects	Command Center Staff	Shift Manager ** Certified ~~Plant~~ Operator **	1 1	
2. Emergency Direction and Control	Command and Control	Shift Manager (Emergency Director)	1(a)	
	ERO Coordination	Duty ERO Coordinator		1
3. Notification & Communication	Notification of Licensee	Shift Manager or Security	1(a)	
	Local/ State			
	Federal			
4. Radiological Assessment	Supervision	Radiation Protection Coordinator		~~(b)~~1
	Dose Assessment	Shift Manager or ~~Plant Operator~~ Shift RP Technician	1(a)	
	Onsite Surveys	Shift RP Technician ** ~~RP Support~~ RP Support	1	 (c)
	Offsite Surveys	RP Support		(c)(d)
	Chemistry	Chemistry Support		(c)
5. Plant System Engineering, Repair, and Corrective Actions	Repair and Corrective Actions	Technical Coordinator		(b)
		Certified ~~Plant~~ Operator Support Personnel	1(a)	 (c)
6. In-Plant ~~PAs~~ Protective Actions	Radiation Protection	~~Plant Operator~~ Shift RP Technician	1(a)	
7. Fire Fighting	--	Offsite fire fighting resources	(e)	
8. 1st Aid and Rescue	--	Shift Personnel and Outside fire resources	(e)	
9. Site Access Control and Accountability	Security & Accountability	Security Personnel	(f)	
		TOTAL:	3 ~~2~~	~~1~~2

** On-shift personnel required to direct or perform site-specific mitigation strategies required for a catastrophic loss in spent fuel pool inventory.

(a) Indicates concurrent or sequential functions performed by existing on-shift minimum staff.

(b) Supplemental positions called as needed based on event. May be contract personnel.

(c) Number of Corporate Support, Radiation Protection, Repair Personnel and Chemistry personnel called to support onsite response based on event. May be contract personnel.

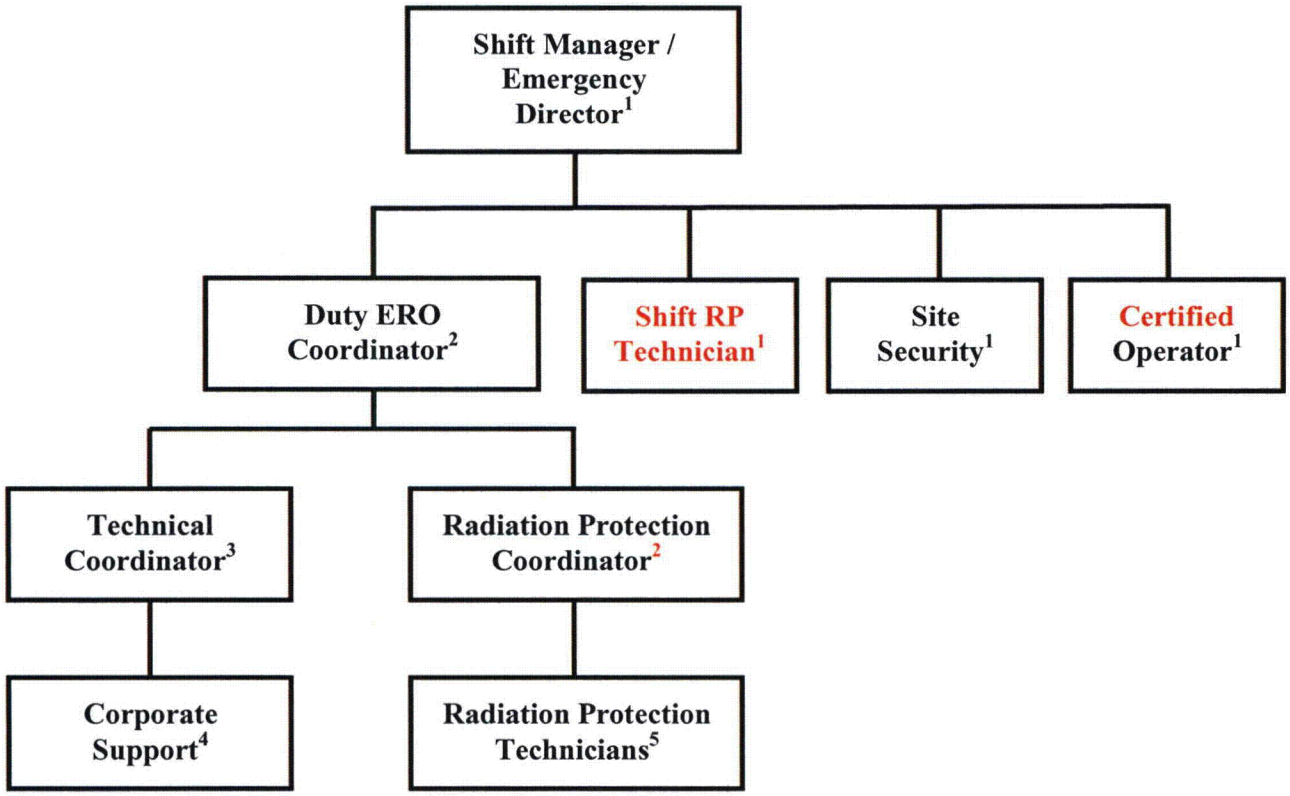
(d) Pre planning for offsite surveys not required due to the radiological consequences of design-basis accidents or other credible events not expected to exceed EPA Protective Action Guides. Survey can be performed with assistance from outside sources if deemed necessary.

(e) Fire Fighting and rescue operations are provided by agreement with offsite resources.

(f) Per the Station Security Plan.

Figure B-1: Emergency Response Organization

Note: The shading and shadowing effects and Notes 1 and 2 are being revised as identified in the response to SONGS-RAI-09. Those changes are also shown in the below figure.



NOTES

1. On-shift positions.
2. Augmented position that will respond within 2 hours when called.
3. Pre-Designated supplemental position, called as needed based on event.
4. Southern California Edison will provide or arrange for additional technical, maintenance and other support as needed to restore station to pre-event condition.
5. Additional Radiation Protection Technicians are called to support response as needed. They may be provided by an Emergency Services Contract. Shift personnel are trained as radiation workers and to perform limited RP duties until additional support is available.

The PDEP, Part II, Section D.1, first bullet is revised as follows:

- The 60-minute criterion will commence when plant instrumentation, plant alarms, computer displays, or incoming verbal reports corresponding to an EAL first become available to the individual in command and control (SM/ED) or ~~Plant~~ Certified Operator.

Note that Section D.1, first bullet is also revised in response to SONGS-RAI-14. Those changes are not shown in the revised bullet above.

SONGS-RAI-07

Part II, Section B.9 (Supplemental Emergency Assistance to ERO) states that agreements are in place for outside agencies to support Law Enforcement; however, Appendix 3 does not provide a reference for law enforcement support. Please confirm that any letters of agreement for law enforcement support are covered under the SONGS Permanently Defueled Security Plan and verify under what program or plant procedures, law enforcement and other offsite support (firefighting, medical assistance, etc.) would be coordinated in response to a security event at the SONGS site.

SCE Response:

SONGS remains committed to the Physical Security Plan (PSP) approved by the NRC. SONGS PSP Section 8, Local Law Enforcement Liaison, outlines the requirements for law enforcement support. This section references the SONGS Law Enforcement Response Plan (LERP), which clearly outlines the roles and responsibilities for first responding agencies. The roles and responsibilities include the various support needs by agency, communication requirements, command and control structures, equipment, and response times. The LERP is designated as Safeguards Information. SCE confirmed there is written documentation of agreement with the following law enforcement agencies and they have provided their own duties and responsibilities for inclusion into the LERP:

California State Parks
California Highway Patrol
San Diego County Sheriff
Orange County Sheriff
Federal Bureau of Investigation
Marine Corps Provost Marshall

The LERP was reviewed in July of 2014 as part of an annual Routine Maintenance Order (RMO). Changes were made based on the July review as well as a comprehensive review by law enforcement agencies conducted in December of 2013. The July 2014 revision included new evacuation routes through Marine Corps Base Camp Pendleton due to the completion of new structures, e.g., hospital and commissary.

Station procedure SO123-IV-7.1, Security Communications Systems, Section 6.13, Local Law Enforcement Agency (LLEA) Communications, states the following:

6.13.1 When a Security Event occurs, then the SSS [Security Shift Supervisor], or designee, directs an Alarm Station Operator in SAS [Secondary Alarm Station] to perform the following:

1 Contact the LLEA.
2 Coordinate situation intelligence concerning the Security Event with responding LLEA response personnel.
3 Monitor LLEA radio transmissions while the LLEA is in transit to the Site.
4 Initiate SE(123) 71-1, Security Notification Checklist.

The primary emergency services off-site organization is Camp Pendleton Fire Department. During any event that involves an injury or fire beyond what SONGS Fire Brigade is capable of controlling, offsite assistance would be requested by the Shift Manager. Currently a memorandum of understanding is on file from Camp Pendleton Fire Department (provided in Attachment A) that outlines agreements during fires and medical emergencies. A new agreement was created for the permanently defueled status of the station and is currently out for signature. Procedure SO123-XIII-4.10, San Onofre Fire Brigade Program, Section 6.8, Off Site Assistance, states:

6.8.1 A dedicated ring down line (also known as the "orange phone") is maintained from the site to the Camp Pendleton Fire Department (CPFD) dispatch center who provides medical and fire emergency services. (This line is verified on a daily basis.)

OSM-911 (Operations 911 Response 2) outlines the steps necessary for different possible emergencies onsite. Each fire and medical emergency states:

As soon as the need for Offsite Assistance is recognized:

- IMMEDIATELY Call the Camp Pendleton Fire Department on the ORANGE phone directly
- Notify Security and Radiation Protection that outside agencies are responding
- IF additional assistance is required from outside agencies, THEN coordinate with the Camp Pendleton Fire Department
- IF conditions change, THEN keep Offsite Agencies updated

PDEP changes in response to SONGS-RAI-07

None

SONGS-RAI-08

Under Table B-1, "ERO Minimum Staffing Requirements," please respond to the following:

a. Has SONGS performed an on-shift analysis for ERO functions to ensure sufficient personnel will be able to respond to the limiting event, which is a catastrophic loss of spent fuel pool (SFP) water inventory using the minimum shift staffing as indicated in the Table B-1? The response should include:

   - SFP mitigation strategies as described in SCE's letter dated August 26, 2013 (ADAMS Accession No. ML13240A130), and
   - All functional areas of the Table B-1 to address any potential collateral duties.

b. What personnel are assigned on-shift to monitor personnel exposure and determine if radiological conditions exist that may preclude access to the SFP to perform mitigative actions, if required?

c. Footnotes (b) and (c) state, in part, that "May be contract personnel." Will these personnel be initially trained to perform required function(s), and will they maintain the training qualifications as provided in Section O?

d. Footnote (d) states, in part, that "Survey can be performed with assistance from outside sources if deemed necessary." Who specifically would be performing these surveys in the unlikely event that there is a radiological release, and in what timeframe would these outside sources be available to perform surveys?

e. Footnote (e) states, "Fire Fighting and rescue operations are provided by agreement with offsite resources." What on-shift capability is there to perform firefighting, first aid, and rescue activities? Are these measures considered under the SONGS Mitigation Strategy License Condition?

SCE Response:

a. SONGS has performed an ERO on-shift staffing analysis, addressing SFP mitigating strategies as described in SCE's letter dated August 26, 2013 (as updated on January 2, 2014), including review of collateral duties for all functional areas of Table B-1.

The specific event scenario utilized for the staffing analysis involves a catastrophic loss of Unit 3 SFP level:

- All SFP cooling is lost
- All onsite installed sources of SFP makeup water flow (e.g., pumps) have been lost
- Onsite installed sources (i.e., tanks) of SFP makeup water are unaffected
- The loss of Unit 3 SFP level results in radiation levels that pose immediate overexposure risk to any personnel entering the Unit 3 SFP operating floor

- The flow path utilized for this beyond design-basis mitigation strategy utilizes one of two available onsite portable engine-driven pumps through deployed hoses and installed seismic fire riser piping (and associated valves) to a water spray monitor (i.e., spray nozzle) deployed at the Unit 3 SFP room door that has been opened. Water is then sprayed over the operating deck and into the SFP (Reference procedure SO23-V-5.100, "SONGS B.5.b Mitigation Strategies").
- While many flexible flow paths are available, this path was chosen as the most likely to be utilized in the assumed event conditions. Other potential flow paths are expected to have similar participant tasking

In addition to the scenario described above, a separate case study was performed to validate that the minimum on-shift PDEP staff can perform mitigation efforts in the event that the second SFP (Unit 2 and Unit 3) is also affected by a catastrophic loss of water inventory. For this case study redundant equipment is available to perform mitigation efforts on both SFPs.

The staffing analysis and case study yielded the following results:

- Notification of off-site agencies occurred 25 minutes following initiation of the event (T + 25)
- Addition of water to the first SFP (Unit 3) occurred approximately 55 minutes following initiation of the event (T + 55)
- Addition of water to the second SFP (Unit 2) occurred approximately 90 minutes following initiation of the event (T + 90)
- There were no unresolved task overlaps or over-burdening conditions as described in NEI 10-05 "Assessment of On-Shift Emergency Response Organization Staffing and Capability"

Mitigation times for a single SFP event were field tested on September 25, 2014 and documented within the SONGS work tracking system. During field verification potential interferences to mitigation response were discovered and resolved.

The successful implementation of the mitigating strategy was achieved utilizing only the on-shift staffing (Shift Manager, Certified Operator and Shift RP Technician) required by the proposed SONGS PDEP (as revised by the changes identified in this letter) currently undergoing NRC review. Specifically, the PDEP minimum on-shift staff (Shift Manager, Certified Operator and Shift RP Technician) is tasked with implementation of the mitigating strategy. The Shift Manager remains in the Command Center. The Certified Operator and the Shift RP Technician complete all in-plant mitigating actions. In addition to these credited on-shift staff positions, a second on-shift Certified Operator (not credited in the staffing analysis) is required by the proposed SONGS Permanently Defueled Technical Specifications currently undergoing NRC review and is available to assist in the implementation of the mitigating strategy tasks. The staffing analysis validates acceptable implementation without crediting the second on-shift Certified Operator. Successful implementation of the mitigating strategy does not require mobilization of off-site resources utilization of other potential SONGS on-shift personnel resources (e.g., Security Officers in non-response positions).

These mitigation strategies are implemented with site procedures. The primary procedure is SO23-V-5.100, which includes direction for command and control, onsite coordination, offsite communication, SFP makeup via internal strategy and SFP makeup via external strategy.

Table B.1 will also be modified to reflect the positions performing the mitigating strategy.

b. As discussed in the SCE response to SONGS-RAI-06, an RP Technician will be added to the required on-shift staffing organization described in Section B.1 and Table B-1. The Shift RP Technician is qualified to monitor personnel exposure and determine if radiological conditions exist that may preclude access to the SFP area to perform mitigating actions.

c. The SONGS staff will include personnel with the skills needed to maintain the systems and components required to keep stored spent fuel safe. The staff will perform initial actions in the event of an accident and outside resources may be called on to assist in maintaining or restoring systems.

   If utilized, contract personnel who are filling staff positions will receive initial training consistent with their roles and responsibilities and training qualifications will be maintained as described in Section O of the PDEP. Training requirements will be specified within an Emergency Preparedness Program Training Procedure. This is consistent with industry practices.

   In addition, Section O.2 of the PDEP will be revised to allow the use of just-in-time training for outside support, if the outside support personnel have not previously received initial task-specific training.

d. State agencies maintain independent capability to perform surveys and dose assessments. While no formal agreement exists with the state agencies regarding the response time of this contingency resource, historically their response time has been consistent with the augmentation time of the Station's Emergency Response Organization.

e. On-shift firefighting capability will consist of an Incipient Fire Brigade. The Incipient Fire Brigade will consist of three on-shift personnel, who will have no concurrent ERO duties.

   Three on-shift personnel will be trained to provide first aid (Shift Manager, Certified Operator and Shift RP Technician). This requirement will be controlled by the Emergency Preparedness Program Training procedure (SO123-VIII-ADMIN-2). Part II, Section L.2 of the PDEP establishes the requirements for onsite first aid capabilities.

   No on-shift rescue capability will be maintained. Rescue capabilities are provided by the Camp Pendleton Fire Department (as described in the PDEP, Part II Section A.1.c). Because the SONGS site is located within Camp Pendleton, traffic is not an issue and response times for the Camp Pendleton Fire Department are typically 25 minutes to 30 minutes, based on previous drills and actual events.

   These measures were reviewed relative to the Mitigation Strategy License Condition in a staffing study that is consistent with the guidance provided in NEI-10-05. The review concluded that these measures support the Mitigation Strategy License Condition.

PDEP changes in response to SONGS-RAI-08

a. The PDEP, Part II, Section B.1 is revised by adding the following as the second paragraph of section:

   An on-shift analysis was performed for ERO functions to ensure sufficient personnel will be able to respond to the limiting event, a catastrophic loss of spent fuel pool (SFP) water inventory.

   Changes to Table B-1 to reflect the positions performing the mitigating strategy are shown in the response to SONGS-RAI-06.

b. No additional changes to PDEP for this item. The changes to the RP Technician requirements in the PDEP are shown in the response to SONGS-RAI-06.

c. The PDEP, Section O.2 is revised by adding the following paragraph after the first paragraph of the section.

   Outside contracted personnel who are brought in to assist with mitigating or recovery actions who have not received emergency plan training will receive just-in-time training prior to performing response actions.

d. None

e. None

SONGS-RAI-09

Note (1) under Figure B-1, "Emergency Response Organization," states, "Shaded boxes indicate shift positions." There are no shaded boxes on this figure. Please revise as required to clarify or provide basis for note.

SCE Response:

The boxes whose titles are annotated with Note 1 are the boxes that are supposed to be "shaded." However, the phrase "Shaded boxes indicate" is redundant, since the correct titles in the boxes are annotated with Note (1) (in superscript). Therefore, Note 1 will be revised to not reference shading and simply state "On-shift positions." Note 1 will be referenced in the Figure for the four on-shift positions (three that were included in the originally submitted PDEP and the fourth added by the SCE response to SONGS-RAI-06) by a superscript 1 after each position, and no shading will be used for the associated boxes.

In addition, Note 2 identifies that the augmented positions are identified by "shadowed boxes." This Note will also be revised to not reference shadowing and the shadowing will be removed from the associated boxes in the Figure.

PDEP changes in response to SONGS-RAI-09

The SONGS PDEP Figure B-1 is revised to delete the shading and shadowing effects and Notes 1 and 2 are revised as follows:

1. ~~Shaded boxes indicate~~ On-~~S~~shift positions.

2. ~~Shadowed box indicates~~ a~~A~~ugmented position that will respond within 2 hours when called.

Note that Figure B-1 is also revised in response to SONGS-RAI-06.

SONGS-RAI-10

Note (4) under Figure B-1 states, "Southern California Edison will provide or arrange for additional technical, maintenance and other support as needed to restore station to pre-event condition." Please describe what arrangements are or will be in place to expedite support for these functions. In addition, in what timeframe would outside sources be expected to be available to perform these function(s)?

SCE Response:

Initially the Shift Manager/Emergency Director coordinates all response activities. SONGS maintains an Emergency Telephone Directory (as described in Part II, Section P.10 of the PDEP) listing resources that may be called to provide support. This is consistent with how additional support is called out and coordinated for an operating station.

When the ERO is activated, one of the primary functions of the Duty ERO Coordinator is to coordinate assistance from either Southern California Edison (SCE) or outside resources (as described in Part II, Section B.5 of the PDEP).

As a large electrical utility, SCE has many resources that can be utilized to support emergency response at SONGS, including personnel, equipment and administrative procedures to contract outside assistance. The company has procedures in place and routinely responds to casualty events caused by weather, wild fires, and other natural events.

SONGS requires an Emergency Response clause in major Supplemental Provider Purchase Orders. This ensures contractors who are performing day to day tasks onsite are aware that they may be called to assist in an emergency.

SCE resources can reasonably be expected to arrive at the site within a few hours from the time they are contacted.

PDEP changes in response to SONGS-RAI-10

None

SONGS-RAI-11

Note (5) under Figure B-1 states, "They may be provided by an Emergency Services Contract." Will these personnel be initially trained and maintain training qualifications as provided in Section O? In addition, in what timeframe would outside sources be expected to be available to perform radiation protection function(s)?

SCE Response:

If non-SCE RP Technicians are contracted to support day to day activities at the site, they would receive training as specified on plant access and procedures. If additional technicians are needed for emergency response and these additional technicians are outside support personnel who have not previously received initial training, they would receive just in time training prior to being utilized. This is consistent with current industry practices at operating stations.

The SONGS staff will include a minimum number of personnel with the skills needed to maintain the systems and components necessary for safe storage of spent fuel. The normal SONGS staff will perform initial actions in the event of an accident and outside resources may be called on to assist in maintaining or restoring systems.

The PDEP will be revised to indicate the use of just-in-time training for outside support. This is identified in the SCE response to SONGS-RAI-08, part c.

The addition of an on-shift RP Technician (as identified in the SCE response to SONGS-RAI-06) ensures that radiation protection functions are immediately available to support emergency response. Augmented support can be obtained from other utilities or contracted RP services within a reasonably short period of time, i.e., they can be expected to arrive within 24 hours.

PDEP changes in response to SONGS-RAI-11

No additional changes to PDEP for this item. The changes related to the use of just-in-time training for outside support are shown in the response to SONGS-RAI-08, item c

SONGS-RAI-12

Part II, Section C.2.a states, "If a near site Incident Command Post (ICP) has been established for a large scale or hostile action event, SONGS will send liaisons to the ICP to provide specific information relative to the event and assist as needed."

a. Please describe whether SONGS has discussed this response with respective offsite response organizations, based on the decommissioning status of the site, and whether the dispatching of liaisons and coordination with offsite organizations at the near-site ICP is contained in established plant procedures. In addition, was the dispatching of these liaisons considered in the on-shift staffing analysis discussed in SONGS-RAI-08(a)?

b. Please provide further details identifying assistance expected from appropriate State, local, and Federal agencies with responsibilities for coping with emergencies, including an act that includes the use of violent force to destroy equipment, take hostages, and/or intimidate to achieve an end. This may include an attack by air, land, or water using guns, explosives, projectiles, vehicles, or other devices to deliver destructive force.

SCE Response:

SONGS utilizes a Law Enforcement Response Plan (LERP) in accordance with 10 CFR 73.55 (k)(9). The LERP outlines the roles and responsibilities for first responding agencies and SONGS Security, and includes the requirement to send liaisons to the ICP, which is located on Marine Corps Base Camp Pendleton, to provide coordination with offsite organizations. The LERP includes the various support needs by agency, communications requirements, command and control structures, equipment, and response times for coping with emergencies, including hostile actions. The specific details of assistance expected is outlined in the LERP, which is designated as Safeguards Information.

Liaisons sent to the ICP will be from the Supplemental ERO. As such, the dispatching of these liaisons was not considered in the ERO on-shift staffing analysis. The PDEP wording will be changed to state that the liaisons are part of the Supplemental ERO. Emergency Plan Implementing Procedures will include steps for staffing of liaisons when an ICP is established to respond to event onsite.

PDEP changes in response to SONGS-RAI-12

The PDEP, Part II, Section C.2.a is revised as follows:

> If a near site Incident Command Post (ICP) has been established for a large scale or hostile actions event, SONGS will send liaisons to the ICP to provide specific information relative to the event and assist as needed. Individuals assigned as ICP Liaisons will be part of the supplemental ERO.

SONGS-RAI-13

Part II, Section C.3 states, in part, that "Laboratory facilities are available and equipped to support normal plant and expected emergency operations." Please identify the location(s) and briefly describe the capabilities of these facilities to support expected emergency operations. In addition, the PDEP states, "Agreements may also be used to obtain laboratory services from other stations." Please include referenced agreements in Appendix 3 and submit copies for NRC staff review.

SCE Response:

Support for chemical analysis is provided by Sierra Analytical Labs, located in Laguna Hills, California. Support for radiological analysis is provided by GEL Laboratories, located in Charleston, South Carolina. The laboratories have the capability for analyses of terrestrial, marine, and air samples. This information will be added to the PDEP.

No pre-arranged agreement will be in place for obtaining laboratory services from other stations. The industry has a history of sharing resources, and the Institute of Nuclear Power Operators (INPO) provides a listing of resources utilities have agreed to share during emergencies.

PDEP changes in response to SONGS-RAI-13:

The PDEP, Part II, Section C.3 is revised as follows:

> Laboratory facilities are available and equipped to support normal plant and expected emergency operations. ~~No outside laboratory services have been pre-arranged.~~ Services will be contracted as needed for declared events. Agreements may also be used to obtain laboratory services from other stations.
>
> Support for chemical analysis is provided by Sierra Analytical Labs, located in Laguna Hills, California. Support for radiological analysis is provided by GEL Laboratories, located in Charleston, South Carolina. The laboratories have the capability for analyses of terrestrial, marine, and air samples.

SONGS-RAI-14

Part II, Section D.1, "Emergency Classification System," refers to the capability to assess, classify, and declare an emergency condition within 60 minutes of the availability of indications.

a. Please provide technical basis for designating 60 minutes as a threshold for event declaration once indications are available. Specifically, explain what activities or actions would be underway that would justify a delay classification of emergency out to 60 minutes.

b. 5th bullet states, "The 60-minute criterion will not prevent implementation of response actions necessary to protect public health or deny the State and local authorities the opportunity to implement measures necessary to protect the public health and safety." Please provide the basis for this statement, since State and local authorities must still have the capability to implement offsite protective measures, if needed, which would be based on the time notification of the emergency classification, and while unlikely, assessment of the release of radioactive materials.

c. The PDEP also states, in part, that "SONGS utilizes the classification methodology endorsed by the NRC in Regulatory Guide 1.101 *[Emergency Planning and Preparedness for Nuclear Power Reactors]* for development of initiating conditions and emergency action levels." Regulatory Guide 1.101 identifies NUMARC/NESP-007 and NEI 99-01 as acceptable alternatives to guidance provided in Appendix 1 to NUREG-0654/FEMA/REP-1, but only NEI 99-01 provides criteria for the development of initiating conditions and emergency action levels for a defueled plant. Please clarify the specific methodology used to develop defueled initiating conditions and emergency action levels.

SCE Response:

a. In the Proposed Rule (74 FR 23254) to amend certain emergency planning requirements for 10 CFR Part 50, the NRC asked for public comment on whether the NRC should add requirements for non-power reactor licensees to assess, classify, and declare an emergency condition within 15 minutes and promptly declare an emergency condition. The NRC received several comments on these issues. The NRC stated that there may be a need for the NRC to be aware of security-related events early on so that an assessment can be made to consider the likelihood that the event is part of a larger coordinated attack. However, the NRC determined that further analysis and stakeholder interactions was needed prior to changing the requirements for non-power reactor licensees. Therefore, the NRC did not include requirements in the 2011 EP Final Rule for non-power reactor licensees to assess, classify, and declare an emergency condition within 15 minutes and promptly declare an emergency condition. The staff considered the similarity between a permanently defueled reactor and a non-power reactor for the low likelihood of any credible accident resulting in radiological releases requiring offsite protective measures.

Since the new rule changes did not establish a time limit for declaring events at non-power reactors, the 60 minute time was designated because of the need for a measurable goal for assessing ERO response. SCE has re-evaluated this proposed classification time period and will revise the PDEP to require classification within 30 minutes. This proposed 30-minute time will still provide a reasonable and measurable goal and is aligned with the NRC decision not to put the 15 minute requirement on non-power reactors. Given the event time lines described in the design basis accident analysis and the postulated beyond design basis accident analysis, the proposed 30 minute declaration time satisfies the "promptly" standard expressed in the exempted rule language.

SONGS will maintain the capability to assess, classify, and declare an emergency condition. For a site such as SONGS that is in the permanently defueled condition, the rapidly developing scenarios associated with events postulated to occur during reactor power operation are no longer credible. The consequences resulting from the only remaining events (e.g., fuel handling accident) develop over a significantly longer period. As such, the 15 minute requirement to classify and declare an emergency is unnecessarily restrictive.

b. The EALs are related to events that could result in a release of radioactive material. The postulated releases from these events are well below the EPA Protective Action Guidelines at which protective actions should be taken for the general public.

   Declaration of any of these events within 30 minutes would allow ample time to notify offsite authorities prior to any affects beyond the site boundary.

c. The PDEP will be revised to reflect that the Initiating Conditions and Emergency Actions Levels were developed in accordance with guidance in NEI 99-01, Rev 6, "Development of Emergency Action Levels for Non-Passive Reactors."

PDEP changes in response to SONGS-RAI-14:

a. The PDEP, Part II, Section D.1 is revised as follows:

   The station maintains the capability to assess, classify, and declare an emergency condition within 30 minutes of the availability of indications that an Emergency Action Level (EAL) has been exceeded.

   - The 30-minute criterion will commence when plant instrumentation, plant alarms, computer displays, or incoming verbal reports corresponding to an EAL first become available to the individual in command and control (SM/ED) or Plant Operator.

   - Validation or confirmation of plant indications, alarms or reports is to be accomplished within the 30-minute criterion as part of the classification assessment.

   - For EAL thresholds that specify a duration (time imbedded EALs), the declaration process runs concurrently with that specified threshold duration. If it is determined that the condition will not clear within the time period, the event is declared regardless of whether the imbedded time period has been met. Once the condition has existed for the specified duration, no further classification assessment is warranted and the EAL must be promptly declared.

   - The 30-minute criterion is not used as a grace period to attempt to restore plant conditions to avoid declaring an emergency in which an EAL has been exceeded.

- The 30-minute criterion will not prevent implementation of response actions necessary to protect public health or deny the State and local authorities the opportunity to implement measures necessary to protect the public health and safety.

Note that the first bullet is also revised in response to SONGS RAI-06.

b. None

c. The PDEP, Part II, Section D.1 is revised as follows:

SONGS utilizes the ~~a~~ classification methodology endorsed by the NRC ~~in Regulatory Guide 1.101 for the development of initiating conditions and emergency action levels~~. Specifically SONGS classification system follows the methodology in NEI 99-01, Rev 6, Development of Emergency Action Levels for Non-Passive Reactors.

SONGS-RAI-15

Part II, Sections D.1.a and b state that notifications will be made by SONGS to required off-site agencies within 60 minutes of the declaration of an Unusual Event or Alert classification. Please provide technical justification for the 60-minute threshold, especially based on requested threshold of 60 minutes to classify an event, which may result in a 2 hour time lapse from the availability of indication to classify an event until required off-site agencies are notified. Has this 60-minute notification threshold been discussed and agreed upon with State and local agencies receiving notification?

SCE Response:

As stated in the response to SONGS-RAI-14, the classification time has been reduced from 60 minutes to 30 minutes. Therefore, the total time lapse from availability of indication to classify an event until required off-site agencies are notified is 1.5 hours.

The change in notification time from 15 minutes to 60 minutes is appropriate because events described in the design basis accident analyses and the postulated beyond design basis accident analyses demonstrate that initiation of the State and local government emergency response actions within 15 minutes is not necessary to protect the health and safety of the public.

While the capability should exist for the notification of offsite government agencies within a specified time period, exemptions granted to previously shutdown stations have allowed for extending the State and local government agencies' notification time up to 60 minutes based on a justification similar to the SONGS site-specific justification provided below.

Because the design basis accidents and other credible events are not postulated to exceed the EPA PAGs at or beyond the site boundary, the significantly reduced staff, and the minimal expected offsite response required, the need to provide immediate (within 15 minutes) notification can be changed to notification within 60 minutes without affecting the health and safety of the public.

The 60-minute provision is consistent with the 10 CFR 50.72(a)(3) notification to the NRC and is appropriate because, for a site such as SONGS that is in the permanently defueled condition, the rapidly developing scenarios associated with events postulated to occur during reactor power operation are no longer credible and there is no need for State or local response organizations to implement any preplanned protective actions. In the Statement of Considerations for the Final Rule for EP requirements for ISFSIs and for monitor retrievable storage installation (MRS) facilities (60 FR 32430; June 22, 1995), the Commission responded to comments concerning offsite emergency planning for ISFSIs or an MRS and concluded that, "the offsite consequences of potential accidents at an ISFSI or a MRS would not warrant establishing Emergency Planning Zones." In a nuclear power reactor's permanently defueled state, the accident risks are more similar to an ISFSI or MRS than an operating nuclear power plant. The draft proposed rulemaking in SECY-00-0145 suggested that after at least one year of spent fuel decay time, the decommissioning licensee would be able to reduce its EP program to one similar to that required for an MRS under 10 CFR 72.32(b) and additional EP reductions would occur when: (1) approximately five years of spent fuel decay time has elapsed; or (2) a licensee has demonstrated that the decay heat level of spent fuel in the pool is low enough that the fuel would not be susceptible to a zirconium fire for all spent fuel configurations. The EP program would be similar to that required for an ISFSI under 10 CFR 72.32(a) when fuel stored in the SFP has more than five

years of decay time and would not change substantially when all the fuel is transferred from the SFP to an onsite ISFSI. Exemptions from offsite EP requirements have been approved when the specific site analyses show that at least ten hours is available from a partial drain down event where cooling of the spent fuel is not effective allowing the hottest fuel assembly to reach 900°C. Because ten hours allows sufficient time to initiate mitigating actions to prevent a zirconium fire in the SFP or to initiate ad hoc offsite protective actions, offsite EP plans are not necessary for permanently defueled nuclear power plants.

Southern California Edison (SCE) has revised the accident analyses for those design basis accidents (DBA) that remain applicable in the permanently defueled condition. These revised accident analyses demonstrate that as of August 2013, the radiological consequences of remaining applicable DBA will not exceed the limits of the U.S. Environmental Protection Agency's (EPA) Protective Action Guides (PAGs) at the Exclusion Area Boundary (EAB).

In the event that air cooling is not possible, a minimum of 10 hours is available to take mitigating actions or, if needed, offsite protective actions using an all-hazards approach to emergency planning from the time the fuel is uncovered until it reaches the auto-ignition temperature of 900°C. This case is most often referred to as spent fuel pool adiabatic heat up. As provided in an SCE letter dated October 6, 2014 (response to RAI-015), the 10-hour threshold was reached on July 25, 2013 and as of October 12, 2014, greater than 17 hours is available.

The 60 minute notification threshold was discussed with the Interjurisdictional Planning Committee (IPC) - whose members are County of Orange, City of San Juan Capistrano, City of San Clemente, the Marine Base at Camp Pendleton, the State Department of Parks and Recreation, the County of San Diego, and SCE – on February 5, 2014 and is documented in the IPC minutes of that meeting. Cal OES and FEMA Region IX were in attendance at that meeting. The meeting minutes document that the notification time is being changed from 15 minutes to 60 minutes. The IPC provided no dissenting comments concerning the 60 minute notification time.

PDEP changes in response to SONGS-RAI-15

None

SONGS-RAI-16

Part II, Section D.4, "Offsite Emergency Planning," states, "Although they may not be specific to an event at SONGS, the Emergency Preparedness Manager should *[underline added]* coordinate with offsite agencies for response planning to an emergency at the station." This statement implies that coordination with offsite agencies is optional for events that may require a response by offsite organizations (firefighting, medical assistance, etc.) to the station. Please discuss interactions with State and local agencies that SONGS plans to maintain to ensure the effective maintenance and implementation of the SONGS Defueled Emergency Plan.

SCE Response:

It was not the intent of SCE to imply by the above PDEP statement that coordination with offsite agencies is optional. Therefore, the PDEP will be revised to clarify that coordination with offsite agencies is not an optional activity.

SONGS Emergency Plan Implementing Procedure SO123-EP-1, SONGS Emergency Plan Implementation, requires the coordination of the emergency planning effort with the offsite agencies. A new procedure will be in place that will implement these same requirements. This will help assure effective maintenance and implementation of the SONGS PDEP. Specifically:

- Activities related to offsite emergency preparedness shall be coordinated with the State, Counties and Camp Pendleton;
- Emergency plans, communications, and supporting equipment for SONGS shall be coordinated with Company, local offsite agencies, California Office of Emergency Services (CAL OES) and Department of Homeland Security (DHS); and
- Emergency Action Levels (EALs) shall be reviewed annually with the State, Counties and Camp Pendleton.

PDEP changes in response to SONGS-RAI-16

The PDEP, Part II, Section D.4 is revised as follows:

4. Offsite Emergency Planning

Offsite agencies maintain plans to respond to various natural or man-made emergencies. Although they may not be specific to an event at SONGS the Emergency Preparedness Manager ~~should~~ shall coordinate with offsite agencies for response planning to an emergency at the station.

SONG-RAI-17

Part II, Section E.1 states, "SONGS, in cooperation with state and local authorities, has established mutually agreeable methods and procedures for notification of offsite response organizations..." Please provide documentation that reflects the engagement with State and local agencies on the establishment of mutually agreeable methods and procedures for notification, including agreement on notification message content and format, means of verification, along with methods of transmission as stated in Section E.3.

SCE Response:

SCE presented a slide presentation concerning the SONGS transition to a permanently defueled emergency plan to the IPC on February 5, 2014. Included in the discussion were methods and procedures for notification to offsite organizations. The members of the IPC are the County of Orange, the City of San Juan Capistrano, the City of San Clemente, the Marine Base at Camp Pendleton, the California State Department of Parks and Recreation, the County of San Diego, and SCE. California Office of Emergency Services (CAL OES) and FEMA Region IX were in attendance at that meeting. Additionally, SCE discussed the proposed notification process with the IPC on November 6, 2013.

The IPC Monthly Meeting minutes of November 6, 2013 and February 5, 2014 and the presentation slides, "SONGS Transition to a Permanently Defueled Emergency Plan (PDEP), Briefing for the Interjurisdictional Planning Committee, Wednesday February 5, 2014," are included in Attachment B of this enclosure.

PDEP changes in response to SONGS-RAI-17

None

SONGS-RAI-18

Part II, Section E.3, "Initial Notification Messages," states, in part, that the initial notification form will provide the following information: "d. Type of actual or projected abnormal release (airborne or liquid); g. Actual or projected dose rates and/or integrated dose at the Site Boundary; and h. Estimate of any abnormal surface radioactive contamination in plant or onsite."

a. Items e and f have either been omitted or the list mis-numbered. Please correct the listing to provide missing information or renumber as appropriate.

b. How is the radiological information, stated in Items d, g, and h above, determined in a timely manner to support the initial notifications, since the on-shift staff does not include a Radiation Protection Technician?

SCE Response:

a. The list in Section E.3 is mis-numbered and the PDEP will be revised to correct this error.

b. As discussed in the SCE response to SONGS-RAI-06, an RP Technician will be added to the required on-shift staffing organization described in the PDEP, Part II, Section B.1 and Table B-1. The Shift RP Technician will perform the tasks of radiological monitoring and assist with determining radioactive release status.

PDEP changes in response to SONGS-RAI-18

a. The PDEP, Part II, Section E.3 is revised as follows:

SONGS, in conjunction with authorities from local agencies has established the specific content and format of the initial notification message to be transmitted during an emergency, along with methods of transmission. The initial notification form will provide the following information if it is known and appropriate:

a. Location of incident, and name and telephone number of caller.
b. Date/Time of incident.
c. Class of emergency.
d. Type of actual or projected abnormal release (airborne or liquid).
e. Actual or projected dose rates and/or integrated dose at the Site Boundary.
f. Estimate of any abnormal surface radioactive contamination in plant or onsite.
g. Plant emergency response actions underway.
h. Request for offsite support from onsite personnel.
i. Prognosis for event based on plant or response team information.

b. No additional changes to PDEP for this item. The changes to the RP Technician requirements in the PDEP are shown in the response to SONGS-RAI-06.

SONGS-RAI-19

Part II, Section F.1.b, "Communications with State/local Governments," states, "Offsite notifications are provided to local *[underline added]* agencies warning points (which are continually staffed) from the Command Center using commercial telephone lines or other mobile communications devices…" Please provide responses to the following:

a. Part II, Section E.3 states that, at a minimum, an initial notification will be made to the State of California and the Marine Corps Base (Camp Pendleton), in addition to Orange County and San Diego County. Please address the notification of the State of California and the Marine Corps Base (Camp Pendleton), and verify that phrase "local agencies" is specifically referring to Orange County and San Diego County.

b. Plan simply states, "local *[underline added]* agencies warning points." Please identify organizational titles and alternates at both ends of communication for the State of California, Marine Corps Base (Camp Pendleton), Orange County, and San Diego County, based on agreement with respective offsite agencies.

c. The PDEP states, "commercial telephone lines or *[underline added]* other mobile communications." Please clearly designate the designated primary and backup means of communication for required initial notification points from the Command Center, based on agreement with respective offsite agencies.

SCE Response:

a. The term "local agencies" used in Section F.1.b is referring to Orange County and San Diego County. Therefore, the PDEP will be revised to explicitly include the State of California and the Marine Corps Base (Camp Pendleton) as part of the offsite notification. In addition, the City of San Clemente, City of Dana Point, and City of San Juan Capistrano (which are local agencies but do not have warning points) will be notified by Orange County.

b. The PDEP will be revised to include a table that lists the warning point organizational titles and alternates (if applicable) at both ends of communication (i.e., SONGS and offsite agencies) for the offsite agencies to be notified.

c. The PDEP will be revised to specifically state the primary and backup means for the required initial notification points from the Command Center will be commercial telephone (primary) and satellite phone (backup).

PDEP changes in response to SONGS-RAI-19

a. & c. The PDEP, Part II, Section F.1.b is revised as follows:

b. Communications with State/Local Governments

Offsite notifications are provided to the California Office of Emergency Services (CAL OES), the Marine Corps Base (Camp Pendleton) and local agencies warning points (which are continually staffed) from the Command Center using commercial telephone ~~lines~~ (the primary means of communication) or ~~other mobile communications devices such as cell or~~ satellite phone~~s~~ (the back-up means of communication).

b. The PDEP, Part II, Section F is revised by adding the following table (Table F-1) that identifies the offsite agencies' organizational titles and alternates for notification at the warning points:

Table F-1: Offsite Response Agency Notification (Warning Points)

Offsite Response Agency	Notified By	Individual Answering
CAL OES	SONGS Emergency Director or designee	Duty Personnel
Marine Corps Base, Camp Pendleton	SONGS Emergency Director or designee	Command Duty Officer or 911 Dispatch
Orange County	SONGS Emergency Director or designee	Orange County Communications Control 1
San Diego County	SONGS Emergency Director or designee	San Diego County Communications Shift

SONGS-RAI-20

Part II, Section F.1.e, "ERO Notification System," refers to using multiple methods of notifying the ERO. What specifically are the primary and backup communication methods? How are these systems maintained, tested, and validated?

SCE Response:

The specific communications methods to notify the SONGS Emergency Response Organization (ERO) will be for the Command Center to initiate call trees using commercial telephone (primary) and satellite phone (back up) to call ERO members on their home or cell phones. The PDEP will be revised to clearly state the primary and backup methods notifying the ERO.

Various sections of the PDEP provide the requirements to maintain, test and validate the SONGS ERO notification equipment:

Part II, Section F.3 states: Communications equipment is checked in accordance with Section H.10.

Part II, Section H.10 states: Station procedures identify the general category of equipment and supplies that make up equipment available to assist with emergency response and requirements for inventorying and testing equipment. General types of equipment and supplies available to support emergency response include:

- Radiation Monitoring Equipment
- Contamination Control Supplies
- Decontamination Equipment and Supplies
- Protective Clothing
- Damage Control and Mitigation Equipment
- Communications and Radio Equipment
- Supplemental Lighting

Part II, Section N.2.d states: Augmentation drills are performed to demonstrate the capability to notify and activate the ERO in a timely manner.

These three PDEP sections provide assurance that the communications systems are maintained, tested, and validated.

PDEP changes in response to SONGS-RAI-20

Part II, Section F.1.e of the SONGS PDEP will be revised as follows:

e. ERO Notification System

ERO notification is performed by the use of ~~the public address system and using a system of electronic devices (i.e. pagers, text message cell phones, etc.) and/or~~ call trees ~~via~~ initiated by commercial telephone as the primary method of communications ~~and~~or a satellite phones as the back-up method of communications. The station public address system may also be used to notify on site personnel.

SONGS-RAI-21

Part II, Section G, "Emergency Public Information," refers to dissemination of information during an event at SONGS. Please explain how the following NUREG-0654/FEMA-REP-1 evaluation criteria are addressed:

- Designated spokesperson, which should have access to all necessary information. (G.4.a)
- Arrangements for the timely exchange of information among designated company/agency spokespersons. (G.4.b)
- Coordinated arrangements for dealing with rumors. (G.4.c)

SCE Response:

NUREG 0654 / FEMA-REP-1, Revision 1, Section II Evaluation Criteria G.3.a states that each principal organization shall designate the points of contact and physical locations for use by news media during an emergency. Evaluation Criteria G.4.a, states that each principal organization shall designate a spokesperson who should have access to the necessary information. During non-emergency conditions or at the initiating stages of an emergency, SCE has a corporate media line that is available at all times (24/7) for media inquiries. SCE also has a dedicated Corporate Communications spokesperson who serves as a liaison with the local media. This individual would have access to needed information regarding the event and would be responsible for disseminating information to the public. News conferences would be conducted on site or at other locations as needed. The plant spokesperson function would be performed by communications department personnel, senior plant management, or corporate management.

SCE also has a Local Public Affairs officer who acts as a liaison between SCE and State and local public affairs officers to coordinate the timely flow of information and address any mis-information related to the event.

The SCE Corporate Communications Department deals with rumors as part of the normal functions. During declared events at the station they would continue to perform this function in coordination with the Local Public Affairs officer.

These Corporate support functions are specified in corporate policies and procedures including "Corporate Communication 2014 Business Continuity Plan" and "Southern California Edison 2013-2014 Emergency Support Locator."

The PDEP will be revised to more accurately reflect these functions.

PDEP changes in response to SONGS-RAI-21

The PDEP, Part II, Section B.4 is revised by adding the following bullet to the Emergency Director delegable responsibilities:

- Notify SCE corporate officers and the company's duty spokesperson

The PDEP, Part II, Section G is revised by adding the following paragraph after the second paragraph of the section:

SCE maintains a corporate media line that is available at all times (24/7). A Corporate Communications Spokesperson maintains a liaison with local media and would act as the initial company spokesperson for a declared emergency at SONGS. SCE also has a Local Public Affairs officer who acts as a liaison between SCE and State and local public affairs officers to coordinate the timely flow of information and address any mis-information related to the event.

SONGS-RAI-22

Part II, Section H.1, "Command Center," states that plant systems and equipment parameters may be monitored in the Command Center. Please explain how the following NUREG-0654/FEMA-REP-1 evaluation criteria are addressed or provide justification for why criteria are no longer considered applicable:

- Onsite monitoring systems that are to be used to initiate emergency measures, as well as those to be used for conducting assessment. The equipment shall include: geophysical phenomena (hydrologic/seismic) monitors, and fire and combustion products detectors. (H.5.a/b/d)
- Provisions to acquire data from or for emergency access to offsite geophysical phenomena (hydrologic/seismic) monitors. (H.6.a)

SCE Response:

The Command Center design will incorporate instruments capable of monitoring parameters necessary to classify events. Currently, this includes radiation monitors, spent fuel pool temperature, meteorological data and fire protection system status. There are no Emergency Action Level Initiating Conditions directly related to hydrologic or seismic monitors; therefore, no onsite instruments will be provided/maintained in the Command Center related to these parameters.

The Command Center will have an internet connection capable of accessing data from offsite hydrologic/seismic monitors.

The PDEP will be revised to clearly state the Command Center has the capability to monitor systems used to initiate emergency measures.

PDEP changes in response to SONGS-RAI-22

The PDEP, Part II, Section H.1, first paragraph is revised as follows:

> The Command Center is the onsite facility used to respond to emergency events. Plant systems and equipment parameters necessary to initiate emergency measures and assess conditions can ~~may~~ be monitored in this location. The Command Center also has internet capabilities, which allows access to geophysical (i.e., meteorological, hydrologic, and seismic) information.

SONGS-RAI-23

Based on the elimination of the Emergency Operations Facility (Part II, Section H.2/H.3), describe the means in place to coordinate potential response actions with off-site Emergency Operations Centers.

SCE Response:

The SONGS analysis confirmed that the dose consequences from the design basis accidents and other credible events are not postulated to exceed the EPA PAGs at or beyond the site boundary. The low likelihood of a credible accident at SONGS that could result in a radiological release is because of the permanently shut down and defueled status of the reactors. Therefore, an Emergency Operations Facility is not required. The Command Center can provide for the communication and coordination with offsite organizations to meet the level of support required to coordinate potential response actions for any incident that occurs at SONGS.

If the Command Center becomes uninhabitable, emergency plan implementing procedures address the Emergency Director relocating the Command Center functions, facilitating continued ability to provide communication and coordination with offsite organizations and the SONGS ERO.

The PDEP, Part II, Section H.1 discusses the Command Center's capabilities. Also, Part II, Section B.5.d allows for various emergency response personnel to be assembled as the emergency needs dictate. The Command Center will be the facility from which the Emergency Director will coordinate with these offsite agencies in either their normal daily offices or the offsite agencies Emergency Operations Center, if activated.

PDEP changes in response to SONGS-RAI-23

None

SONGS-RAI-24

Under Part II, Section I.10, "Dose Estimates," states, in part, that "Events at the permanently defueled station no longer can exceed the Alert level (i.e., offsite doses will not reach EPA Protective Action Guides)." Please revise the statement to clearly reflect that the Alert level threshold is based on a release for an applicable design-basis accident only reaching a fraction of the EPA PAGs.

SCE Response:

The PDEP will be revised to clearly state that releases related to DBA will only reach a fraction of the EPA PAGs.

PDEP changes in response to SONGS-RAI-24

The PDEP, Part II, Section I.10 is revised as follows:

> Design Basis Accidents ~~Events~~ at SONGS ~~the permanently defueled station~~ can no longer ~~can~~ exceed the Alert level (i.e. offsite doses will only result in a fraction of the ~~not reach~~ EPA Protective Action Guides). Dose estimates will be performed to determine projected onsite doses and potential offsite consequences of any release to the environment.

SONGS-RAI-25

Part II, Section J, "Protective Response," refers to protective actions during an event at SONGS. Please explain how the following NUREG-0654/FEMA-REP-1 evaluation criteria are addressed:

1. Each licensee shall establish the means and time required to warn or advise onsite individuals who may be in areas controlled by the operator, including:

    a. Employees not having emergency assignments;
    b. Visitors;
    c. Contractor and construction personnel; and
    d. Other persons who may be in the public access areas on or passing through the site or within the owner controlled area.

SCE Response:

The PDEP, Part II, Section E.2.a identifies that site personnel are notified of an emergency using the Public Address system and recognizable site alarms. These means will be maintained consistent with the site population to provide for site personnel warning and notification. This includes all personnel identified in the NUREG-0654/FEMA-REP-1 evaluation criteria stated above. Furthermore, Section E.2.a also states that response actions will be announced to onsite personnel.

Specifically, Section E.2.a states: "Each emergency classification results in onsite personnel being notified of the initial classification or any escalation of an emergency by recognizable alarms and/or verbal announcements over the plant Public Address (PA) System. Announcements include the emergency classification and response actions to be taken by personnel onsite (such as ERO, non-ERO, contractor personnel, and visitors). Provisions are made to alert personnel in high noise areas and outbuildings as applicable."

The PDEP will be revised to state that Public Address announcements will be made as soon as possible after the triggering event (emergency declaration or decision to take protective actions). Exact time requirements for notifications are generally measured by completing the required action within the required time, i.e., if accountability is to be completed within 30 minutes, no specific time is set for notification but has to be performed in a timely manner to successfully meet the overall 30 minute goal.

PDEP changes in response to SONGS-RAI-25

The PDEP, Part II, Section E.2.a is revised to add the following paragraph after the last paragraph of the section:

> Notifications of onsite personnel will be made as soon as possible after the triggering event (emergency declaration or decision to take protective actions) to ensure that actions can be completed within required time frames.

SONGS-RAI-26

Part II, Section J states that protective actions for the public are no longer necessary since it is no longer possible for the radiological consequences of design basis accidents or other credible events at SONGS to exceed EPA PAGs beyond the site boundary requiring offsite protective actions. The statement should be revised to reflect that the pre-defined protective action recommendations by the licensee (SONGS) are no longer required. Offsite agencies will maintain the ability under their comprehensive emergency management (all-hazard) plans to implement an offsite protective measure, if needed, in the unlikely event of a release due to a beyond design-basis event.

SCE Response:

The PDEP will be revised to reflect that while there will be no pre-defined Protective Action Recommendations by SONGS, the Offsite Agencies will maintain the ability to implement protective actions under their response plans.

PDEP changes in response to SONGS-RAI-26

The PDEP, Part II, Section J, second paragraph is revised as follows:

> It is no longer possible for the radiological consequences of design-basis accidents or other credible events at SONGS to exceed the limits of the EPA PAGs beyond the site boundary or require offsite protective actions. Therefore, pre-planned protective actions for the public are no longer necessary and the emergency planning zones will no longer exist. Therefore, SONGS will not have pre-defined Protective Action Recommendations. Offsite agencies maintain the ability, under their emergency management plans, to implement offsite protective measures, if needed, in the unlikely event of a release due to a beyond design-basis event.

SONGS-RAI-27

Under Part II, Section J.1, "Protective Actions for Site Personnel," please clarify that the capability will exist to account for all individuals onsite at the time of the emergency within 30 minutes of initiation of accountability/site evacuation.

SCE Response:

The PDEP will be revised to clearly state that accountability of individuals within the protected area will be completed within 30 minutes of initiation of accountability/site evacuation.

PDEP changes in response to SONGS-RAI-27

The PDEP, Part II, Section J.1 is revised as follows:

Protective actions for onsite personnel will be delineated in the site procedures and ~~may~~ will include:

- Criteria for ordering a site evacuation
- Means and timely notification of onsite persons impacted
- Ability to account for individuals within the protected area within 30 minutes from the time accountability is initiated
- Provisions for maintaining accountability of assembled and evacuated personnel, and for identifying and determining the locations of personnel that were not evacuated
- Search and rescue
- Evacuation routes and means for transporting onsite personnel (e.g., privately owned vehicles, buses, company vehicles)
- Monitoring of evacuees for contamination and control measures if contamination is found
- Means for evacuating and treating onsite injured personnel, including potentially contaminated personnel

SONGS-RAI-28

Part II, Section J.2, "Mitigation Strategies and Equipment," refers to documented spent fuel pool mitigation strategies for mitigation of emergencies involving the spent fuel pool. In SCE's letter to the NRC dated August 26, 2013 (ADAMS Accession No. ML13240A130), SCE indicated its intent to maintain SFP strategies.

Please provide a description of the actions SONGS could take to mitigate the consequences of an event involving the SFP, or include appropriate reference to describing these actions. The description should include:

- Permanently installed equipment available to fill or spray the SFP;
- On-site portable equipment available to fill or spray the SFP;
- Off-site equipment available to fill or spray the SFP;
- Available water sources;
- Written procedures to perform the mitigation strategies and how they are maintained;
- The personnel who would perform these mitigation strategies and how they are trained;
- How the equipment used in the mitigating strategies are stored, maintained and tested;
- Approximate times it would take to deliver, setup, and start delivering makeup/spray to the SFP using portable equipment; and
- How makeup/spray could be delivered to the SFP in the event that radiation levels at the SFP prohibited entry to the area.

SCE Response:

By letter dated August 27, 2014 (ADAMS Accession No. ML14209A005), the NRC staff provided a Request for Additional Information (RAI) regarding SCE's proposed emergency planning exemption request. RAI-10 from that letter asked for the same information provided above. SCE responded to this RAI by letter dated September 9, 2014 (ADAMS Accession No. ML14258A003), and provided the requested information.

By e-mail dated September 10, 2014 (ADAMS Accession No. ML14274A210), the NRC provided a follow-up question regarding SCE's response to the previous RAI-10. SCE responded to this follow-up question by letter dated October 6, 2014.

Please refer to these previous responses for a complete response to this RAI-28.

SONGS-RAI-29

Part II, Section L.4, "Medical Transportation," states that prompt ambulance transport is available on a 24-hour per day basis. It further states that during transportation Radiation Protection personnel will accompany the victim. Please clarify how transport is supported promptly since the on-shift staff does not include a Radiation Protection Technician. Also, the plan states that such service is confirmed by letter of agreement. Please specify organization(s) that will be providing transport to allow NRC staff to verify with letters of agreement listed in Appendix 3.

SCE Response:

As discussed in the SCE response to SONGS-RAI-06, an RP Technician will be added to the required shift staffing organization described in Section B.1 and Table B-1. This will allow for support of transportation of contaminated injured personnel. If the on-shift RP Technician does leave the site, a replacement would be called in as soon as possible.

Furthermore, during the most likely times when an injured individual may also be contaminated (e.g., work being conducted on contaminated systems) additional RP Technicians will normally be available onsite and can accompany the victim.

The Marine Corps Base, Camp Pendleton, Orange County Fire Authority, and Air Methods Corporation are the organizations that will be providing transport in accordance with the letters of agreement listed in Appendix 3 of the PDEP. Ambulance service personnel receive training in transportation of contaminated injured individuals.

In addition, SCE noted that the PDEP lists that the Camp Pendleton and Orange County Fire Authority agreement types are applicable to Fire Fighting. Camp Pendleton also provides transportation of injured personnel, and Orange County Fire Authority provides transportation of injured personnel only. The PDEP will be revised with these changes.

PDEP changes in response to SONGS-RAI-29

The changes to the RP Technician requirements in the PDEP are shown in the response to SONGS-RAI-06.

The PDEP, Part III, Appendix 3 is revised as follows (note that the below change does not include the changes to this Appendix shown in SONGS-RAI-5):

Organization/Agreement Type	Applicable To
Saddleback Memorial Medical Center, San Clemente Campus	Medical Treatment
Mission Hospital	Medical Treatment
Air Methods Corporation	Transport of Injured Persons
Commanding Officer, Marine Corps Base, Camp Pendleton	Fire Fighting / Transport of Injured Person
Orange County Fire Authority	~~Fire Fighting~~ Transport of Injured Person

SONGS-RAI-30

Under Part II, Section M.2, "Recovery Organization," please provide further detail on how normal SONGS organization will be structured to address the following NUREG-0654/FEMA-REP-1 evaluation criteria:

- Each licensee plan shall contain the position/title, authority and responsibilities of individuals who will fill key positions in the facility recovery organization. This organization shall include technical personnel with responsibilities to develop, evaluate and direct recovery and reentry operations.

SCE Response:

The PDEP, Part II, Section M.2 states that the SONGS Executive Management position who normally directs site activities will be responsible for directing all site activities during recovery. The intent of this statement is that the individual who is normally in charge of site operations will remain in authority and be responsible for directing recovery actions. There will be no pre-identified changes to the normal site organization to conduct recovery activities. This does not preclude bringing in additional personnel to perform specific functions related to recovery.

Because the design basis accidents and other credible events are not postulated to exceed the EPA PAGs at or beyond the exclusion area boundary, the need for a pre-designated recovery organization interacting with offsite agencies is limited.

SCE notes that the Technical Specifications (TS) currently do not include an organizational chart in TS 5.2.1, Onsite and Offsite Organizations. TS 5.2.1.a states: "Lines of authority, responsibility, and communication shall be established and defined for the highest management levels through intermediate levels to and including all operating organization positions. These relationships shall be documented and updated, as appropriate, in the form of organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These relationships, including the plant specific titles of those personnel fulfilling the responsibilities for the positions delineated in these Technical Specifications, are documented in the UFSAR." The proposed Permanently Defueled Technical Specifications, submitted to the NRC in a letter dated March 31, 2014 (ADAMS Accession No. ML14085A141) maintains this TS requirement.

SCE will revise the PDEP to clearly reference that the Plant TS contains the requirement to maintain the normal organizational requirements in the UFSAR and to clearly show the structure of the SONGS PDEP recovery organization to address the NUREG 0654/FEMA-REP-1 evaluation criteria.

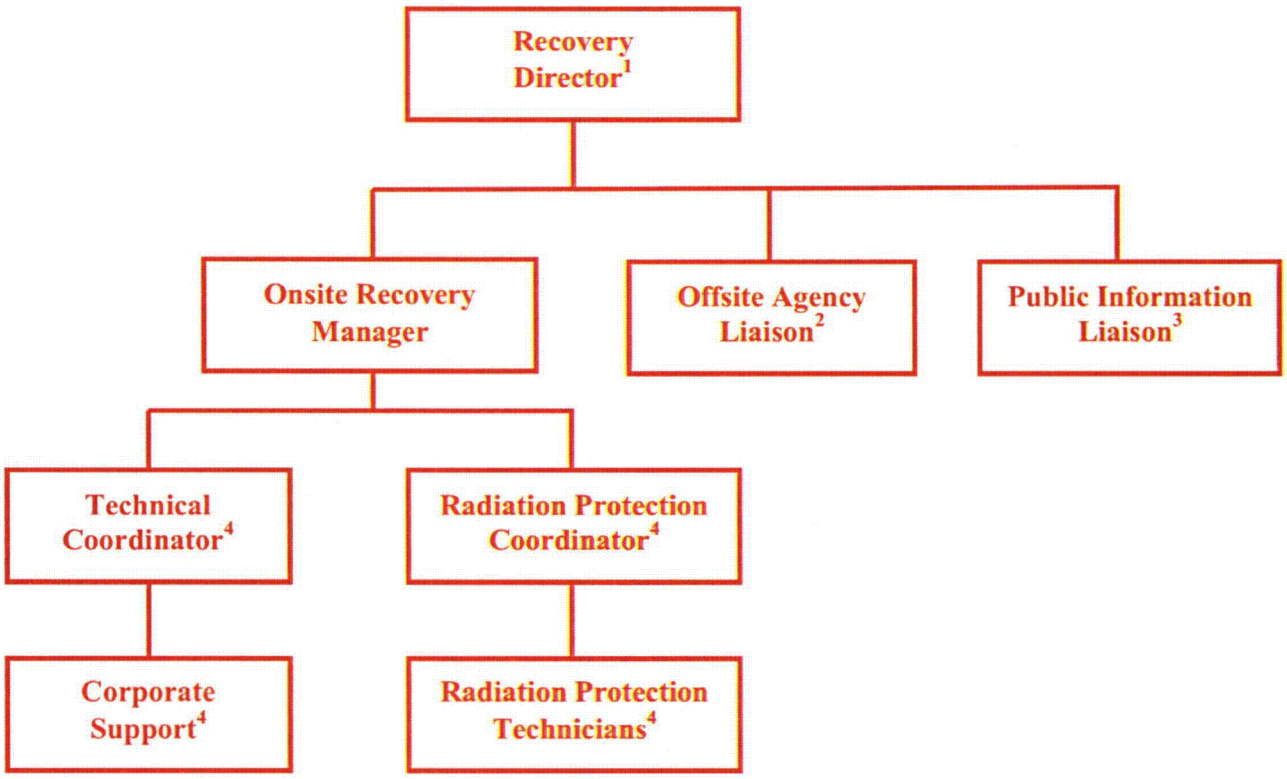
PDEP changes in response to SONGS-RAI-30

The PDEP, Part II, Section M.2 is revised as follows:

> The recovery organization will be based on normal SONGS organizations and functions with the SONGS executive management position being responsible for directing all site activities. The normal station organization is documented in the UFSAR, as required by Technical Specification 5.2.1.a.
>
> If the event results in additional support being required to return the site to pre-event status along with increased interface with offsite agencies and/or media involvement, a recovery organization similar to that shown in Figure M-1 will be put in place.

Notification of onsite personnel and offsite response organizations that the plant recovery is to commence will be performed in accordance with Emergency Plan Implementing Procedures.

Figure M-1: Typical Recovery Organization



NOTES

1. Senior Management
2. Position normally filled by site Emergency Preparedness Manager
3. Position filled from SCE Communications Department
4. Southern California Edison will provide or arrange for additional technical, maintenance, radiation protection and other support as needed to restore station to pre-event condition

SONGS-RAI-31

Under Part II, Section N.1, "Biennial Exercise," please provide [*sic*] further details on how an integrated drill, performed on alternating years, will include a combination of some of the principal functional areas of the onsite emergency response capabilities, including:

- activities such as management and coordination of emergency response,
- accident assessment,
- event classification,
- notification of offsite authorities,
- assessment of onsite impact of radiological releases, and
- system repair and mitigative action implementation.

Also, clarify that during these drills, the following areas would be addressed:

- opportunity to consider accident management strategies;
- supervised instruction would be permitted, and
- operating staff would have opportunity to resolve problems (success paths).

SCE Response:

The PDEP will be revised to clearly state that Biennial Exercises and alternate year integrated drills will include demonstration of principal functional areas over the time period of the designated drill cycle.

Section N.1 will also be revised to require that during each six year drill cycle participants will be presented with an opportunity to consider accident management strategies and to resolve problems (i.e., success paths).

The PDEP, Part II, Section N.2 addresses supervised instructions. Specifically, Section N.2, Other Drills, states that "Drills are conducted to provide training and practice opportunities for ERO members." This section will be revised to add wording that drills may include supervised instructions.

PDEP changes in response to SONGS-RAI-31

The PDEP, Part II, Section N.1 is revised by adding the following after the 2nd paragraph of the section:

Biennial Exercises and alternate year integrated drills will allow the ERO to demonstrate the following principal functional areas at least once every 6 years:

- Activities such as management and coordination of emergency response
- Accident assessment
- Event classification
- Notification of offsite authorities
- Assessment of onsite impact of radiological releases
- System repair and mitigate action implementation
- An opportunity to consider accident management strategies
- The Operating Staff would have opportunity to resolve problems (success paths)

The PDEP, Part II, Section N.2, first paragraph is revised as follows:

Drills are conducted to provide supervised instruction, training, and practice opportunities for ERO members. Equipment and proficiency drills may be performed as part of the biennial exercise, integrated drill or as an independent drill.

SONGS-RAI-32

Under Part II, Section N.2, "Other Drills," please address the following NUREG-0654/FEMA-REP-1 evaluation criteria:

- (Under "Communications Drills") Testing of communications with Federal emergency response organizations (N.2.a), specifically with NRC Headquarters and NRC Regional Office Operations Center; and
- (Under "Radiation Protection Drills") Plant environs and radiological monitoring drills shall be conducted annually (N.2.d).

SCE Response:

The PDEP will be revised to include a quarterly testing requirement of communications with NRC Headquarters and NRC Regional Office Operations Center.

The PDEP will also be revised to include annual drills to measure all sample media (water, vegetation, soil an air) at or near the site boundary and they will demonstrate communications and record keeping aspects. SCE will also add wording to invite offsite agencies to participate at least once per drill cycle (every 6 years).

PDEP changes in response to SONGS-RAI-32

The PDEP, Part II, Section N.2.a is revised by adding the following paragraph after the first paragraph of Section N.2.a:

> Communications with NRC Headquarters and the NRC Regional Office Operations Center will be tested quarterly.

The PDEP, Part II, Section N.2.b is revised by adding the following paragraph after the first paragraph of Section N.2.b:

> Radiation Protection Drills involving collection and analysis of all sample media (water, vegetation, soil and air) at or near the site boundary will be conducted annually. These drills will include demonstration of communications and record keeping. At least once during the drill cycle State and local organizations will be invited to participate.

SONGS-RAI-33

Under Part II, Section O, "Emergency Response Training," please address the following:

a. Please define the frequency for "annual" training.

b. (Section O.1, "Assurance of Training of the Offsite Response Organization") Please clarify that training on "special problems potentially encountered during a nuclear plant emergency" includes radiological orientation.

c. Please include or reference what training is provided for fire control teams (fire brigades), security personnel, and headquarters support personnel on emergency plan-related response activities, as applicable.

SCE Response:

a. Frequency terms are defined in the PDEP, Part III, Appendix 4, Glossary of Terms and Acronyms. As defined in the PDEP, the term "annual" means at least once per calendar year, January 1 to December 31.

b. The PDEP will be revised to include training on radiological aspects of events at a nuclear facility. This will include effects of exposure to radiation and radiological contamination.

c. The PDEP will be revised to include training provided to the Security Force and company communications personnel who could be expected to perform a role in emergency response.

   The Incipient Fire Brigade will be made up of shift personnel who will receive emergency plan training based on their other roles. Since the Fire Brigade could function outside a declared event, the training for Fire Brigade duties are addressed by training programs outside the Emergency Plan.

   Other than the special support provided by the company communications department, headquarters personnel would be asked to provide support based on their normal job assignments. Therefore, no specific emergency plan training is pre-identified for headquarters personnel other than the company communications department personnel. They would receive just in time training if they were needed to respond to the site or provide support not normally part of the job assignments.

PDEP changes in response to SONGS-RAI-33

a. None

b. The PDEP, Part II, Section O.1.a, second paragraph is revised to the following :

   The training made available is designed to acquaint the participants with the special problems potentially encountered during a nuclear plant emergency (including effects of radiation exposures and radiological contamination), notification procedures and their expected roles. Organizations that must enter the site also receive site-specific emergency response training and are instructed as to the identity (by position and title) of those persons in the onsite organization who will control their support activities.

c. The PDEP, Part II, Section O.4 is revised by adding the following items:

g. Site Security Force

The Security Force will receive specific emergency response training on:

- Emergency Plan fundamentals and Site Accountability procedures
- Site Evacuation Procedures

h. Key SCE Communications Department Personnel

Individuals assigned to act as spokespersons or to coordinate public information will receive training on:

- Emergency Plan fundamentals
- Dissemination of information during declared events at the station

Attachment A to Enclosure 1

Letters of Agreement associated with the SCE response to SONGS-RAI-05

Tri-City Medical Center
4002 Vista Way, Oceanside, CA 92056-4506 • 760.724.8411

February 10, 2004

Richard Garcia
Offsite Emergency Plan Coordinator
Nuclear Affairs & Emergency Planning
Southern California Edison Company
P. O. Box 4198
San Clemente, CA 92674-4198

Re: Medical Treatment at Tri-City Medical Center

Dear Mr. Garcia:

Tri-City Medical Center has always been, and agrees to continue to be, willing to work with Southern California Edison Company ("SCE") concerning provision of medical treatment of SCE personnel from the San Onofre Nuclear Generating Station ("Songs"), as well as emergency medical treatment for other individuals who, as a consequence of activity of SONGS, may have injuries complicated by radiation contamination, or who may have been exposed to excessive levels of radiation. Tri-City's Emergency Department has physician and nursing staff coverage 24 hours per day to provide evaluation and treatment of any such contaminated injured individuals. Tri-City is accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO).

Tri-City acknowledges the staff training and emergency room supplies and equipment, which have been provided by Southern California Edison to support the handling of radiation contaminated patients. Tri-City further acknowledges Southern California Edison's commitment to continue to provide staff training, equipment and supplies, as evidenced by SCE's execution of the Acknowledgement of this letter, to support the provisions of medical treatment, as described. Tri-City also accepts SCE's commitment to provide health physics expertise to assist the Tri-City staff with radiological control and decontamination functions, as needed.

Southern California Edison will be responsible for the payment of reasonable fees and charges for any services rendered by Tri-City at SCE's request. If either Tri-City or SCE becomes unable, or is no longer willing, to abide by the understanding expressed in this letter, it shall promptly communicate that fact to the other party in writing.

Very truly yours,

Joy A. Gorzeman, RN, MSN
COO/CNE

Acknowledgement:

SOUTHERN CALIFORNIA EDISON COMPANY

By: _____ Date: 2/19/2004

Contract04: SONGS Ltr. Agreement (21004)

SOUTHERN CALIFORNIA
EDISON
An EDISON INTERNATIONAL Company
San Onofre Nuclear Generating Station

RECEIVED
APR 22 2014
Administration

April 7, 2014

Mr. Kenneth McFarland
Chief Executive Officer
Mission Hospital
27700 Medical Center Road
Mission Viejo, CA 92691

Subject: 2014 Review of Medical Agreement

Mr. McFarland:

Annually, in accordance with the SONGS Emergency Plan, Southern California Edison conducts a review of medical services agreements for the San Onofre Nuclear Generating Station to certify they are valid. Enclosed are copies of both agreement, dated January 28, 2010 and January 17, 2002 respectively. In conjunction with these agreements, and at your request, we will provide training and education to your staff in the evaluation and treatment of radiation related injuries.

Please indicate your concurrence that the agreement is valid by signing and dating this cover letter. The cover letter may be mailed, faxed, or emailed to me at your earliest convenience.

If you have any questions regarding the medical service agreement, or our educational program, please contact me at (949) 368-9683..

Sincerely,

Mayra Alvarado
Southern California Edison
Mayra.Alvarado@sce.com
PO Box 128
San Clemente, CA 92674
Fax: (949) 368-3664

Enclosure

Both agreements are considered current and valid

Signed Kenneth McFarland Date 5/22/14

PO Box 128
San Clemente, CA 92674-0128

SOUTHERN CALIFORNIA
EDISON
An EDISON INTERNATIONAL Company

January 17, 2002

Peter Bastone
Chief Executive Officer
Mission Hospital Regional Medical Center
27700 Medical Center Road
Mission Viejo, CA. 92691

Dear Mr. Bastone:

Subject: 2002 Renewal of Agreement for Medical Treatment Facilities

This letter confirms the Agreement between Mission Hospital Regional Medical Center (the "Hospital") and Southern California Edison Company ("SCE") concerning provision of medical treatment facilities for the general medical treatment of SCE personnel from San Onofre Nuclear Generating Station (the "Station") and emergency medical treatment for other individuals suffering from injuries, injuries complicated by radiation contamination, or excessive radiation exposure as a consequence of activity at the Station. Staff training and certain equipment to support the handling of radiation contaminated patients will be provided by SCE.

Confirmation of this Agreement is based on our current understanding that:

1. The Hospital has the physical capacity, personnel, medical equipment and resources to handle a radiation contaminated patient as a result of an accident at the Station and is accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO).

2. The Hospital has or will grant temporary house privileges through the appropriate procedures as defined by the Medical Staff bylaws to those designated physicians who have their up-to-date credentials and license on file with the Hospital and have contracted with SCE to provide treatment or consultation to SCE personnel and other individuals who have been injured at the Station or individuals from communities in vicinity of the Station who have been exposed to excessive radiation; or who have injuries complicated by radioactive contamination as a consequence of a radiological accident at the Station.

P. O. Box 4198
San Clemente, CA 92674-4198

By executing acceptance of this letter, you confirm these understandings and agree to provide the following medical treatment services to SCE in support of the operation of the Station:

1. Hospital care and treatment for SCE personnel or other individuals in support of Station operations who have been injured at the Station; or who have been exposed to excessive radiation; or who have injuries complicated by radioactive contamination as a consequence of a radiological accident at the Station.

2. Hospital care and treatment for individuals from communities in the vicinity of the Station injured as a result of activities at the Station, whose injuries may be complicated by radioactive contamination as a consequence of a radiological accident at the Station.

SCE will be responsible for the payment of your reasonable fees and charges for any such services rendered at SCE's request. This Agreement will remain in effect unless terminated by either party giving thirty (30) days advance written notice of termination to the other party.

Please signify your continued agreement to the provisions of this letter by executing the acceptance below and returning this letter to me in the enclosed self-addressed stamped envelope. A copy of this letter agreement is also enclosed for your records.

Very truly yours

Howard Newton
Manager, Site Support Services

Accepted and agreed to this 22ND day of JAN., 2002

By: _____
Peter Bastone, Chief Executive Officer

SOUTHERN CALIFORNIA
EDISON
An EDISON INTERNATIONAL Company
San Onofre Nuclear Generating Station

April 7, 2014

Roy Cox
Regional Logistics Manager
Air Methods
1670 Miro Way
Rialto, CA 92376

Subject: 2014 Review of Medical Agreement

Mr. Cox:

Annually, in accordance with the SONGS Emergency Plan, Southern California Edison conducts a review of medical services agreements for the San Onofre Nuclear Generating Station to certify they are valid. Enclosed is the copy of the agreement, dated February 9, 2009. In conjunction with this agreement, and at your request, we will provide training and education to your staff in the evaluation and treatment of radiation related injuries.

Please indicate your concurrence that the agreement is valid by signing and dating this cover letter. The cover letter may be mailed, faxed, or emailed to me at your earliest convenience.

If you have any questions regarding the medical service agreement, or our educational program, please contact me at (949) 368-9683.

Sincerely,

Mayra Alvarado
Southern California Edison
Mayra.Alvarado@sce.com
PO Box 128
San Clemente, CA 92674
Fax: (949) 368-3664

Enclosure

The agreement is considered current and valid

Signed [signature] Date 4/24/14

Kevin Strathope RVP

PO Box 128
San Clemente, CA 92674-0128

Air Methods

The Exclusive Airborne Healthcare Company...Since 1980

Air Methods Corporation
Denver/Centennial Airport
NASDAQ/NMS: AIRM

February 9, 2009

Re: Agreement for Transportation of Injured or Contaminated Individuals

This letter acknowledges Mercy Air Service Inc. is agreeable and willing to be identified by San Onofre Nuclear Generating Station (hereafter "SONGS") as an emergency air ambulance resource.

SONGS may request Mercy Air Ambulance Service under this Letter agreement (weather and maintenance permitting) for any injured individual, who may also have exposure to radiological contamination, to the most appropriate treatment facilities available at the time of incident.

Mercy Air response is conditioned upon Southern California Edison Company (SCE) providing staff training and assistance necessary to support the handling of radiologically contaminated patients, as well as the availability of aircraft and qualified personnel at the time of the request. Mercy Air accepts SCE's commitment to provide health physics and medical expertise to assist contamination involved, degree of decontamination achieved, and risks involved to the staff and craft for the transport of the injured individual. Mercy Air shall have the discretion whether to accept the injured for transport based on risk to the flight crew.

Mercy Air understands SCE will be responsible for the payment of usual and customary fees and charges for any such services rendered at SCE's request, as evidenced by SCE's execution of this letter. Mercy Air will provide emergency care and transportation from SONGS to either of the following facilities capable of handling contaminated-injured patients: Tri City Medical Center in Oceanside, and Mission Hospital and Regional Medical Center in Mission Viejo.

The term of this agreement shall be three (3) years from the above date and subject to extension thereafter on a year to year basis by mutual agreement. Notwithstanding other provisions contained herein, this agreement may be terminated by either party with or without cause following written notice to the other party at least ninety (90) days prior to effective termination date.

Sincerely,

Western Regional Vice President
Mercy Air Service, Inc.
Air Methods Corp

Offsite Emergency Planning and External Affairs Manager
San Onofre Nuclear Generating Station

7301 South Peoria – Englewood, Colorado, USA 80112 – 303-792-7400 – FAX 303-790-0499

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

June 16, 2014

Chief Jeffrey L. Wilkerson
Camp Pendleton Fire Department
(Hand Delivered)

SUBJECT: San Onofre Nuclear Generating Station (SONGS): Appendix E to 10 CFR Part 50-Emergency Planning and Preparedness

Dear Chief Wilkerson,

Per our mutual aid assistance agreement, dated June 9, 2008 and our past discussions, it has been agreed that the Camp Pendleton Fire Department will continue to honor the agreement. This agreement per Section 2.a. will allow your continued support of firefighting and/or other emergency services (including, but not limited to, medical, hazardous materials, or rescue). The agreement is also currently being updated to reflect our current organizational and operational structure.

A recent Nuclear Regulatory Commission (NRC) regulation states in part: "By June 23, 2014, (*emergency plans must have)* identification of, and a description of the assistance expected from, appropriate State, Local, and Federal agencies with responsibilities for coping with emergencies, including hostile action at the site...."

With your concurrence, the above required assistance is covered under section 2.a of the existing mutual aid assistance agreement. Thank you in advance for your continued assistance and support.

Sincerely,

Brian D. Metz, Fire Marshal
Southern California Edison, San Onofre

Agreed By:

Chief, Jeffrey L. Wilkerson
Camp Pendleton Fire Department

P.O. Box 128
San Clemente, CA 92674-0128

MUTUAL AID ASSISTANCE AGREEMENT

THIS AGREEMENT is entered into this 9th day of June, 2008, between Southern California Edison Company, 2244 Walnut Grove Avenue, Rosemead, California 91770 and the Commanding Officer, Marine Corps Base, Camp Pendleton, California 92055.

The intent of this revision is to expand the previous mutual firefighting agreement into a more comprehensive emergency services agreement, which includes: fire, emergency medical services (EMS), hazardous materials emergency response, and rescue.

1. **WHEREAS**:

    a. Each of the parties maintains certain equipment and personnel for fire suppression and emergency services within its own jurisdiction and areas, and

    b. The parties desire to augment the fire protection and emergency services available to the San Onofre Nuclear Generating Station, Units 2 and 3 located on Camp Pendleton, and the Marine Corps Base, Camp Pendleton, California, and

    c. The lands and districts of the parties are adjacent or contiguous so that mutual assistance is deemed feasible, and

    d. It is the policy of the Department of the Navy and the municipalities or other districts and of their governing bodies to conclude such agreements wherever practicable, and

    e. It is deemed sound, desirable, practicable, and beneficial for the parties to render assistance to one another in accordance with these terms;

2. **THEREFORE, IT IS AGREED**:

    a. The senior officer of a party's fire department or the senior officer of such fire department actually present at any fire is authorized to request firefighting and/or other emergency services (including, but not limited to, medical, hazardous materials response, or rescue) assistance under this agreement whenever he deems it advisable.

    b. A call for assistance, received by Marine Corps Base, Camp Pendleton's Fire and Emergency Services, shall be referred to the Emergency Communication Center. A call, received by the San Onofre Nuclear Generating Station, shall be referred to the Fire Chief, or his duly authorized representative, before any equipment or personnel are dispatched.

    c. The senior officer on duty of the fire department receiving the request shall immediately take the following action:

1. Determine if apparatus and personnel can be spared to respond to the call;

2. Determine what apparatus and personnel might most effectively be dispatched;

3. Determine the exact mission to be assigned in accordance with the detailed plans and procedures of operation (see Attachment A); and

4. Based on resources and availability, dispatch such apparatus and personnel with complete instructions as to the mission.

d. Any benefit arising out of the rendering of assistance pursuant to this agreement shall inure solely to the undersigned parties. Each of the parties shall be required to notify the other party of organizational changes, conditions, and operations that might lead to inadvertent third-party benefit.

e. The rendering of assistance under the terms of the agreement is not mandatory, but the party receiving the request should immediately inform the requesting party if assistance cannot be rendered.

f. Reimbursement and liabilities of parties will be determined as follows:

1. In rendering assistance, the agents, servants, and employees of one party will not be considered the agents, servants, and employees of the other party.

2. Direct expenses and losses which are additional firefighting costs over and above normal operating costs incurred while fighting a fire on property under the jurisdiction of the United States may be reimbursed in accordance with the Federal Fire Prevention and Control Act of 1974 (Public Law No. 93-498, 15 U.S.C. 2201 et seq.) and its implementing regulations (44 C.F.R. 151).

3. Except as provided above, each party waives all claims against the other for any loss, damage, personal injury, or death resulting from performance under this agreement.

4. Any service performed by Marine Corp's personnel under this agreement shall constitute service "in the line of duty," without prejudice to any investigation conducted under JAGINST 5800.7.D.

g. The technical head, or designee, of the fire department requesting service shall assume full charge of the operations. If he requests a senior officer of the responding fire department to assume command, he shall not, by relinquishing command, be relieved of his responsibility for the operation. However, the apparatus, personnel, and equipment of the responding fire department shall be under the immediate supervision and responsibility of the senior officer of the responding fire department.

h. The chief fire officers and personnel of both parties are invited and encouraged, on a reciprocal basis, to frequently visit each other's activities for guided familiarization tours consistent with local security requirements and, as feasible, to jointly conduct pre-fire planning inspections and drills.

i. The technical head, or designee, of the fire departments are authorized and directed to meet and draft any detailed plans and procedures of operation necessary to effectively implement this agreement. Such plans and procedures of operation shall become effective upon ratification by the signatory parties.

j. This agreement shall become effective immediately and shall remain in full force and effect until cancelled by mutual agreement of the parties or by written notice by one party to the other party, giving ten days notice.

IN WITNESS THEREOF, the parties have executed this agreement

at _____ on June 9, 2008.

Fee, John F.
Manager, Site Emergency Preparedness
Southern California Edison Co.

O. A. JAMMAL
Colonel, U. S. Marine Corps
Chief of Staff
Marine Corps Base, Camp Pendleton

OPERATIONAL PLAN
ATTACHMENT A - MEMORANDUM OF UNDERSTANDING
MUTUAL THREAT ZONE RESPONSES

It is agreed that Mutual Threat Zones exist for Southern California Edison and the Marine Corps Base, Camp Pendleton.

A. **AREAS**

The Mutual Threat Zone areas are as follows:

Area 1 - The Mesa facilities of Southern California Edison to include, but not limited to, the Emergency Operations Facility, multiple warehouse complexes, transportation services facility, medical clinic, training and office facilities, etc.

Area 2 - The old Highway 101 and adjacent lands from Basilone Road off-ramp to the southernmost entrance to the San Onofre State Park.

Area 3 - The San Onofre Housing Complex and Base Exchange Complex.

Area 4 - Permanent Buildings within the San Onofre Nuclear Generating Station Owner-Controlled Area.

B. **RESPONSE**

The response for each Area will be as follows:

Area 1 - On receipt of a valid fire alarm or verified report of fire, SOFD will dispatch the Station Engine and Ambulance and request from Camp Pendleton Fire and Emergency Services the dispatch of at least a single engine company. Basic Life Support (BLS) medical emergencies will be handled by the SOFD ambulance. Advanced Life Support (ALS) medical emergencies may require assistance from Camp Pendleton Fire and Emergency Services medics and/or Orange County Fire Authority (OCFA) medics, as determined appropriate by the SOFD officer in charge of the incident.

Area 2 - Upon receipt of a request for firefighting assistance by one Party, the Party will be notified and equipment dispatched. SOFD and the Camp Pendleton Fire and Emergency Services will dispatch the requested equipment, based on resources and availability.

Area 3 - Upon receipt of a request for assistance from the Camp Pendleton Fire Department, SOFD will dispatch requested equipment, based on resources and availability.

Area 4 - Upon receipt of a request for assistance from the San Onofre Fire Department, the Camp Pendleton Fire and Emergency Services dispatcher will provide the requested equipment, based on resources and availability.

C. COMMAND

In all zones, an onsite Command Post (CP) will be established. The responsible agency will have an Incident Commander (IC) available at the location. In the interest of inter-agency coordination, a representative of both fire departments will be available at the Command Post to discuss matters of mutual concern. In Areas 1 and 4, the San Onofre Fire Department Chief Officer will provide direction. In Areas 2 and 3, the Camp Pendleton Chief Officer will provide direction.

D. RESOURCES

Each of the Parties shall make every effort to supply the equipment, personnel and services described in this exhibit; however, it is understood by the Parties that under certain circumstances, a responding Party may be unable to dispatch part or all of the equipment, services and personnel described in this Attachment. The equipment, personnel, and services actually made available to a requesting Party shall be pursuant to the best efforts of the Responding Party.

Marine Corps Camp Pendleton is advised and understands on-site fire department staffing at SONGS may not be reduced below the five persons required by installation regulations (re: 11-88-SER).

E. ANNUAL REVIEW

Exercises to test the response capabilities of the Parties shall be conducted at least once per year. All exercises of this Agreement shall be observed by a representative of the Parties who shall make written reports within 60 days of any drill or exercise, as required by the agency. The Parties' reports shall be used for review and amendment of this Agreement as provided herein.

F. AMENDMENTS

After each exercise as provided in Paragraph E, the Parties shall review and amend this Agreement as appropriate. The Agreement may be amended at any time, but any amendment must be in writing and signed by each of the Parties.

SOUTHERN CALIFORNIA
EDISON
An EDISON INTERNATIONAL Company
San Onofre Nuclear Generating Station

April 7, 2014

Chief Keith Richter
Fire Chief
Orange County Fire Authority
1 Fire Authority Road
Irvine, CA 92602

Subject: 2014 Review of Medical Agreement

Chief Richter:

Annually, in accordance with the SONGS Emergency Plan, Southern California Edison conducts a review of medical services agreements for the San Onofre Nuclear Generating Station to certify they are valid. Enclosed is the copy of the agreement, dated July 7, 2004. In conjunction with this agreement, and at your request, we will provide training and education to your staff in the evaluation and treatment of radiation related injuries.

Please indicate your concurrence that the agreement is valid by signing and dating this cover letter. The cover letter may be mailed, faxed, or emailed to me at your earliest convenience.

If you have any questions regarding the medical service agreement, or our educational program, please contact me at (949) 368-9683.

Sincerely,

Mayra Alvarado
Southern California Edison
Mayra.Alvarado@sce.com
PO Box 128
San Clemente, CA 92674
Fax: (949) 368-3664

Enclosure

The agreement is considered current and valid

Signed Keith Richter Date 4/22/14

PO Box 128
San Clemente, CA 92674-0128

ORANGE COUNTY FIRE AUTHORITY
P. O. Box 57115, Irvine, CA 92619-7115 • 1 Fire Authority Road, Irvine, CA 92602
Chip Prather, Fire Chief (714) 573-6000 www.ocfa.org

July 7, 2004

Mr. Howard W. Newton
Manager, Site Support Services
Southern California Edison

Subject: Renewal of Agreement for the Transportation of Individuals

Dear Mr. Newton:

This letter confirms an agreement ("Agreement") between the Orange County Fire Authority ("OCFA") and Southern California Edison ("SCE") concerning emergency care and ambulance transportation for individuals that are injured at the San Onofre Nuclear Generating Station, where the injury may involve radiological contamination.

Pursuant to this Agreement, San Onofre Nuclear Generating Station may request OCFA provide emergency care and transportation under this Agreement for any injured individual who may have been exposed to radiological contamination at the San Onofre Nuclear Generating Station. Transportation will be to one of the following medical treatment facilities capable of handling contaminated-injured patients: San Clemente Hospital, South Coast Medical Center in Laguna Beach, Tri-City Medical Center in Oceanside, and Mission Hospital and Regional Medical Center in Mission Viejo.

As part of this Agreement, SCE agrees to provide staff training and assistance to OCFA so it is adequately prepared to handle contaminated individuals as described herein. In exchange, OCFA agrees to provide available vehicles and qualified personnel in response to requests from SCE for assistance in the handling of radiologically contaminated patients.

In addition, when SCE requests assistance from OCFA then SCE will provide OCFA staff with available health physics and medical information about the related contamination injuries so this information can be used by the OCFA in responding to these injuries. This information will assist OCFA's staff in understanding the nature of the injury, the extent and characteristics of any contamination that may be involved, the degree of decontamination achieved, and the risks involved to the staff and to the vehicles and equipment used for the transport of the injured individual.

SCE agrees that it will be responsible for the payment of usual and customary fees and charges for any emergency care or transportation services rendered at SCE's request, as evidenced by SCE's execution of this letter, and OCFA agrees to send any bills to me at the above address (unless subsequent billing instructions are provided in writing by SCE to OCFA).

It is also understood and agreed that the sole remedy of either party for breach of this Agreement (except for non-payment for services rendered by SCE which shall not be subject to this limitation on remedies) shall be the termination of this Agreement. Except for non-payment claims, under no circumstances shall either party be liable to the other for any damages arising out of the breach of this Agreement.

Notwithstanding any other provisions contained herein, either party with or without cause may terminate this Agreement following 30 days written notice to the other party.

The SCE signatory below represents that he has authority to sign this Agreement on behalf of SCE.

Very truly yours,

ORANGE COUNTY FIRE AUTHORITY

By: _____
CHIP PRATHER, FIRE CHIEF

ACCEPTED AND AGREED TO:

SOUTHERN CALIFORNIA EDISON

By: _____
HOWARD W. NEWTON, MANAGER,
SITE SUPPORT SERVICES

APPROVED AS TO FORM:

By: _____
GENERAL COUNSEL

Attachment B to Enclosure 1

Meeting minutes and slide presentation associated with the SCE response to SONGS-RAI-17

Interjurisdictional Planning Committee

P.O. Box 4198, San Clemente, CA 92674

County of Orange • County of San Diego • City of San Clemente • City of San Juan Capistrano
City of Dana Point • California State Parks • U.S. Marine Corps • Southern California Edison

IPC MONTHLY MEETING

November 6, 2013
Attendees

Alvarado, Mayra	SONGS
Asturias, Susan	San Diego County OES
Ayala, Pedro	Red Cross
Boothe, Matt	CHP
Cantor, Michael	City of San Juan Capistrano
Churchill, Brad	SONGS
Cleavenger, Dan	SONGS
Dymmel, Eric	State Parks
Genschan, Scott	SONGS
Kaminske, Sara	OCSD/EM
Kirchner, Jeremy	City of Dana Point
Olson, Lynne	Cal EMA
Sischo, Lucia	SONGS
Seward, Steve	SONGS
Tucker, Jen	City of San Clemente
Wirsig, Johnny	MCB Camp Pendleton

Personally Identifiable Information

Redacted by NRC Staff

1. Call to Order and Self Introductions

The November 6, 2013 IPC meeting was called to order at 09:38 a.m. by Sara. The IPC presented Jen with a memento, thanking her for all her hard work and her professionalism as part of the IPC team. Her last day is December 5th. Steve Seward, Brad Churchill, and Scott Genschan were introduced. They are transitioning into ER for SONGS.

2. Review and approval of meeting minutes

The October 2, 2013 IPC meeting minutes were approved as written.

3. Results of the 2013 SONGS 10 CFR 50.54t Audit

Brad reported that the results of the audit show that emergency planning and the overall organization provides effective protection of public health and safety. The interface between the OROs and SONGS is very positive. Liaisons know their role and the letters of agreement are current. Bottom line is that the offsite jurisdictions and SONGS work as a coherent team.

4. General Overview of Proposed Changes to SONGS Emergency Plan

Scott provided a briefing on the proposed changes. There are five significant changes to the plan:

1. There will be no event related radiological impacts beyond the site boundary.
    a. Sirens will no longer be needed
    b. Need for evacuation will be eliminated
2. The Emergency Operations Facility will be eliminated.
    a. No radiological monitoring teams necessary
    b. JIC responsibilities will be transferred to Corporate Communications
3. There will be significantly reduced on-site emergency response staffing.
    a. Fire department becomes Fire Brigade
4. There will be a limited augmented (recalled) Offsite Response Organization.
5. TSC and OSC will be co-located.

Finally, they are reviewing the need to maintain beyond design basis mitigation equipment (i.e., the Fukushima mitigations).

Dan mentioned that the fuel that was in the reactor that was never used and didn't burn has been decontaminated and moved to dry cask. It will be shipped to Washington State for re-packaging. This should occur between now and December. It is considered low-level, as the steam generators were off line for some time.

Eventually the Yellow and Blue phone lines will go away. The plant will still need to notify the off-sites, but are not required to have a dedicated line for that.

The changes require a change to the SONGS emergency plan. These changes will be submitted to the NRC (target date is the end of December 2013). The NRC will review and approve or not. This could take anywhere from 6 to 18 months.

5. Utility Decommissioning Update

Scott provided an overview of the plant's status. The siren test went very well. 150 sirens were sounded, with very few calls into the 9-1-1 system. If the revised emergency plan is approved there will not be a need for a siren test next year. The growl tests start next week and will be conducted over a two week period.

6. SONGS Plume Phase Exercise

Exercise went very well. The FEMA out-briefing indicated that it was a very clean exercise with no deficiencies or ARCA's identified. FEMA had nothing but praise for the plant and the off-sites. FEMA's IMAT Team was also very impressed with the professionalism of the IPC members.

Dan reported that at the plant there were three NRC inspectors in addition to the resident inspector. The overall finding was that SONGS can protect the health and safety of the public. SONGS conducted the exercise with a minimum amount of staffing, only nine in the EOF down from 24.

We can expect the draft AAR within 30 days.

7. ODAC Update

There were no issues with the exercise.

8. Roundtable

Dan reminded everyone that the December 4th meeting is also the holiday luncheon. They are paring down the number of attendees to the core group of people who participated in the exercise. The hope is to limit the number of attendees to 40.

Lynne reported that Bill Potter is putting together a meeting to review NPP Special Funding on November 21st in Sacramento. Subsequent meetings will be held in Orange County and San Luis Obispo. Edison is still looking at the issue. They will continue to fund the off-sites as long as a need exists in the emergency plan. Worse case is they will pay 80% for 2013-14. There is also a potential for a pro-rated amount.

Pete Dietrich has moved to corporate. The new site V.P. is Paul Dalmisonao. The question was asked if SONGS will know where they stand with the NRC. The answer was probably not.

Lynne raised the KI issue. Bill Potter has not been able to get a response from the NRC. An analysis is supposed to be conducted by the NRC who will then make a recommendation to the state. Bill is working with them on this. Currently no one is willing to step up and say that San Onofre off-sites do not need KI. The state needs a response in writing from the NRC.

The ALC is due to FEMA by January 30th. The state would like it by January 15th.

Jen mentioned a rumor that radioactive water is coming from Japan. A Canadian group wrote an article to that effect that was emailed around by the California Coastal Coalition from Oceanside. Expert opinion is that there is no radioactive water heading towards California.

The next IPC meeting will be held on **Wednesday December 3, 2013 at 10:00 a.m. at the Dana Point EOC.**

Sara adjourned the meeting at 11:00 a.m.

Interjurisdictional Planning Committee

P.O. Box 4198, San Clemente, CA 92674

County of Orange • County of San Diego • City of San Clemente • City of San Juan Capistrano
City of Dana Point • California State Parks • U.S. Marine Corps • Southern California Edison

IPC MONTHLY MEETING

February 5, 2014
Attendees

Abel, Chris	SONGS
Alvarado, Mayra	SONGS-EP
Amabile, Tom	San Diego OES
Beekman, Mike	CUSD
Boothe, Matt	California Highway Patrol
Boston, Donna	OCSD/EM
Bruce, Cameron	Mission Hospital
Cantor, Michael	City of San Juan Capistrano
Carpenter, Katie	City of San Clemente
Cleavenger, Dan	SONGS
Dymmel, Eric	California State Parks
7589	
Harriman, Janell	OCSD/EM
Kaminske, Sara	OCSD/EM
Kirchner, Jeremy	City of Dana Point
Lawrence, Pete	Oceanside Fire
Olson, Lynne	CalOES
Petro, Mike	Orange County Fire Authority
Seward, Steve	SONGS
Sischo, Lucia	SONGS-EP
Sifuentes, Alberto	FEMA Region IX
Styner, Randy	OCEH
Taibi, Gaetano (Guy)	CDPH
Tran, Viet	SONGS
Wallevand, Shelley	OCEH
Wirsig, Johnny	MCB Camp Pendleton

Personally Identifiable Information

Redacted by NRC Staff

1. Call to Order and Self Introductions

The February 5, 2014 IPC meeting was called to order at 9:32am by Jeremy Kirchner.

2. Review and approval of meeting minutes

The January 8, 2014 IPC meeting minutes were approved as amended to correct Katie Carpenter's email address. Motion to approve: Tom Amabile, Second: Mike Cantor, motion passed with all in favor.

3. Decommissioning Update

Steve Hook from the Contingency Management Consulting Group (CMCG) gave a power point presentation with the decommissioning update. This presentation will be emailed to all IPC members.

Decommissioning efforts are focused on three priorities: de-fueling, license exemptions, and developing and submitting new EP/EALs.

New PDEP target submittal date to the NRC is 2-28-2014. Review and approval process can take anywhere from 6-8 months.

Under the new plan:

- SONGS will no longer be required to conduct HAB exercise (NRC/FEMA concur on this decision).
- 15 minute notification requirement to the offsites will change to 60 minutes.
- EOF and JIC will no longer exist. There will be one central command center.
- Alert will be the highest EAL with only 11 classifications for NOUE and Alerts that are site specific to SONGS.
- On-shift ERO staff have been reduced to 16 and under the new plan will be reduced to 2. Augmented technical and radiological staff will be available for support if needed.
- Fire department has been closed and replaced with a 5 staff fire brigade. Will be reduced to 2 under the new plan. Fire support will be provided by Camp Pendleton.
- Yellow Phone system will be discontinued and replaced with commercial/cell/satellite phones
- Number of hospitals will be reduced to 2 – Mission Hospital, Mission Viejo and TriCity Hospital, Oceanside. Medical drill will be conducted in October (date TBD) with TriCity Hospital.
- Siren system will be discontinued. Dan will call in a representative to give a quote for cities or agencies interested in keeping and maintaining their sirens. Quote should be provided within the next two months

Chris Abel asked that IPC members share the decommissioning information with City/County/Agency supervisors. Please contact him if you would like him to do a decommissioning update presentation for you.

4. Utility Update

Safety information – the driveway up to the Learning Center is still under construction so please be careful and watch for trucks crossing as you enter and exit.

TLDs- new are available. Please turn in your old tlds to Mayra by the March 5, 2014 IPC meeting

Siren Growl Schedule – Camp Pendleton February 24/25, Dana Point February 26/27, San Juan Capistrano Feb28-March 3, San Clemente March 4-6, State Parks March 7/8. Annual Siren test still scheduled for October 16, 2014.

Community Engagement Panel (CEP) – SCE will put out a news release on Thursday, February 6, 2014 naming members that have agreed to serve on the panel. The panel is

designed to improve transparency and offer an opportunity for people living near the plant to have open communication with the utility. Will meet on a quarterly basis. Will not have decision-making/voting authority but serve as a conduit for information between the plant and the community. Meetings will be open to the public and media. CEP will be led by UCSD Professor David Victor. Members will include the mayors from the cities of San Clemente, San Juan Capistrano, and Dana Point, representatives from state parks, OCSD, Camp Pendleton, schools, and environmental groups. There will be 18 total members.

Jeremy Kirchner called for a vote that IPC representation on the CEP is not necessary.
-Motion to approve: Mike Cantor, Second: Tom Amabile, motion passed with all in favor

5. **Legislative Update**
At the January, 2014 NPP working group meeting SCE gave a statement that after reviewing the current legislation they have an obligation to continue funding offsites at the current levels. This legislation expires in 2019. IPC is requesting SCE submit funding obligations in writing.

The NPP working group did not submit the drafted amendment to the legislation presented at the January 8, 2014 IPC meeting. The group will continue meeting quarterly to use the additional time to create new legislation to replace the current legislation before it expires in 2019.

6. **KI Update**
FEMA published a letter stating that based on the current conditions at SONGS, they will no longer be evaluating KI distribution programs due to the removal of the threat of a radioactive iodine release.

Donna Boston met with the OC Health Officer who agreed with the letter from FEMA. Donna has requested a memo from the OC Health Officer which she will present to Council for approval to amend the KI policy.

Jeremy will send email on behalf of the IPC and Orange County, San Diego County and Camp Pendleton Health Officers to request a statement from CDPH for their position on the letter from FEMA regarding KI distribution.

Next steps:
Randy will be drafting talking points for IPC
Public education will be needed (mailer/media release etc)
IAP #14 (Jeremy Kirchner), EOP, R1 forms, and EAS (Mike Cantor) messages will need to be updated
Decision to accept/decline new shipment of KI from the State

Mike Beekman requested that a decision be made regarding the cessation of the KI distribution program before school registration packets are sent out to parents in July if possible.

7. Roundtable

Jeremy – will email updated onsite drill exercise schedule to group. There are multiple mini drills scheduled for this quarter. Participation is encouraged but voluntary. NREP Conference is coming up April 7-10, 2014 if anyone is interested.

Randy – San Luis Obispo HAB Exercise in April. Randy will be a controller.

Guy – CDPH has a new Senior Health Physicist, Sheetal Singh. She is replacing Larry Morgan.

Cameron – Thanks for the invite to be included in the IPC Meeting. Will be training a new representative that will be attending future meetings.

Mike C. – Requested proposed SONGS budget numbers for next fiscal year. Lynne will send out.

Lynne – Annual Letter of Certification has been submitted. Thank you to Janell.

Alberto – Final AAR has been published and sent out

Tom A. – R&D Ex the second week of July, 2014 for San Diego County

Eric – requested information regarding the process for calibrating the dosimeters. Lynne answered that it is completed by the State.

The next IPC meeting will be held on **Wednesday March 5, 2014 at 9:30 a.m. at the SONGS Learning Center.**

Jeremy adjourned the meeting at 11:40 a.m.

SONGS

Transition to a

Permanently Defueled Emergency Plan (PDEP)

Briefing for the

Interjusdictional Planning Committee

Wednesday February 5, 2014

Steve Hook

Introduction

- SONGS current status
- Current SONGS Emergency Plan
- SONGS Emergency Plan Transition
- Current Emergency Plan Activity
- NRC Historical Precedence
- Draft NRC Interim Staff Guidance
- SONGS Draft PDEP
- Offsite Planning Changes

SONGS PRESENT STATUS

- June 12, 2013 - SCE notifies the NRC it has permanently ceased operation of Units 2 and 3

- All fuel is now in the spent fuel pool (SFP)

- The focus for Emergency Plan is changing to a decommissioning activity.

Current SONGS Emergency Plan

- All aspects of the current SONGS Emergency Plan remain in place
- All requirements in the SONGS Emergency Plan are being maintained.
- SONGS remains dedicated to providing the IPC with important information on status and activities of the plant.

SONGS Emergency Plan Transition

- The NRC has issued a draft Interim Staff Guidance (ISG) for defueled plant emergency plans.
- An industry team, including SONGS personnel, reviewed the ISG and are providing comments on the document through the Nuclear Energy Institute (NEI).

Current Activity

- SONGS is developing a Permanently Defueled Emergency Plan (PDEP) for submittal to the NRC. Target date 2-28-14
- SONGS is working with other stations that are permanently defueled to ensure that all the defueled stations are doing the right thing in this process.
- We are using lessons learned from previous submittals to avoid issues.

NRC Historical Precedence

Operating Reactor(s)

Multi-faceted, to address a variety of emergencies, including hostile action events (HAB), affecting public health and safety

- Formal offsite REP plans
  - Emergency Planning Zone (EPZ)
  - Alert and Notification System(ANS)
  - Evacuation Time Estimate Studies (ETE)
  - Emergency Classification (NOUE-->GE)
- Predetermined offsite Protective Actions
- Immediate (15 min) offsite notification
- Extensive site/offsite emergency response organizations (EROs)
- Dedicated on- and off-site facilities
- Joint, biennial exercises
- Comprehensive site/offsite training

Decommissioning Site

Focused on addressing low consequence, limited impact emergencies

- No formal offsite REP plans: no EPZ / ANS / ETE; removes SAE & GE classification levels → no offsite PAR
  - HAB event not considered
- "Prompt" offsite agency notification
- Streamlined site ERO, to include: assessment; ERO activation; notification/communication; training; facilities and equipment; and recovery
- No dedicated offsite facilities; common onsite facility
- Offsite response organizations invited to participate onsite biennial exercise

Draft NRC Interim Staff Guidance

- Provides standard exemptions for emergency planning for permanently defueled commercial nuclear facilities.
- Accepts NEI standard emergency action levels (EALs) for defueled plants. Limited to NOUE and Alert for Permanently defueled plants
- Provides guidance for the contents of the PDEP

SONGS Draft PDEP

- SCE remains responsible for Emergency Planning efforts
- Onshift ERO Staffing reduced – (16 to 2)
  Augmented staff available
  - Technical Support
  - Radiological Support
- Emergency Classification is limited to:
  - Notification of Unusual Event
  - Alert

SONGS Draft PDEP
(continued)

- Offsite fire department support – Camp Pendleton
- Offsite notifications required within 60 minutes of emergency classification
- NRC notification required within 60 minutes of emergency classification and after offsite notifications are completed.

SONGS Draft PDEP
(continued)

- Streamline onshift staffing for emergency response organization (ERO)
- Staff augmentation ready if needed
- One response facility – Command Center
- Notification via commercial, cell, or satellite telephone
- Offsite response to SONGS event will be diminished due to reduced source term

SONGS Draft PDEP
(continued)

- No Joint Information Center (JIC)
  - One onsite emergency response facility
    - Command Center
- Two offsite medical facilities – Proposing
  - Saddleback Memorial Medical Center in San Clemente and
  - Mission Hospital in Mission Viejo
- Biennial Exercises (may be observed or invited to participate – no FEMA evaluation)

SONGS Draft PDEP

(continued)

Drills to continue

- Communications
- ERO Augmentation
- Radiation Protection
- Medical Emergency (onsite and utilizing offsite facilities)
- Fire

SONGS Draft PDEP

(continued)

Offsite Training

- Fire fighting
- Medical services, transport of contaminated injured
- Law enforcement

Onsite Training

- Communications
- Interface with offsite responders

Offsite Planning Changes

- Anticipated changes to the SONGS Emergency Plan Program Offsite Interface include:
  - Disposition of Alert Notification System (sirens)
  - Notification and communications systems
  - Elimination of the Joint Information Center (JIC)
  - Reduction in the letters of agreement to support response
  - Offsite participation in biennial exercises

SONGS Commitment

- Conducting a safe and efficient operation
- Keeping the IPC informed
- Coordinating with the IPC on Emergency Planning issues

ENCLOSURE 2

Technical Change Discussion for PDEP, Part II, Section I.9 Revision

ENCLOSURE 2
Technical Change Discussion for PDEP, Part II, Section I.9 Revision

The PDEP, Part II, Section I.9, first paragraph states:

> Instrumentation to measure radioactivity in counts per minute (cpm) and to determine dose rate in mRem/hr is used for detection and measurement of airborne isotopic concentrations. The air sample will be taken with a Portable Air Sampler. Air sampling results will be obtained through the use of a portable single channel analyzer and appropriate gamma sensitive detector.

During development of the RAI responses, SONGS noted that this section required use of a "single channel analyzer." The current equipment used at SONGS is a multi-channel analyzer. Therefore, PDEP, Part II, Section I.9, first paragraph is revised as follows:

> Instrumentation to measure radioactivity in counts per minute (cpm) and to determine dose rate in mRem/hr is used for detection and measurement of airborne isotopic concentrations. The air sample will be taken with a Portable Air Sampler. Air sampling results will be obtained through the use of a portable ~~single~~multi-channel analyzer and appropriate gamma sensitive detector.

This change is acceptable because a multi-channel analyzer has more capability than a single channel analyzer and will perform the same function as a single channel analyzer.

ENCLOSURE 3

Modified Permanently Defueled Emergency Plan

San Onofre Nuclear Generating Station

San Onofre Nuclear Generating Station (SONGS) Permanently Defueled Emergency Plan

(Volume 1, PDEP-1)

Prepared by: _____
xxxx Date

Reviewed by: _____
xxxx Date

Approved by: _____
xxxx Date

Revision 0a

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Volume 2 – PDEP-2, EAL Technical Bases Manual

Section A: Purpose

The purpose of this Permanently Defueled Emergency Plan (PDEP) is to assure an adequate level of preparedness by which to cope with a spectrum of emergencies that could be postulated to occur, including means to minimize radiation exposure to plant personnel. This PDEP integrates the necessary elements to provide effective emergency response considering cooperation and coordination of organizations expected to respond to potential emergencies.

Section B: Background

SONGS is owned by Southern California Edison (SCE), San Diego Gas and Electric (SDG&E) and the cities of Anaheim and Riverside, California. SCE is authorized to act as agent for the co owners and has exclusive responsibility for the operation of the facility.

The PDEP describes the station's plan for responding to emergencies that may arise at the station while in a permanently shutdown and defueled configuration. All irradiated fuel is stored in the Independent Spent Fuel Storage Installation (ISFSI) and in the Spent Fuel Pool. In this condition, no reactor operations can take place and the station is prohibited from moving the fuel from the Spent Fuel Pool to the reactor vessel. An analysis of the possible design basis events and consequences is presented in the evaluation of the Safety Analysis Report accident assessment. This PDEP addresses the risks associated with SONGS current conditions.

The analysis of the potential radiological impact of design basis accidents in a permanently defueled condition indicates that any releases beyond the Site Boundary are limited to small fractions of the Environmental Protection Agency (EPA) Protective Action Guide (PAG) exposure levels, as detailed in the EPA's "Protective Action Guide and Planning Guidance for Radiological Incidents," Draft for Interim Use and Public Comment dated March 2013 (PAG Manual). Exposure levels, which warrant pre-planned response measures, are limited to onsite areas. For this reason, radiological emergency planning is focused onsite.

Section C: Scope

SONGS has developed this PDEP to respond to potential radiological emergencies at the station considering it's permanently shutdown and defueled status. Because there are no postulated design basis accidents that would result in off-site dose consequences that are large enough to require off-site emergency planning, the overall scope of this plan delineates the actions necessary to safeguard onsite personnel and minimize damage to property.

In addition to the description of activities and steps that can be implemented during a potential emergency, this PDEP also provides a general description of the steps taken to recover from an emergency situation.

Furthermore the PDEP provides for:

- Identification and evaluation of emergency situations
- Protective measures
- Communications
- Coordination and notification of governmental authorities
- Document review and control
- Emergency Preparedness assessment
- Training of all emergency personnel
- An exercise and drill program
- An emergency recovery phase

Section D: Planning Basis

The concepts presented in this PDEP address the applicable regulations stipulated in 10 CFR 50.47, "Emergency Plans" and 10 CFR 50, Appendix E, "Emergency Planning and Preparedness for Production and Utilization Facilities" and are consistent with the applicable guidelines established in NUREG-0654/FEMA-REP-1, Revision 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants."

Exemptions to 10 CFR 50.47 and 10 CFR 50 Appendix E for SONGS were granted by the Nuclear Regulatory Commission (NRC) per XXX (xx/xx/xx).

The PDEP revision 0 was approved for use by the NRC per Safety Evaluation Report (SER) XXX (xx/xx/xx).

Section E: Emergency Response Organization

SONGS has primary responsibility for planning and implementing emergency measures within the site boundary including overall accident assessment. These emergency measures include mitigation, corrective actions, protective measures, and aid for personnel onsite. To assist in accomplishing these responsibilities, advance arrangements have been made with offsite organizations for special emergency assistance such as ambulance, medical, hospital, fire, and police services.

Section F: Form and Content of Plan

The PDEP has been formatted similar to NUREG-0654/FEMA-REP-1, Revision 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants." The use of this format lends itself to uncomplicated comparison with the criteria set forth in NUREG-0654/FEMA-REP-1 and addresses the guidance provided in NSIR/DPR-ISG-02, Emergency Planning Exemption Requests for Decommissioning Nuclear Power Plants.

Each Part II section begins by listing the planning standard implemented by section as modified by the exemptions granted to SONGS by the NRC for a permanently defueled station.

A. Assignment of Responsibility

Planning Standard 50.47(b)(1) (as exempted in Reference 11) – Primary responsibilities for emergency response by the nuclear facility licensee and by State and local organizations have been assigned, the emergency responsibilities of the various supporting organizations have been specifically established, and each principal response organization has staff to respond and to augment its initial response on a continuous basis.

1. Concept of Operations

The relationships and the concept of operations for the organizations and agencies that are a part of the overall ERO are as follows:

a. Primary Governmental Response Organizations

Identified below are federal, off-site agencies, and county organizations that are involved in a response to an emergency at SONGS.

1) Federal Agencies

The National Response Framework (NRF) is a guide to how the Nation responds to all types of disasters and emergencies. It is built on scalable, flexible, and adaptable concepts identified in the National Incident Management System (NIMS) to align key roles and responsibilities across the Nation. The NRF describes specific authorities and best practices for managing incidents that range from the serious but purely local to large-scale terrorist attacks or catastrophic natural disasters. The NRF describes the principles, roles and responsibilities, and coordinating structures for delivering the core capabilities required to respond to an incident and further describes how response efforts integrate with those of the other mission areas. The federal family response for an emergency at a SONGS station is made up of the following:

a) Nuclear Regulatory Commission (NRC)

With regard to emergency preparedness, the NRC will perform the following:

- Assess licensee emergency plans for adequacy;
- Make decisions with regard to the overall state of emergency preparedness and issuance of operating licenses.
- Coordinate with other federal response agencies.

The NRC will respond to incidents at licensed facilities or vehicular accidents involving licensed materials, including radionuclides, in transit. The NRC will act as the lead Federal agency with regard to technical response during a nuclear incident including radiological assistance.

b) Department of Homeland Security (DHS)

Per the NRF, DHS is responsible for the overall coordination of a multi-agency Federal response to a radiological incident. The primary role of DHS is to support local agencies by coordinating the delivery of Federal non-technical assistance. DHS coordinates local agencies requests for Federal assistance, identifying which Federal agency can best address specific needs.

c) Marine Corps Base, Camp Pendleton

Marine Corps Base, Camp Pendleton is the responsible agency for all emergency responses affecting all personnel located at the Base. The Commanding General, Marine Corps Base is the decision maker. Through a Letter of Agreement the Marine Corps Base Fire Department provides fire, medical, and rescue responses to SONGS.

d) Federal Bureau of Investigation (FBI)

The FBI acts as the lead agency for the coordination of law enforcement agencies responding to Security related events at the San Onofre Nuclear Generating Station. Response actions to Security events are addressed in the SONGS Safeguards Contingency Plan.

2) State of California

The California Office of Emergency Services (OES) is designated the state authority for coordination of all State level response. Cal OES is the primary state response agency that coordinates the State's response to requests for assistance from local jurisdictions. The primary method of initial notification of Cal OES is by a commercial telephone line from the SONGS Command Center to the Warning Center in Sacramento.

3) Local Agencies

a) Orange County

The Orange County Sheriff's Department is responsible for offsite coordination and response in unincorporated Orange County.

b) San Diego County

The San Diego County Office of Emergency Services is the lead governmental agency for offsite coordination and response in San Diego County.

b. SONGS Concept of Operations

During an emergency, the ERO replaces the normal station organization. The ERO provides the following functions:

- Control and operation of station activities.
- Mitigation of the emergency condition.
- Protection of station personnel.
- Emergency event classification.
- Radiological monitoring and dose assessment
- Emergency notifications to Federal, State and local agencies.
- Coordination of emergency support for fire fighting, security, and rescue/first aid.

c. Block Diagram of Organization Interrelationships

Interrelationships between major SONGS organizations and sub-organizations in the total response effort are illustrated in a block diagram in Figure A-1.

d. Individual in Charge of the Emergency Response

The individual in charge of the SONGS emergency response is given the title of Emergency Director.

e. 24 Hour Emergency Response

Individuals assigned to the shifts are available 24 hours per day. These individuals can perform all required response actions until individuals arrive to augment shift personnel.

2. State and County Functions and Responsibilities

The state and counties have plans that specify the responsibilities and functions for the major agencies, departments, and key individuals of their organizations. This information is located in their respective plans and standard operating procedures. These plans address multiple types of accidents which may occur at facilities within their jurisdictions.

3. Agreements in Planning Effort

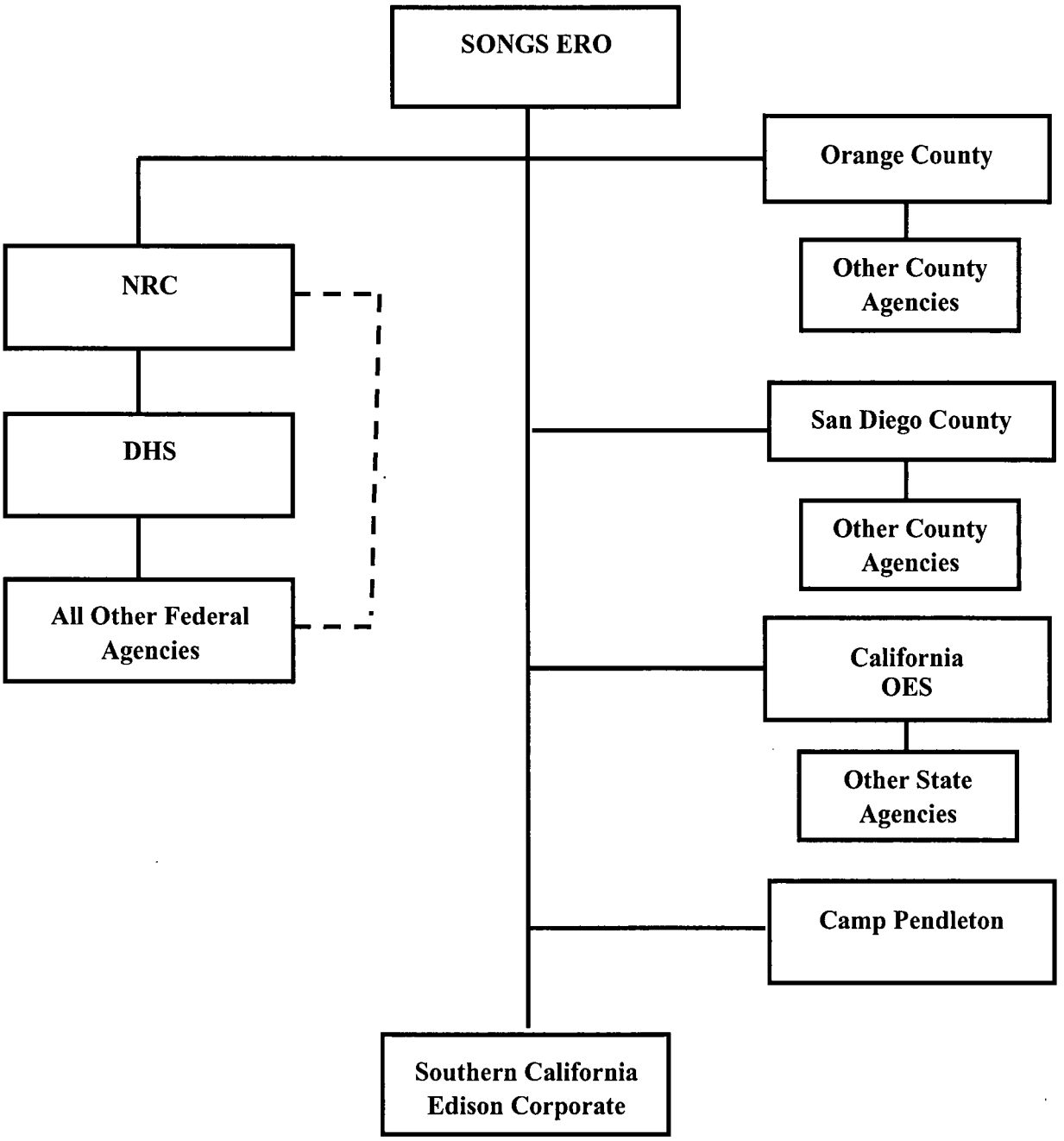
Written agreements describing the concept of operations between SONGS and other support organizations having an emergency response have been established. These agreements identify the emergency measures to be provided, the mutually accepted criteria for implementation, and the arrangements for exchange of information. A formal contract/purchase order is considered acceptable in lieu of a letter of agreement for the specified duration of the contract.

Appendix 3 of this PDEP contains the list of active and in force letters of agreement. The actual letters of agreement are maintained in Emergency Preparedness files.

4. Continuous Coverage

The ERO maintains the depth and capability for continuous 24-hour coverage of the emergency response for a protracted period.

Figure A-1: SONGS Emergency Response Organization Interrelationships



B. SONGS Emergency Response Organization

Planning Standard 50.47(b)(2) – On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available and the interfaces among various onsite response activities and offsite support and response activities are specified.

1. On-Shift Emergency Response Organization Assignments

SONGS has personnel on-shift at all times that provide the initial response to an event. Members of the on-shift organization are trained on their responsibilities and duties in the event of an emergency and are capable of performing all necessary response actions until the augmenting ERO arrives or the event is terminated. The normal shift staffing assignments include the roles and responsibilities for their emergency response functions. The relationship between normal and emergency response positions for the shift personnel is unchanged when an event occurs.

An on-shift analysis was performed for ERO functions to ensure sufficient personnel will be able to respond to the limiting event, a catastrophic loss of spent fuel pool (SFP) water inventory.

Shift ERO Positions:

a. Shift Manager (Emergency Director), see section B.4 for Emergency Director (ED) responsibilities.

b. Certified Operator, performs system and component manipulations and basic radiation surveys as needed.

c. Station Security will report to the ED when implementing the PDEP. Security personnel will assist ED as directed.

d. Radiation Protection Technician performs radiological assessment and radiation protection duties.

Refer to Table B-1, ERO Minimum Staffing Requirements, for summary of ERO shift and augmented positions.

2. Initial Assignment of Event Response Authority and Responsibility

The Shift Manager is the on-shift individual who declares the initial emergency classification and assumes the role of Emergency Director upon event declaration and has the authority and responsibility to immediately and unilaterally initiate any emergency actions. If the Shift Manager is unavailable or incapacitated for any reason the Certified Operator will assume duties until another Shift Manager arrives.

The Emergency Director has the authority to suspend any security measure described in the Physical Security Plan as necessary to facilitate response to emergency conditions.

3. Line of Succession

The Shift Manager assumes the title and responsibilities of the Emergency Director when an event is initially recognized and declared, and remains the Emergency Director throughout the event.

4. Functional Responsibilities of the Emergency Director

Non-delegable responsibilities of the Emergency Director include the following:

- Event classification and declaration
- Notification of offsite authorities (State/local and NRC notifications)
- Authorization for the use of EPA-400 emergency exposure controls (emergency worker dose limits that exceed 10 CFR 20 occupational exposure limits)

Key delegable responsibilities of the Emergency Director include the following:

- Management of available station resources
- Initiation of assessment and mitigative/corrective actions
- Initiation of onsite protective actions
- Decision to call for offsite police, fire or ambulance assistance
- Augment the emergency staff as deemed necessary
- Notify SCE corporate officers and the company's duty spokesperson

5. Emergency Response Organization Positional Responsibilities

The Emergency Response Organization (ERO) is responsible for implementing the actions described in this Emergency Plan. The ERO is made up of shift personnel (described in section B.1), augmented by the Duty ERO Coordinator, Radiation Protection Coordinator and supplemental positions described below.

The Duty ERO Coordinator and Radiation Protection Coordinator shall report to the Command Center within 2 hours of declaration of an Alert classification or at the discretion of the Shift Manager for other events. The supplemental ERO is activated at the discretion of the Emergency Director and/or the Duty ERO Coordinator.

a. Duty ERO Coordinator

The Duty ERO Coordinator reports to the Emergency Director. The responsibilities of the Duty ERO Coordinator when implementing the PDEP include:

- Report to the Command Center and assist Emergency Director with assessment, mitigation, and communications tasks.
- Assist the Emergency Director to supplement the emergency staff as deemed necessary.
- Coordinate supplemental personnel and resource to support for emergency response.

b. Radiation Protection Coordinator

The Radiation Protection Coordinator reports to the Duty ERO Coordinator. The responsibilities of the Radiation Protection Coordinator when implementing the PDEP include:

- Monitor personnel accumulated dose
- Advise the Emergency Director concerning Radiological EALs
- Augment the emergency staff as deemed necessary
- Establish Radiological Controls
- Perform Dose Assessment
- Establish and maintain communications as desired by the Emergency Director
- Maintain a record of event activities

The following positions are supplemental ERO and may be filled by staff or contract personnel possessing requisite knowledge to support the response:

a. Technical Coordinator

The Technical Coordinator reports to the Duty ERO Coordinator. The responsibilities of the Technical Coordinator when implementing the PDEP include:

- Assist with and arrange for other resources to evaluate technical data pertinent to plant conditions
- Augment the emergency staff as deemed necessary
- Assist with incident assessment and recommend mitigative and corrective actions
- Assist with search and rescue actions
- Coordinate maintenance and equipment restoration
- Establish and maintain communications as desired by the Emergency Director
- Maintain a record of event activities

b. Radiation Protection Technicians (RPTs)

RPTs report to the Radiation Protection Coordinator when activated.

Additional RPTs are called as needed to support emergency response. They may be provided through a services contract.

Technicians perform radiological monitoring and surveys of plant areas and radionuclide analysis of air and water samples. When an event is classified and the PDEP is implemented, the Technicians report to the Radiation Protection Coordinator. Their responsibilities when implementing the PDEP include:

- Perform radiological monitoring and surveys as directed
- Ensure the habitability of the occupied areas of the plant
- Monitor personnel exposures
- Perform radioisotopic analysis as directed

- Establish and monitor Radiological Control Areas (RCAs)
- Provide radiological and first aid support to search and rescue and medical emergencies.
- Maintain a record of event activities and surveys performed
- Perform decontamination functions as necessary

c. Other Emergency Response Personnel

Various emergency response personnel may be assembled as emergency needs dictate. Such personnel include: emergency services (fire, rescue, first aid), radiological monitoring and damage assessment, control and repair. Personnel from other SCE areas or outside private entities will be used to support emergency response.

6. Emergency Response Organization Block Diagram

Figure B-1 illustrates the overall emergency response organization.

7. Corporate Emergency Response Organization

No formal corporate response organization has been pre-identified. Southern California Edison will provide personnel and resource support as needed to mitigate any emergency conditions at the station. The company owns and operates an extensive fleet of ground transportation vehicles consisting of heavy-duty trucks, equipment, and four-wheel drive vehicles. These are available to SONGS as needed.

8. Industry/Private Support Organizations

Industry and private support will be used based on needs of the event.

9. Supplemental Emergency Assistance to the ERO

Agreements are maintained with outside support agencies who do not take part in the organizational control of the emergency that provide assistance when called on during an emergency or during the recovery phase. These agreements identify the emergency measures to be provided, the mutually accepted criteria for implementation, and the arrangements for exchange of information. These support agencies provide services of:

a. Fire protection;

b. Ambulance services;

c. Medical and hospital support

d. Law Enforcement

Support groups that provide fire protections are listed in Appendix 3, List of Letters of Agreement.

Support groups providing transportation and treatment of injured station personnel are described in Section L of this plan and Appendix 3.

Table B-1: ERO Minimum Staffing Requirements

Functional Area	Major Tasks	Emergency Positions	Shift Staffing	Augmented Staffing
1. Plant Operations, Assessment of Operational and Mitigation Aspects	Command Center Staff	Shift Manager ** Certified Operator **	1 1	
2. Emergency Direction and Control	Command and Control	Shift Manager (Emergency Director)	1[(a)]	
	ERO Coordination	Duty ERO Coordinator		1
3. Notification & Communication	Notification of: Licensee Local/ State Federal	Shift Manager or Security	1[(a)]	
4. Radiological Assessment	Supervision	Radiation Protection Coordinator		1
	Dose Assessment	Shift Manager or Shift RP Technician	1[(a)]	
	Onsite Surveys	Shift RP Technician ** RP Support	1	 (c)
	Offsite Surveys	RP Support		(c)(d)
	Chemistry	Chemistry Support		(c)
5. Plant System Engineering, Repair, and Corrective Actions	Repair and Corrective Actions	Technical Coordinator		(b)
		Certified Operator Support Personnel	1[(a)]	 (c)
6. In-Plant Protective Actions	Radiation Protection	Shift RP Technician	1[(a)]	
7. Fire Fighting	--	Offsite fire fighting resources	(e)	
8. 1st Aid and Rescue	--	Shift Personnel and Outside fire resources	(e)	
9. Site Access Control and Accountability	Security & Accountability	Security Personnel	(f)	
		TOTAL:	**3**	**2**

** On-shift personnel required to direct or perform site-specific mitigation strategies required for a catastrophic loss in spent fuel pool inventory.

(a) Indicates concurrent or sequential functions performed by existing on shift minimum staff.

(b) Supplemental positions called as needed based on event. May be contract personnel.

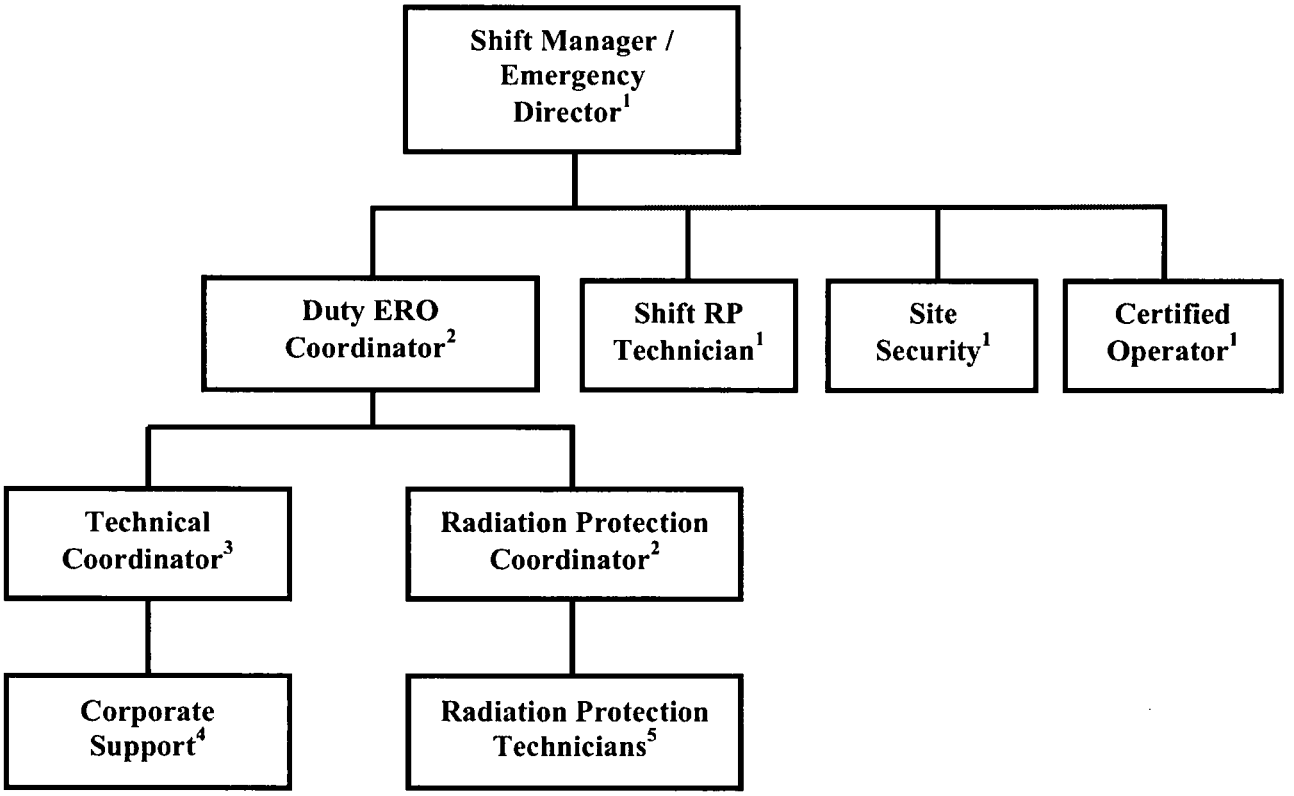
(c) Number of Corporate Support, Radiation Protection, Repair Personnel and Chemistry personnel called to support onsite response based on event. May be contract personnel.

(d) Pre planning for offsite surveys not required due to the radiological consequences of design basis accidents or other credible events not expected to exceed EPA Protective Action Guides. Survey can be performed with assistance from outside sources if deemed necessary.

(e) Fire Fighting and rescue operations are provided by agreement with offsite resources.

(f) Per the Station Security Plan.

Figure B-1: Emergency Response Organization



NOTES

1. On-shift positions.
2. Augmented position that will respond within 2 hours when called.
3. Pre-Designated supplemental positions, called as needed based on event.
4. Southern California Edison will provide or arrange for additional technical, maintenance and other support as needed to restore station to pre-event condition.
5. Additional Radiation Protection Technicians are called to support response as needed. They may be provided by an Emergency Services Contract. Shift personnel are trained as radiation workers and to perform limited RP duties until additional support is available.

C. Emergency Response Support and Resources

Planning Standard 50.47(b)(3) (as exempted in Reference 11) – Arrangements for requesting and effectively using assistance resources have been made and other organizations capable of augmenting the planned response have been identified.

1. Federal Response Support and Resources

a. Individuals Authorized to Request Federal Assistance

The Emergency Director is authorized to request assistance as needed.

b. Federal Resources

Federal agencies that may provide assistance in direct support of SONGS in the event of an accident are identified in Section A of this plan.

c. Resources Available to Support Federal Response

The Command Center has space available to accommodate limited NRC response team members.

2. Liaisons

a. If a near site Incident Command Post (ICP) has been established for a large scale or hostile actions event, SONGS will send liaisons to the ICP to provide specific information relative to the event and assist as needed. Individuals assigned as ICP Liaisons will be part of the supplemental ERO.

3. Radiological Laboratories

Laboratory facilities are available and equipped to support normal plant and expected emergency operations. Services will be contracted as needed for declared events. Agreements may also be used to obtain laboratory services from other stations.

Support for chemical analysis is provided by Sierra Analytical Labs, located in Laguna Hills, California. Support for radiological analysis is provided by GEL Laboratories, located in Charleston, South Carolina. The laboratories have the capability for analyses of terrestrial, marine, and air samples.

4. Other Assistance

Refer to Appendix 3, List of Letters of Agreement for outside organizations that have pre-agreed arrangements to support onsite response actions.

No other specific assistance has been pre-identified.

D. Emergency Classification System

Planning Standard 50.47(b)(4) (as exempted in Reference 11) – A standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee.

1. Emergency Classification System

A graded scale of response for distinct classifications of emergency conditions, actions appropriate for those classifications, and criteria for escalation to a more severe classification is provided.

The station maintains the capability to assess, classify, and declare an emergency condition within 30 minutes of the availability of indications that an Emergency Action Level (EAL) has been exceeded.

- The 30-minute criterion will commence when plant instrumentation, plant alarms, computer displays, or incoming verbal reports corresponding to an EAL first become available to the individual in command and control (SM/ED) or Certified Operator.
- Validation or confirmation of plant indications, alarms or reports is to be accomplished within the 30-minute criterion as part of the classification assessment.
- For EAL thresholds that specify a duration (time imbedded EALs), the declaration process runs concurrently with that specified threshold duration. If it is determined that the condition will not clear within the time period, the event is declared regardless of whether the imbedded time period has been met. Once the condition has existed for the specified duration, no further classification assessment is warranted and the EAL must be promptly declared.
- The 30-minute criterion is not used as a grace period to attempt to restore plant conditions to avoid declaring an emergency in which an EAL has been exceeded.
- The 30-minute criterion will not prevent implementation of response actions necessary to protect public health or deny the State and local authorities the opportunity to implement measures necessary to protect the public health and safety.

SONGS utilizes a classification methodology endorsed by the NRC. Specifically SONGS classification system follows the methodology in NEI 99-01, Rev 6, Development of Emergency Action Levels for Non-Passive Reactors.

The emergency classification system utilizes two categories for classification of emergency events. The specific initiating conditions for each classification and their corresponding emergency action levels are provided in the EAL Technical Bases Manual controlled as Volume 2 of this PDEP.

The definitions and discussions of the two Emergency Classification Levels (ECLs), from lowest to highest severity, are as follows:

a. Notification of Unusual Event

Events are in progress or have occurred which indicate a potential degradation of the level of safety of the plant or indicate a security threat to facility protection has been initiated. No releases of radioactive material requiring off-site response or monitoring are expected unless further degradation of safety systems occurs.

This is the less severe of the two levels. The purpose of this classification is to bring response personnel and offsite agencies to a state of readiness in the event the situation degrades and to provide systematic handling of information and decision-making. The Shift Manager will classify a Notification of Unusual Event.

Required actions at this classification include:

- Notifications to station personnel.
- Notification, within 60 minutes, of the required off-site agencies.
- At the discretion of the Emergency Director augment shift personnel if needed.
- Notification of the Nuclear Regulatory Commission (NRC) as soon as possible but within 60 minutes of classification.
- Assessment of the situation and response as necessary, which may include escalating to a higher classification if conditions warrant.
- Appropriate measures to mitigate the effects of the emergency and return conditions to normal operation status.
- When the event is terminated, closeout is performed over communication links to offsite authorities (i.e., NRC and local agencies), followed by written summary within 24 hours.

b. Alert

Events are in progress or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant or a security event that involves probable life threatening risk to site personnel or damage to site equipment because of HOSTILE ACTION. Any releases are expected to be limited to small fractions of the EPA PAG exposure levels.

The purpose of this classification is to ensure that emergency response personnel are readily available and to provide offsite authorities with current status information. An Alert will be classified as the initiating event or as escalation from a Notification of Unusual Event.

Required actions at this classification include:

- Notifications to station management.
- Notification, within 60 minutes, of the required off-site agencies.
- Activation of the Emergency Response Organization.
- Notification of the NRC as soon as possible but within 60 minutes of classification.

- Keeping offsite authorities informed of plant status by providing periodic updates, including radiological data.
- When the event is terminated, closeout is performed over communication links to offsite authorities (i.e., NRC and local agencies), followed by written summary within 8 hours.
- Site evacuation and personnel accountability may be directed by the Emergency Director based on hazards associated with the event.
- Appropriate measures to mitigate the effects of the emergency and return conditions to normal operation status.

2. Emergency Action Level Technical Bases

The initiating conditions, their corresponding emergency actions levels and the technical bases for each classifiable threshold are contained in the station's EAL Technical Basis Manual, which was based on NEI 99-01, Revision 6, Section 8 and Appendix C, and was approved for use by the NRC.

3. Offsite Classification Systems

SONGS emergency planning personnel periodically review the classification system with state and local agencies.

4. Offsite Emergency Planning

Offsite agencies maintain plans to respond to various natural or man-made emergencies. Although they may not be specific to an event at SONGS the Emergency Preparedness Manager shall coordinate with offsite agencies for response planning to an emergency at the station.

E. Notification Methods and Procedures

Planning Standard 50.47(b)(5) (as exempted in Reference 11) – Procedures have been established for notification, by the licensee, of State and local response organizations and for notification of emergency personnel by all organizations; the content of initial and follow-up messages to response organizations has been established.

1. Bases for Notification of Offsite Agencies

SONGS, in cooperation with state and local authorities, has established mutually agreeable methods and procedures for notification of offsite response organizations consistent with the approved emergency classification level scheme. Notifications to offsite agencies include a means of verification.

2. Notification and Mobilization of Emergency Response Personnel

Emergency implementing procedures are established for notification and mobilization of emergency response personnel.

a. Notification of Onsite Personnel and Mobilization of the ERO

Each emergency classification results in onsite personnel being notified of the initial classification or any escalation of an emergency by recognizable alarms and/or verbal announcements over the plant Public Address (PA) System. Announcements include the emergency classification and response actions to be taken by personnel onsite (such as ERO, non-ERO, contractor personnel, and visitors). Provisions are made to alert personnel in high noise areas and outbuildings as applicable.

Provisions are established for notification of personnel within the Owner Controlled Area any time a Site Evacuation has been initiated, or as otherwise deemed appropriate.

When an emergency classification level is declared or upgraded, an announcement is made over the plant public address system (or by other means) that states the emergency classification level declared and response actions to be taken by site personnel.

At an Alert classification level all ERO augmentation personnel are notified to respond.

Notifications of onsite personnel will be made as soon as possible after the triggering event (emergency declaration or decision to take protective actions) to ensure that actions can be completed within required time frames.

b. Notification and Mobilization of the Offsite Response Organizations (ORO)

When an emergency classification level is declared or upgraded, initial notifications are promptly made to staffed warning points for the OROs.

Notification and mobilization of federal, state and local agency response personnel is performed in accordance with their applicable emergency plans and procedures.

1) State and Local Response Agencies

State and local agency staffed Warning Points are notified within sixty (60) minutes of an event declaration (initial or an escalation) or change in radiological release status (occurring outside of an event classification, based on an agreement with the local agencies).

2) Nuclear Regulatory Commission (NRC)

The NRC is notified immediately after notification of the appropriate state and local agencies and not later than one (1) hour after the time of initial classification, escalation, termination or entry into the recovery phase.

For hostile action events, the NRC is notified immediately following or concurrent with state and local notifications.

c. Support Organizations

- Medical, rescue, and fire fighting support services are notified for assistance, using normal 911 procedures, as the situation dictates.

- The American Nuclear Insurers (ANI) is notified at an Alert classification with requests for assistance as necessary.

3. Initial Notification Messages

The Initial Emergency Notification Message contains the current emergency classification level and whether a release is taking place.

SONGS, in conjunction with authorities from local agencies has established the specific content and format of the initial notification message to be transmitted during an emergency, along with methods of transmission. The initial notification form will provide the following information if it is known and appropriate:

a. Location of incident, and name and telephone number of caller.
b. Date/Time of incident.
c. Class of emergency.
d. Type of actual or projected abnormal release (airborne or liquid).
e. Actual or projected dose rates and/or integrated dose at the Site Boundary.
f. Estimate of any abnormal surface radioactive contamination in plant or onsite.
g. Plant emergency response actions underway.
h. Request for offsite support from onsite personnel.
i. Prognosis for event based on plant or response team information.

The following offsite agencies, at a minimum, will receive Initial Notification Messages:

- State of California
- Orange County

- San Diego County
- Marine Corps Base, Camp Pendleton

4. Follow-up Messages

Follow up calls will also be made to each of the lead agencies notified initially. Follow-up messages will be made approximately every 2 hours (or at time intervals agreed upon during each event) utilize a follow-up notification form with information similar to the initial notification form.

5. State and County Information Dissemination

Information dissemination is performed in accordance with state and local plans.

6. Notification of the Public

Notifications to the public are performed through the media in accordance with state and local plans.

7. Messages to the Public

Messages to the public are delivered through the media in accordance with state and local plans.

F. Emergency Communications

Planning Standard 50.47(b)(6) (as exempted in Reference 11) – Provisions exist for prompt communications among principal response organizations to emergency personnel.

1. Communications/Notifications

SONGS has reliable communication systems installed.

a. 24 Hour Notification Capabilities

SONGS maintains the capability to make initial notifications to the designated offsite agencies on a 24-hour per day basis.

b. Communications with State/Local Governments

Offsite notifications are provided to the California Office of Emergency Services (CAL OES), the Marine Corps Base (Camp Pendleton) and local agencies warning points (which are continually staffed) from the Command Center using commercial telephone (the primary means of communications) or satellite phone (the back-up means of communication).

Table F-1: Offsite Response Agency Notification (Warning Points)

Offsite Response Agency	Notified By	Individual Answering
CAL OES	SONGS Emergency Director or designee	Duty Personnel
Marine Corps Base, Camp Pendleton	SONGS Emergency Director or designee	Command Duty Officer or 911 Dispatch
Orange County	SONGS Emergency Director or designee	Orange County Communications Control 1
San Diego County	SONGS Emergency Director or designee	San Diego County Communications Shift

c. Communications with Federal Organizations

The Command Center uses NRC Emergency Notification System (ENS) phones through the Emergency Telephone System (ETS), commercial telephone lines, or other mobile communications devices such as cell or satellite phones to communicate with Federal Organizations.

d. Communications between Station Facilities

1. Private Automatic Exchange (PAX) Telephone System

The PAX telephone system provides communication capability between telephones located within the plant by dialing a five-digit station code.

The PAX telephone system also provides for outside communications through interconnections with the corporate telephone communications system and commercial telephone lines.

2. Local Commercial Telephone System

This system provides standard commercial telephone service through the public infrastructure, consisting of central offices and the wire line and microwave carrier.

e. ERO Notification System

ERO notification is performed by the use of call trees initiated by commercial telephone as the primary method of communications or a satellite phone as the back-up method of communications. The station public address system may also be used to notify on site personnel.

f. NRC Emergency Notification System (ENS)

Communications with the NRC Operations Center will be performed primarily via the NRC ENS, commercial telephone lines, or other mobile communications devices such as cell or satellite phones.

2. Medical Communications

Communications are established with a primary or backup medical hospital and transportation services via commercial telephone that is accessed by station personnel.

3. Communications Testing

Communications equipment is checked in accordance with Section H.10.

Communications equipment utilized to notify and communication with the NRC Headquarters and the appropriate NRC Regional Office Operations Center as described in F.1.f are tested monthly for operability.

Communications drills between SONGS and local agencies government facilities are conducted in accordance with Section N.2.a.

G. Emergency Public Information

Planning Standard 50.47(b)(7) (as exempted in Reference 11) –The principal points of contact with the news media for dissemination of information during an emergency are established in advance, and procedures for coordinated dissemination of information to the public are established.

The company's Corporate Communications Department is the principle point of contact for the dissemination of information during an event at the station. The Communications Department will disseminate information to the public through press releases and media conferences in accordance with current corporate communication protocols.

Due to the lack of postulated events that would impact offsite areas or requiring Offsite Response Organizations to take pre-planned actions, no arrangements are made for a Joint Information Center.

SCE maintains a corporate media line that is available at all times (24/7). A Corporate Communications Spokesperson maintains a liaison with local media and would act as the initial company spokesperson for a declared emergency at SONGS. SCE also has a Local Public Affairs officer who acts as a liaison between SCE and State and local public affairs officers to coordinate the timely flow of information and address any mis-information related to the event.

H. Emergency Facilities and Equipment

Planning Standard 50.47(b)(8) – Adequate emergency facilities and equipment to support the emergency response are provided and maintained.

1. Command Center

The Command Center is the onsite facility used to respond to emergency events. Plant systems and equipment parameters necessary to initiate emergency measures and assess conditions can be monitored in this location. The Command Center also has internet capabilities, which allows access to geophysical (i.e., meteorological, hydrologic, and seismic) information.

Command Center personnel evaluate and control the emergency and initiate activities necessary for coping with the emergency. The Command Center may be relocated as determined by the Emergency Director in the event that it is threatened with security events or hazardous conditions. The activities conducted by the Command Center staff include:

- Initial direction of all plant related operations
- Accident recognition, classification, mitigation, and initial corrective actions
- Activation of emergency response facilities and ERO notification
- Notification of offsite agencies
- Continuous evaluation of the magnitude and potential consequences of an incident

In the event that augmented staff personnel respond, the Command Center provides space for those personnel to support the response. These activities include:

- Assessment of plant status
- Implementation of emergency actions and mitigation strategies.
- Provide voice communications with the NRC and local agencies as needed
- Radiological monitoring and assessment
- Brief and prepare personnel for work assignments in response to the event

2. Emergency Operations Facility

The SONGS PDEP does not include an Emergency Operations Facility.

3. Emergency Operations Centers

Offsite agencies maintain Emergency Operations Centers, for all types of emergencies, in accordance with their respective plans.

4. Activation

The Command Center is open on a continuing basis. There is no activation needed. The augmented ERO, which initially consists only of the Duty ERO Coordinator, reports to the Command Center within about 2 hours of declaration of an Alert classification or at the discretion of the Shift Manager for other events.

5. Onsite Monitoring Equipment

Radiation monitoring equipment provides radiological surveillance capabilities. The equipment provides for the following basic functions:

- Warns personnel of radiological health hazards, which have developed.
- Gives early warning of certain plant malfunctions, which might lead, to a radiological health hazard or plant damage.
- Prevents or minimizes the effects of inadvertent releases of radioactivity to the environment by consequence-limiting automatic responses.

Station instrumentation provides a display of plant parameters from which the safety status of systems can be assessed in the Command Center. Key parameters are:

- Gaseous Effluent Monitor readings
- Radiation Levels
- Fuel Handling Area Radiation Levels

Portable radiation and contamination monitoring instruments and sampling equipment normally utilized and maintained by the station is available for emergency use.

6. Offsite Monitoring Equipment

No radiation and contamination monitoring equipment is maintained specifically for offsite monitoring.

7. Offsite Monitoring Equipment Storage

Monitoring equipment is not stored offsite. Limited offsite monitoring near the site boundary will be performed using onsite equipment or arrangements will be made for additional equipment as needed.

8. Meteorological Monitoring

The station maintains meteorological instrumentation for near instant time readings of wind speed and direction to provide guidance if onsite protective actions are implemented.

Backup meteorological information can also be obtained from the National Weather Service.

9. Facility and Equipment Readiness

The Command Center and emergency equipment are inspected and inventoried quarterly and after each use in accordance with site procedures. These procedures provide information on location and availability of emergency equipment and supplies. A system of sealed containers or facilities may be utilized versus actual performance of item-by-item inventories.

10. General Use Emergency Equipment

Station procedures identify the general category of equipment and supplies that make up equipment available to assist with emergency response and requirements for inventorying and testing equipment. General types of equipment available to support emergency response include:

- Radiation Monitoring Equipment
- Contamination Control Supplies
- Decontamination Equipment and Supplies
- Protective Clothing
- Damage Control and Mitigation Equipment
- Communications and Radio Equipment
- Supplemental Lighting

The onsite storeroom maintains a supply of parts and equipment for normal plant maintenance. These parts, supplies and equipment are available for damage control use as necessary.

I. Accident Assessment

Planning Standard 50.47(b)(9) – Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.

1. Plant Parameters and Corresponding Emergency Classification

Emergency Action Level thresholds have been established in accordance with the NRC endorsed methodology in Regulatory Guide 1.101. Refer to section D.

The EAL Technical Bases Manual identifies the system parameter and effluent parameter values which can be used to determine the emergency condition.

Emergency Plan Implementing Procedures (EPIP) and EAL user aids have been developed to identify the system and effluent parameter values which are used to determine an existing emergency classification level.

2. Onsite Accident Assessment Capabilities

On-site capabilities and resources are available to provide initial and continuing information for accident assessment throughout the course of an event and include area and process radiation monitoring systems.

3. Source Term Determination

Station specific dose assessment procedures are used to calculate accumulated or projected dose at some time in the future if current or projected conditions continue. Radiological and meteorological readings are used to project dose rates at predetermined distances from the release point.

Due to the constantly declining source term, based on natural decay of fission products contained in the spend fuel, source terms used for dose projections can also be based on actual on or offsite radiological readings at the time of an event.

4. Effluent Monitor Data and Dose Projection

Station specific dose assessment procedures address calculating accumulated or projected dose at some time in the future if current or projected conditions continue. Radiological instrumentation readings and meteorological data are used to project dose rates at the Site Boundary, and to determine the integrated dose received.

5. Meteorological Information

Local meteorological information is available to the Command Center staff. The meteorological parameters include wind speed and direction. Procedures have been developed to determine stability class as needed for atmospheric dispersion calculations. A description of the onsite meteorological capabilities is given in Section H.

6. Off-scale or Inoperable Effluent Monitors (Unmonitored Releases)

Dose projections can be made during a release through use of actual survey and air sample data in situations where effluent monitors are either off-scale or inoperative or the release occurs by an unmonitored flow path.

7. Field Monitoring

In the event of a radiological release onsite field monitoring activities are performed by qualified individuals to confirm dose projections or assist in event classification. Portable radiological survey instrumentation and equipment is provided as part of the SONGS Radiation Protection Program. This equipment is available to support emergency response.

8. Field Monitoring Team

No pre defined field monitoring teams are assigned. Qualified individuals will be deployed as needed from the Command Center to perform surveys.

Prior to deployment, field monitoring teams are assembled at the Command Center to inventory and test survey and sampling equipment. Following the equipment and inventory checks, field monitoring teams are provided a briefing. Teams are then dispatched to perform surveys.

Communications are performed via radio or cell phones.

9. Air Monitoring

Instrumentation to measure radioactivity in counts per minute (cpm) and to determine dose rate in mRem/hr is used for detection and measurement of airborne isotopic concentrations. The air sample will be taken with a Portable Air Sampler. Air sampling results will be obtained through the use of a portable multi-channel analyzer and appropriate gamma sensitive detector.

The presence of significant levels of radioiodines in the spent fuel is extremely limited, therefore no special equipment is provided to measure for radioiodines.

10. Dose Estimates

Design Basis Accidents at SONGS can no longer exceed the Alert level (i.e. offsite doses will only reach a fraction of the EPA Protective Action Guides). Dose estimates will be performed to determine projected onsite doses and potential offsite consequences of any release to the environment.

11. Offsite Agencies Monitoring Capabilities

The offsite agencies have the ability and resources to coordinate with federal monitoring teams as deemed necessary.

J. Protective Response

Planning Standard 50.47(b)(10) (as exempted in Reference 11) – A range of protective actions has been developed for emergency workers and the public.

It is no longer possible for the radiological consequences of design basis accidents or other credible events at SONGS to exceed the limits of the EPA PAGs beyond the site boundary or require offsite protective actions. Therefore, pre-planned protective actions for the public are no longer necessary and the emergency planning zones will no longer exist. Therefore, SONGS will not have pre-defined Protective Action Recommendations. Offsite agencies maintain the ability, under their emergency management plans, to implement offsite protective measures, if needed, in the unlikely event of a release due to a beyond design-basis event.

1. Protective Actions for Site Personnel

Protective actions for onsite personnel will be delineated in the site procedures and will include:

- Criteria for ordering a site evacuation
- Means and timely notification of onsite persons impacted
- Ability to account for individuals within the Protective Area within 30 minutes from the time accountability is initiated
- Provisions for determining and maintaining accountability of assembled and evacuated personnel, and for identifying and determining the locations of personnel that were not evacuated
- Search and rescue
- Evacuation routes and means for transporting onsite personnel (e.g., privately owned vehicles, buses, company vehicles)
- Monitoring of evacuees for contamination and control measures if contamination is found
- Means for evacuating and treating onsite injured personnel, including potentially contaminated personnel

Notification and protective response actions for onsite emergency workers are also addressed in section E.2 and section K of this plan.

2. Mitigation Strategies and Equipment

SONGS has documented strategies for mitigation of designated emergencies involving the Spent Fuel Pool and has equipment available to be used in those strategies/mitigative actions.

The Shift Manager (Emergency Director) and Duty ERO Coordinator are responsible for assessing the need for and directing mitigation activities. Additional assistance may be provided by the Technical Coordinator upon arrival or via available communication devices. The Implementing Procedures to this plan detail their responsibilities and offer a brief summary of the available strategies.

K. Radiological Exposure Control

Planning Standard 50.47(b)(11) – Means for controlling radiological exposures, in an emergency, are established for emergency workers. The means for controlling radiological exposures shall include exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protective Action Guides.

1. Emergency Exposure Guidelines

SONGS maintains personnel exposure control programs in accordance with 10 CFR 20 under normal conditions. Personnel exposure levels are maintained under EPA-400 levels for emergency workers during declared emergencies.

In emergency situations, workers may receive exposure under a variety of circumstances in order to assure safety and protection of others and of valuable property. The Emergency Worker Dose Limits are as follows:

Dose Limit (Rem TEDE)	Activity	Condition
5	All	All Emergency Workers may be authorized up to 5 Rem Emergency Exposure for the emergency; however attempts should be made to keep exposures within 10CFR20 limits.
10	Protecting valuable property	Lower dose not practicable.
25	Lifesaving or protection of large populations	Lower dose not practicable.
> 25	Lifesaving or protection of large populations	Only on a voluntary basis to persons fully aware of the risks involved.

Limit dose to the lens of the eye to 3 times the above values and doses to any other organ (including skin and body extremities) to 10 times the above values.

2. Emergency Radiation Protection Program

Radiation protection guidelines include the following:

- Volunteers over forty-five years of age are considered first for any emergency response action requiring exposure greater than normal limits. Routine dose limits are and shall not be extended to emergency dose limits for declared pregnant individuals. As in the case of normal occupational exposure, doses received under emergency conditions should be maintained as low as reasonably achievable.

- Persons undertaking any emergency operation in which the dose will exceed 25 Rem TEDE should do so only on a voluntary basis and with full awareness of the risks involved including the numerical levels of dose at which acute effects of radiation will be incurred and numerical estimates of the risk of delayed effects.

- In the context of the emergency limits, exposure of workers that is incurred for the protection of large populations may be considered justified for situations in which the collective dose avoided by the emergency operation is significantly larger than that incurred by the workers involved.

- Exposure accountability is maintained and proper personnel radiological monitoring equipment is provided for personnel during emergency conditions.

- Access to high radiation areas is only permitted with prior approval. Personnel are not allowed to enter known or potential high radiation areas unless their exposure has been properly evaluated.

- Periodic habitability surveys of the Command Center are performed during an emergency. If the facility is determined to be uninhabitable, the facility is evacuated in order to prevent or minimize exposure to radiation and radioactive materials.

- Assembly areas are established, as necessary, to relocate and monitor personnel evacuated from areas of the plant.

Station Emergency Plan Implementing Procedures are in place for expeditious decision-making with reasonable consideration of the relative risks involved in a lifesaving mission involving radiation exposure.

3. Emergency Personnel Exposure and Records

a. Dosimetry

Emergency workers are issued permanent reading dosimeters as a means for recording exposure for permanent records prior to entering a radiologically controlled area. Additionally, personal are issued digital dosimetry capable of measuring dose and dose rate on a real time basis.

b. Dose Records

Emergency worker dose records are maintained in accordance with the emergency and radiological protection procedures. Emergency workers are instructed to read their dosimeters frequently. Permanent reading dosimeters may be processed with increased periodicity during an event.

4. Contamination Control and Decontamination

a. Action Levels for Determining the Need for Decontamination

During emergency conditions, normal plant contamination control criteria will be adhered to as much as possible. However, these limits may be modified by the Emergency Director should conditions warrant.

b. Means for Radiological Decontamination

Contaminated personnel will normally be attended to at an onsite decontamination area in accordance with radiation protection procedures. Decontamination showers and supplies are provided at those onsite areas. If contamination above acceptable levels is found, personnel will be decontaminated in accordance with plant procedures. If normal decontamination procedures do not reduce personnel contamination to acceptable levels, the case will be referred to a competent medical authority (refer to Section L).

Processes for the control of solid contaminated waste are established. Shower and sink drains are routed to where the liquid is contained or is processed and monitored prior to discharge.

Temporary decontamination areas can also be set up inside at various locations.

Arrangements have been made to transfer contaminated injured personnel to hospitals capable of assisting with treatment and decontamination efforts.

5. Contamination Control Measures

Onsite contamination controls are established to contain the spread of loose surface radioactive contamination.

a. Area Access Control

Contaminated areas are isolated as restricted areas with appropriate radiological protection and access control. Personnel leaving contaminated areas are monitored to ensure both themselves and their clothing are not contaminated. Supplies, instruments, and equipment that are in contaminated areas or have been brought into contaminated areas will be monitored prior to removal. Items found to be contaminated, will be decontaminated using normal plant decontamination techniques and facilities or may be disposed of as radioactive waste.

b. Drinking Water and Food Supplies

Measures will be taken to control onsite access to potentially contaminated potable water and food supplies. Under emergency conditions when uncontrolled releases of activity have occurred, eating and drinking are prohibited in station emergency response facilities until habitability surveys indicate that such activities are permissible.

c. Return of Areas and Items to Normal Use

Restricted areas and contaminated items will be returned to normal use when contamination levels have been returned to acceptable levels. Contamination control criteria for returning areas and items to normal use are contained in the plant procedures.

6. Provisions for Onsite Personnel

Protective equipment and supplies will be distributed (as needed) to personnel remaining or arriving on site during the emergency to minimize the effects of radiological exposures or contamination. Protective measures to be utilized are as follows:

a. Individual Respiratory Protection: Emergency response personnel may be required to use respiratory protection in any environment involving exposure to airborne radionuclides, an oxygen deficient atmosphere, or where air quality is in doubt. In the presence of airborne particulates, qualified emergency response personnel may be directed by radiation protection personnel to use full-face filter type respirators. Self-Contained Breathing Apparatus (SCBA) is available for use by the ERO when needed due to hazardous conditions. The criteria for issuance of respiratory protection are described in station procedures.

b. Use of Protective Clothing: Anti-contamination clothing, located in station dress out areas, is available for use by onsite personnel. The criteria for issuance of protective clothing are described in station procedures.

L. Medical and Public Health Support

Planning Standard 50.47(b)(12) – Arrangements are made for medical services for contaminated injured individuals.

1. Offsite Hospital and Medical Services

Arrangements, by letter of agreement or contract, are maintained with primary and back-up hospitals or medical facilities located in the vicinity of the station. These facilities are equipped and qualified for receiving and treating contaminated or exposed persons with injuries requiring immediate hospital care.

Letters of agreement or contracts for medical services for SONGS are listed in Appendix 3.

2. Onsite First Aid Capability

The station maintains onsite first aid supplies and equipment necessary for the treatment of contaminated or injured persons. Medical treatment given to injured persons is of a "first aid" nature. The functions of station personnel in handling onsite injured people are:

1) Administer first aid including such resuscitative measures as are deemed necessary;

2) Begin decontamination procedures; and

3) Arrange for suitable transportation to a hospital when required.

3. Medical Service Facilities

The following facilities are available to provide medical support for any contaminated injured individuals:

- Saddleback Memorial Medical Center, San Clemente Campus
- Mission Hospital

4. Medical Transportation

Arrangements are made by the station for prompt ambulance transport of persons with injuries involving radioactivity to designated hospitals. Such service is available on a 24-hour per day basis and is confirmed by letter of agreement.

If contaminated, efforts will be made to decontaminate the victim before transportation as long as the decontamination does not obstruct the medical attention given the victim or cause an unnecessary delay in transporting. During transportation Radiation Protection department personnel will accompany the victim and prevent the further spread of contamination.

M. Reentry and Recovery Planning

Planning Standard 50.47(b)(13) – General plans for recovery and reentry are developed.

1. Reentry and Recovery

During a declared emergency, a point will be reached at which the plant will be placed in a stable condition. With the understanding that this condition could be attained even though specific Emergency Action Levels are still exceeded, the Emergency Director will determine that there is no longer a need to keep the emergency organization in effect and to begin plant recovery.

The extent and nature of the corrective and protective measures and the extent of plant recovery will depend on the emergency conditions at hand and the status of plant areas and equipment. The general goals for plant recovery are:

- An orderly evaluation of the cause and effect of the emergency and the implementing of solutions to prevent the immediate recurrence of the incident.
- A planned approach for returning the plant to a stable condition by obtaining the appropriate manpower, materials, and equipment needed to accomplish that end.
- An evaluation of the radiation exposure records for all on-site emergency response personnel involved in the incident.
- A planned approach to ensure that radiation exposures and contamination control are in keeping with the ALARA program.

2. Recovery Organization

The recovery organization will be based on normal SONGS organizations and functions with the SONGS executive management position being responsible for directing all site activities. The normal station organization is documented in the UFSAR, as required by Technical Specification 5.2.1.a.

If the event results in additional support being required to return the site to pre-event status along with increased interface with offsite agencies and/or media involvement, a recovery organization similar to that shown in Figure M-1 will be put in place.

Notification of onsite personnel and offsite response organizations that the plant recovery is to commence will be performed in accordance with Emergency Plan Implementing Procedures.

3. Recovery Phase Notifications

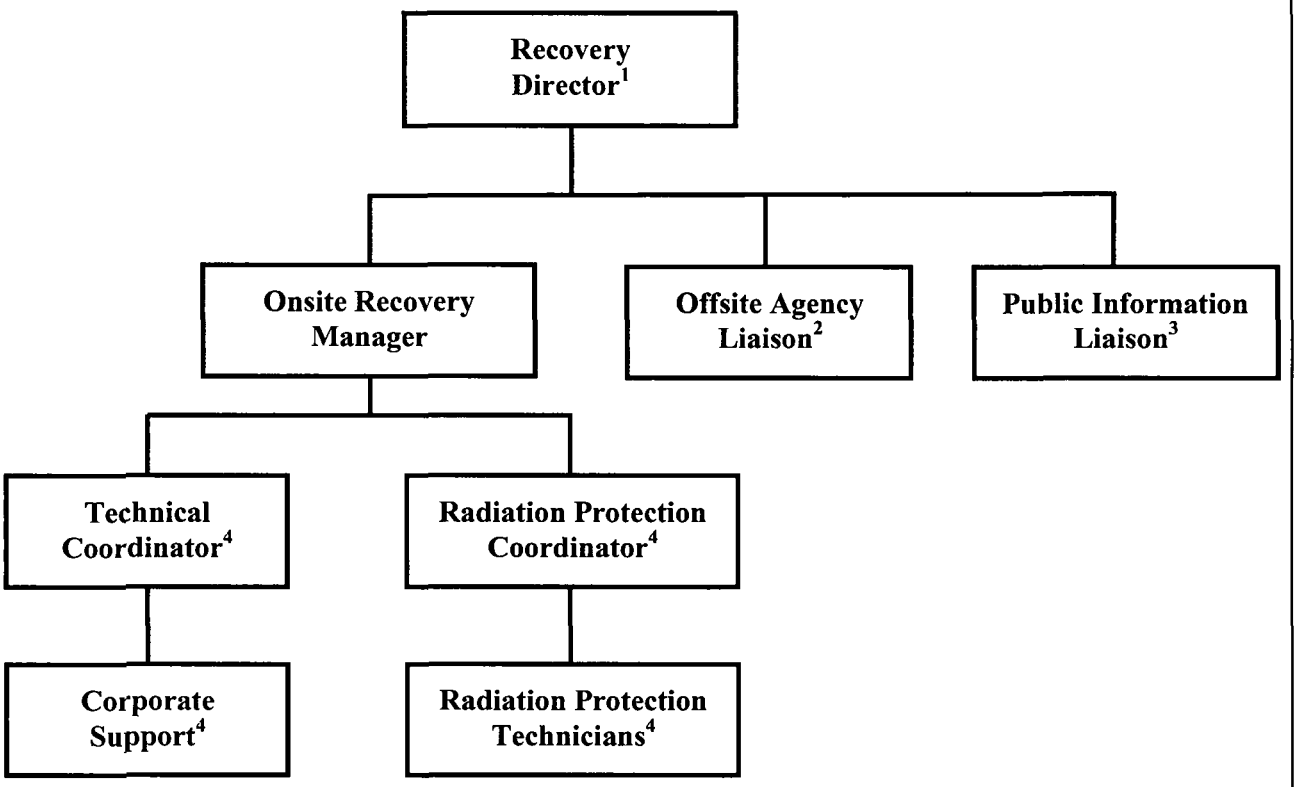
Offsite authorities will be notified when recovery phase begins and ends.

4. Emergency Response Records

- Records associated with the emergency that are to be maintained include:
    - cause of the incident,
    - personnel and equipment involved,
    - extent of injury and damage (onsite and offsite) as a result of the incident,
    - locations of contamination with the final decontamination survey results,

- corrective actions taken to terminate the emergency,
- actions taken or planned to prevent a recurrence of the incident,
- onsite and offsite assistance requested and received, and
- any program changes resulting from a critique of emergency response activities.

Figure M-1: Typical Recovery Organization



NOTES

1. Senior Management
2. Position normally filled by site Emergency Preparedness Manager
3. Position filled from SCE Communications Department
4. SCE will provide or arrange for additional technical, maintenance, radiation protection and other support as needed to restore station to pre-event condition

N. Drill and Exercise Program

Planning Standard 50.47(b)(14) – Periodic exercises are (will be) conducted to evaluate major portions of emergency response capabilities, periodic drills are (will be) conducted to develop and maintain key skills, and deficiencies identified as a result of exercises or drills are (will be) corrected.

1. Biennial Exercise

SONGS conducts a biennial exercise in order to test the adequacy of timing and content of implementing procedures and methods; to test emergency equipment and communication networks; and to ensure that emergency personnel are familiar with their duties. Each exercise will be evaluated by station evaluators and possibly federal evaluators.

For alternating years, an integrated drill will be conducted for the purpose of testing, developing, and maintaining the proficiency of emergency responders.

Biennial Exercises and alternate year integrated drills will allow the ERO to demonstrate the following principal functional areas at least once every 6 years:

- Activities such as management and coordination of emergency response
- Accident assessment
- Event classification
- Notification of offsite authorities
- Assessment of onsite impact of radiological releases
- System repair and mitigate action implementation
- An opportunity to consider accident management strategies
- The Operating Staff would have opportunity to resolve problems (success paths)

The scenarios used for biennial exercise and drills will include, but not be limited to, the following:

- The basic objective(s) used in the exercise.
- The date(s), time period, place(s), and participating organizations.
- A time schedule of real and simulated initiating events.
- A narrative summary describing the conduct of the drill to include such items as simulated casualties, off-site fire assistance, rescue of personnel, use of protective clothing.

Critiques shall be scheduled at the conclusion of each exercise or drill to evaluate the performance of the organizations. The ability of personnel to self-evaluate weaknesses and identify areas for improvement is the key to successful ERO performance.

SONGS will allow observers from federal, state, and local governments, when requested, to observe scheduled exercises.

2. Other Drills

Drills are conducted to provide supervised instruction, training and practice opportunities for ERO members. Equipment and proficiency drills may be performed as part of the biennial exercise, integrated drill or as an independent drill.

a. Communication Drills

Communications with state and local governments shall be tested monthly. These communication drills will include the aspect of understanding the content of messages and the operation of communications equipment.

Communications with NRC Headquarters and the NRC Regional Office Operations Center will be tested quarterly.

b. Radiation Protection Drills

Radiation Protection Drills involving a response to, and analysis of, simulated airborne and liquid samples and direct radiation measurements within the plant are conducted semi-annually.

Radiation Protection Drills involving collection and analysis of all sample media (water, vegetation, soil and air) at or near the site boundary will be conducted annually. These drills will include demonstration of communications and record keeping. At least once during the drill cycle State and local organizations will be invited to participate.

c. Medical Emergency Drills

A medical emergency drill, involving a simulated contaminated individual, and containing provisions for participation by local support services organizations (i.e., ambulance and support hospital) is conducted annually. The offsite portions of the medical drill may be performed as part of the required biennial exercise.

d. Augmentation Drills

Augmentation drills are performed to demonstrate the capability to activate the ERO in a timely manner.

e. Fire Drills

At least once each year a drill shall be conducted which involves participation of the Camp Pendleton Fire Department.

3. Critique and Evaluation

Exercise and drill performance objectives are evaluated against measurable demonstration criteria. As soon as possible following the conclusion of each exercise or drill, a critique, including participants and evaluators, is conducted to evaluate the ability of the ERO to implement the PDEP and its procedures.

A formal written critique report is prepared following an exercise or drill involving the evaluation of designated objectives. The report evaluates and documents the ability of the ERO to respond to a simulated emergency situation. The report will also contain reference to corrective action documents and recommendations.

4. Resolution of Findings

The critique process is used to identify areas of ERO performance and the Emergency Preparedness Program that require improvement. The Emergency Preparedness Manager is responsible for ensuring that items identified in the critique are correctly dispositioned and ensuring resolution of each item.

5. Records

Drill/exercise records and reports are to formulated and maintained. The reports should include a summary of the drill/exercise scenario, objectives, and response actions demonstrated during the drill/exercise. Critique findings from participants, controllers and evaluators should be entered in the Corrective Action program for evaluation.

O. Emergency Response Training

Planning Standard 50.47(b)(15) – Radiological emergency response training is provided to those who may be called on to assist in an emergency.

1. Assurance of Training of the Offsite Response Organizations

Offsite training is provided to support organizations that may be called upon to provide assistance in the event of an emergency. The following outlines the training provided to these organizations:

a. Non-SONGS organizations that may provide specialized services during an emergency (e.g., local law enforcement, fire-fighting, rescue, medical services, transport of injured, etc.) are provided or formally offered annual training.

   The training made available is designed to acquaint the participants with the special problems potentially encountered during a nuclear plant emergency (including effects of radiation exposures and radiological contamination), notification procedures and their expected roles. Organizations that must enter the site also receive site-specific emergency response training and are instructed as to the identity (by position and title) of those persons in the onsite organization who will control their support activities.

b. Training of offsite emergency response organizations is described in their respective local agencies emergency plans, with support provided by SONGS as requested.

2. Functional Training of the ERO

All aspects of emergency preparedness training administration are specified in the station training program. This program identifies the level and the depth to which individuals are to be trained. Appropriate personnel will be trained in the areas such as radiation protection, respiratory protection, and first aid or its equivalent as part of the applicable training programs.

Outside contracted personnel who are brought in to assist with mitigating or recovery actions who have not received emergency plan training will receive just-in-time training prior to performing response actions.

3. First Aid Response

Selected station personnel receive basic training in first aid.

4. Emergency Response Organization

The training for ERO personnel is developed from the position specific responsibilities as defined in this plan. Members of the ERO receive initial and annual refresher training.

On-shift emergency response personnel perform emergency response activities as an extension of their normal duties and are given emergency preparedness training as part of their formal department specific training.

New ERO personnel receive an initial overview course that familiarizes them with the PDEP by providing basic information in the following areas as well as specific information as delineated in the sections below:

- Planning Basis
- Emergency Classifications
- Emergency Response Organization and Responsibilities
- Call-out of Emergency Organization
- Emergency Response Facilities

a. Emergency Directors

Receive specialized training in the areas of:

- Notifications
- Emergency Classification
- Emergency Action Levels
- Mitigation and Protective Actions
- Emergency Exposure Control

b. Personnel Responsible for Accident Assessment

The skills and knowledge required to perform plant stabilization and mitigation are a normal function of operations specific positions. Subsequent stabilization and restoration is pursued utilizing station procedures. Operators receive routine training to ensure proficiency in this area.

Those positions that are called to assist operators with accident assessment, corrective actions, protective actions, and related activities receive appropriate training.

c. Radiological Assessment Personnel

In addition to the training received to qualify for their normal duties, Radiation Protection Personnel receive specific emergency response training on:

- Dose Assessment
- Basic Meteorology
- Transportation of Contaminated injured persons.

d. Police, Site Protection, and Fire Fighting Personnel

1) Local Police and Fire Fighting Personnel: The local Police and Fire Departments are invited to receive training as outlined in Section O.1.

Provisions are in place to provide "Just in Time Training" to untrained emergency workers responding to the site during a large-scale event. This includes training on radiological and plant specific hazards.

e. Repair and Damage Control Teams

Operations, Maintenance and Radiation Protection personnel are trained as part of their normal job specific duties to respond to both normal and abnormal plant operations.

f. Communications Personnel

Personnel using specialized communications equipment that is not part of their normal daily function receive training on the equipment. Personnel involved in notifications to offsite agencies receive training in the notification process.

g. Site Security Force

The Security Force will receive specific emergency response training on:

- Emergency Plan fundamentals and Site Accountability procedures
- Site Evacuation Procedure

h. Key SCE Communications Department Personnel

Individuals assigned to act as spokespersons or to coordinate public information will receive training on:

- Emergency Plan fundamentals
- Dissemination of information during declared events at the station

5. General, Initial, and Annual Training Program Maintenance

Personnel assigned to work at the station receive initial and annual refresher training on general station procedures and policy. This training includes required actions to be taken if an emergency is declared at the station.

6. Records

- Records of training for SONGS ERO personnel are to be documented and maintained.
- Records for training offered and/or provided for the offsite responders is to be documented and maintained.

P. Responsibility for the Maintenance of the Planning Effort

Planning Standard 50.47(b)(16) – Responsibilities for plan development and review and for distribution of emergency plans are established, and planners are properly trained.

1. Emergency Preparedness Staff Training

The individual assigned the duties of the Emergency Preparedness Manager is to maintain an adequate knowledge of regulations, planning techniques and the latest applications of emergency equipment and supplies. This training may include:

- Training courses specific or related to emergency preparedness.
- Observation of or participation in drills and/or exercises at other stations.
- Participation in industry review and evaluation programs.
- Participation in regional or national emergency preparedness seminars, committees, workshops or forums.

2. Authority for the Emergency Preparedness Effort

Southern California Edison (SCE) is responsible for the safe and reliable maintenance of SONGS. The issuance and control of this plan and the activities associated with emergency preparedness at SONGS shall be the overall responsibility of station's Emergency Preparedness Manager.

3. Responsibility for Development and Maintenance of the Plan

The Emergency Preparedness Manager is responsible for the overall radiological emergency preparedness program associated with the station and to administer the program to ensure availability of resources in the event of an emergency.

Specific responsibilities include the following:

- Maintaining and updating this PDEP and associated procedures and documenting those reviews and required revisions
- Coordination of PDEP with other station programs and procedures
- Overseeing Emergency Preparedness Training Program and ensuring that proper records are maintained to document training and retaining of the ERO.
- Overseeing and documenting Emergency Preparedness Drill and Exercise Program
- Documenting and maintaining Emergency Preparedness Facilities and Equipment
- Documenting and maintaining Emergency Preparedness interfaces with offsite agencies.
- Performing and documenting appropriate evaluations of program and of classified emergency events
- Ensuring that onsite personnel and offsite response organizations are notified of updates to the Emergency Plan or procedures.
- Ensuring all Letters of Agreement are reviewed annually and updated as needed.

4. Emergency Plan and Agreement Revisions

The PDEP is reviewed on an annual basis. This review may also include applicable local agencies emergency response based on established agreements.

The annual Plan review/update includes required changes identified during audits, assessments, training, drills, and exercises.

Annually, each Letter of Agreement is reviewed and certified current in order to assure the availability of assistance from each supporting organization not already a party to the individual local agencies plans.

5. Emergency Plan Distribution

The PDEP volumes and implementing procedures are distributed on a controlled basis.

6. Supporting Emergency Response Plans

Other plans that support this PDEP are:

- NUREG-0728, US Nuclear Regulatory Commission, Concept of Operations: NRC Incident Response
- National Response Framework
- State of California Emergency Response Plan

7. Implementing and Supporting Procedures

Emergency Plan procedures provide specific instructions taken for each emergency classification including responsibilities, notification of offsite emergency organizations, and mobilization of the ERO. These procedures provide specific instructions to personnel for response to events and actions required to maintain the Emergency Planning program.

Appendix 2 of this plan contains a listing, by number and title, of those response and administrative/maintenance procedures that implement this PDEP.

8. Cross Reference to Planning Criteria

The PDEP is formatted in the same manner as NUREG-0654. The use of this format lends itself to uncomplicated comparison of the criteria set forth in NUREG-0654. Changes to these procedures are subject to evaluation under 10 CFR 50.54(q).

9. Audit/Assessment of the Emergency Preparedness Program

To meet the requirements of 10 CFR 50.54(t), SONGS coordinates an independent review the Emergency Preparedness Program to examine conformance with 10 CFR 50.47, 10 CFR 50.54, and 10 CFR 50 Appendix E. Included in the audit/assessment are the following:

- The PDEP and associated implementing procedures.
- The emergency preparedness training including drills and exercises as well as any activation of the PDEP since the last program audit.
- The readiness of the station Emergency Response Organization to perform its function.
- The readiness of facilities and equipment to perform as outlined in the PDEP and procedures.
- The interfaces between SONGS and local agencies pertaining to the overall Emergency Preparedness Program.

Results of this review are submitted to Corporate Management and the Chief Nuclear Officer. The Emergency Preparedness Manager ensures that any findings that deal with offsite interfaces are reviewed with the appropriate agencies. Written notification will be provided to local agencies of the performance of the audit and the availability of the audit records for review at SONGS facilities. Records of the review are maintained for at least five years.

10. Maintenance of Emergency Telephone Directory

Names and phone numbers of the Emergency Response Organization, support personnel and applicable offsite organizations shall be reviewed and updated at least quarterly.

Appendix 1: References

References consulted in the writing of this Permanently Defueled Emergency Plan are listed in this section. With exception of regulatory requirements, inclusion of material on this list does not imply adherence to all criteria or guidance stated in each individual reference.

1. 10 CFR 50.47, Emergency Plans

2. 10 CFR 50 Appendix E, Emergency Planning and Preparedness for Production and Utilization Facilities

3. 10 CFR 20, Standards for Protection Against Radiation

4. NUREG-0654, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants, Revision 1, November, 1980

5. NUREG-0728, Report to Congress: NRC Incident Response Plan

6. US NRC Regulatory Guide 1.101, Emergency Planning and Preparedness for Nuclear Power Reactors, revision 4, July, 2003

7. EPA 400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, October 1991

8. FEMA-Guidance Memorandum, MS-1, Medical Services

9. American Nuclear Insurers Bulletin #5B (1981), Accident Notification Procedures for Liability Insured

10. US NRC NSIR/DPR-ISG-02, Interim Staff Guidance, Emergency Planning Exemption Requests for Decommissioning Nuclear Power Plants

11. NRC letter from [date and title of exemption approval letter].

Appendix 2: Procedure Cross-Reference to Plan Sections

Procedure	Plan Sections Implemented
SO123-VIII-ERO-1, Classification and Notifications	Section D &E
SO123-VIII-ERO-2, Shift Manager / Emergency Director Checklist	Sections B, D, E, I,J & M
SO123-VIII-ERO-3, Duty ERO Coordinator Checklist	Sections B, E, I,J & M
SO123-VIII-ERO-4, Technical Coordinator Checklist	Section B & I
SO123-VIII-ERO-5, Radiation Protection Coordinator Checklist	Section B, I, J & K
SO123-VIII-ERO-6, Dose Assessment	Section J
SO123-VIII-ADMIN-1, Emergency Preparedness Program Maintenance	Sections A, C, F, G, H, L, P
SO123-VIII-ADMIN-2, Emergency Preparedness Program Training	Section O
SO123-VIII-ADMIN-3, Emergency Preparedness Program Drill Development and Evaluation	Section N
SO123-VIII-ADMIN-4, 50.54(q) Evaluations	Section P

Appendix 3: List of Letters of Agreements

Organization/Agreement Type	Applicable To
Tri-City Medical Center	Medical Treatment
Mission Hospital	Medical Treatment
Air Methods Corporation	Transport of Injured Persons
Commanding Officer, Marine Corps Base, Camp Pendleton	Fire Fighting / Transport of Injured Person
Orange County Fire Authority	Transport of Injured Person

Appendix 4: Glossary of Terms and Acronyms

Accident Assessment	Accident assessment consists of a variety of actions taken to determine the nature, effects and severity of an accident.
Activation	"ERO Activation" is the process of initiating actions to notify and mobilize Emergency Response Organization (ERO) personnel following an event classification under the emergency plan.
ALARA	Acronym for "As Low as Reasonably Achievable," a basic concept of radiation protection that specifies that radioactive discharges from nuclear plants and radiation exposure to personnel be kept as far below regulation limits as feasible.
Annual	At least once per calendar year, January 1 to December 31.
Assembly/Accountability	A procedural or discretionary protective action taken for all persons within the Protected Area, which involves the gathering of personnel into pre-designated areas, and the subsequent verification that the location of these personnel is known.
Assembly Area	An area designated for the assembly of site personnel upon evacuation of the protected area.
Assessment Actions	Those actions taken during or after an emergency to obtain and process information that is necessary to make decisions to implement specific emergency measures.
Biennial	Occurring every two years
Classification	The classification of emergencies is divided into TWO (2) categories or conditions, covering the postulated spectrum of emergency situations.
Command and Control	When in Command and Control of the event, the designated individual has overall responsibility for SONGS's emergency response efforts.
Command Center	The operations center of the station from which the plant can be monitored.
Company, the	A term used to describe the holder of SONGS license.
Confinement Boundary	The outside surfaces of a storage cask containing spent fuel that act as a barrier between the radioactive substances contained within and the environment.
Corrective Action	Those emergency measures taken to lessen or terminate an emergency situation at or near the source of the problem, to prevent an uncontrolled release of radioactive material, or to reduce the magnitude of a release. Corrective actions include, equipment repair or shutdown, installation of emergency structures, fire fighting, repair, and damage control.

Appendix 4: Glossary of Terms and Acronyms

Damage Assessment	Estimates and descriptions of the nature and extent of damages resulting from an emergency or disaster; of actions that can be taken to prevent or mitigate further damage; and of assistance required in response and recovery efforts based on actual observations by qualified engineers and inspectors.
Decontamination	The reduction or removal of contaminated radioactive material from a structure, area, material, object, or person. Decontamination may be accomplished by (1) treating the surface so as to remove or decrease the contamination; (2) letting the material stand so that the radioactivity is decreased as a result of natural decay; and (3) covering the contamination.
Dose	A generic term that means absorbed dose, dose equivalent, effective dose equivalent, deep dose equivalent, committed dose equivalent, committed effective dose equivalent, or total effective dose equivalent.
Dose Projection	The calculated estimate of a radiation dose to individuals at a given location (normally off-site), determined from the source term/quantity of radioactive material (Q) released, and the appropriate meteorological dispersion parameters (X/Q).
Dose Rate	The amount of ionizing (or nuclear) radiation to which an individual would be exposed per unit of time. As it would apply to dose rate to a person, it is usually expressed as rems per hour or in submultiples of this unit, such as millirems per hour. The dose rate is commonly used to indicate the level of radioactivity in a contaminated area.
Drill	A supervised instruction period aimed at testing, developing and maintaining skills in a particular operation.
Emergency Action Levels (EALs)	A pre-determined, site-specific, observable threshold for a plant Initiating Condition that places the plant in a given emergency class. An EAL can be an instrument reading; an equipment status indicator; a measurable parameter (onsite or offsite); a discrete, observable event; or another phenomenon which, if it occurs, indicates entry into a particular emergency class.
Emergency Director	The Director of the facility in Command and Control of the event. The Shift Manager fills the role of Emergency Director throughout an event.
Emergency Operations Center (EOC)	A facility designed and equipped for effective coordination and control of emergency operations carried out within an organization's jurisdiction. The site from which civil government officials (municipal, county, State, and Federal) exercise direction and control in a civil defense emergency.
Emergency Response Personnel	SCE personnel who may be called upon during an emergency to perform duties to mitigate accident conditions at SONGS.

Appendix 4: Glossary of Terms and Acronyms

Emergency Preparedness	A state of readiness that provides reasonable assurance that adequate protective measures can and will be taken upon implementation of the emergency plan in the event of a radiological emergency.
Environmental Monitoring	The use of radiological instruments or sample collecting devices to measure and assess background radiation levels and/or the extent and magnitude of radiological contamination in the environment around the plant. This may be done in various stages such as normal operations, emergency, and recovery.
Evacuation	The urgent removal of people from an area to avoid or reduce high level, short-term exposure usually from activity release of radioactivity or other environmental hazard.
Exercise	A test of the integrated capability and a major portion of the basic elements existing within emergency preparedness plans and organizations. An exercise may involve participation of offsite organizations.
Hostile Action	An act toward the station or its personnel that includes the use of violent force to destroy equipment, takes hostages, and/or intimidate the licensees to achieve an end. This includes attack by air, land, or water using guns, explosives, projectiles, vehicles, or other devices used to deliver destructive force. Other acts that satisfy the overall intent may be included. This should not be construed to include acts of civil disobedience or felonious acts that are not part of a concerted attack on the station.
Initiating Condition	A predetermined condition where either the potential exists for an emergency or such an emergency has occurred.
Integrated Drill	A training activity that incorporates multiple demonstration requirements to be conducted in connection with one another. An example could be including a contaminated injured person with a loss of spent fuel coolant accident.
Local agencies	An all-inclusive term referring to county and municipal governments.
Meteorological Instrumentation	A device mounted in a location that will provide the Command Center with local wind sped and direction to assist in the assessment and decision-making to implement onsite protective actions.
Monthly	At least once per calendar month.
Offsite	The area around a nuclear generating station that lies outside the "Owner Controlled Area".

Appendix 4: Glossary of Terms and Acronyms

Onsite	The area around the station that lies within the station's "Owner Controlled Area".
Owner Controlled Area	SCE SONGS controlled property, to include facilities and parking lots located on the west side of the Interstate 5 freeway, extending westward from Old Highway 101 to the median high-tide line, bordered on the north and south by the State Park Beach.
Personnel Monitoring	The determination of the degree of radioactive contamination on individuals, using standard survey meters, and/or the determination of dosage received by means of dosimetry devices.
Radiation Monitoring System	An instrumentation system designed to detect and alarm abnormal radiation levels in spent fuel pool area and effluent streams.
Projected Dose	That calculated dose that some individuals in the population group may receive if no protective actions are implemented. Projected doses are calculated to establish an upper limit boundary.
Protected Area	That onsite area within the security boundary as defined in the station's Security Plan.
Protective Action	Those emergency measures taken for the purpose of preventing or minimizing radiological exposures to affected population groups.
Quarterly	At least once in each of the following four periods: January 1 through March 31; April 1 through June 30; July 1 through September 30; October 1 through December 31.
Radiological Release	A '*Release in Progress*' is defined as ANY radioactive release that is a result of, or associated with, the emergency event. Normal off-gas or plant vent releases that occur during operations or shutdown are not considered to be a release unless the value exceeds an alarm setpoint.
Safety System	A system required for cooling the spent fuel pool of in the permanently defueled mode of operation.
Semi-Annual	At least once in each of the following periods: January 1 through June 30; July 1 through December 31.
Site Evacuation	The evacuation of non-essential personnel from the plant site.
Source Term	Radioisotope inventory of spent fuel, or amount of radioisotope released to the environment, often as a function of time.
Staffed Warning Points	Offsite agency locations that are staffed 24 hours a day. Such as 911 centers or other staffed watch locations.
Threshold Value	Measurable, observable detailed conditions which must be satisfied to determine an EAL applicability.
Total Effective Dose Equivalent (TEDE)	The sum of the deep dose equivalent (for external exposure) and the committed effective dose equivalent (for internal exposure) and 4 days of deposition exposure.

Appendix 4: Glossary of Terms and Acronyms

Unrestricted Area	Any area to which access is not controlled for protecting individuals from exposure to radiation and radioactive materials, or other industrial hazards.
Vehicle Barrier System VBS)	Vehicle control measures (passive or active) used to protect against the malevolent use of a land vehicle. The VBS consists of both active and passive components, terrain features, man-made structural features, and vehicle access checkpoints.
Weekly	At least once per calendar week: Sunday through Saturday.

Any abbreviation followed by a lower case 's' denotes the plural form of the term.

Appendix 4: Glossary of Terms and Acronyms

ACRONYMS

ARM ..... Area Radiation Monitor

CFR ..... Code of Federal Regulations

CC ..... Command Center

DHS ..... Department of Homeland Security

DOE ..... Department of Energy

DOT ..... Department of Transportation

DPH ..... Department of Public Health

EAL ..... Emergency Action Level

EAS ..... Emergency Alerting System

ENS ..... Emergency Notification System (NRC)

EOC ..... Emergency Operations (or Operating) Center

EPA ..... Environmental Protection Agency

EPZ ..... Emergency Planning Zone

HPN ..... Health Physics Network (NRC)

ISFSI ..... Independent Spent Fuel Storage Installation

NRC ..... Nuclear Regulatory Commission

OES ..... California Office of Emergency Services

PAG ..... Protective Action Guide

PDEP ..... Permanently Defueled Emergency Plan

RAC ..... Regional Advisory Committee (FEMA)

SCBA ..... Self Contained Breathing Apparatus

VBS ..... Vehicle Barrier System