

May 16, 2016

Ms. Poonam Acharya  
Project Manager  
Department of Toxic Substances Control  
5796 Corporate Avenue  
Cypress, CA 90630

Subject: San Onofre Nuclear Generating Station (SONGS) Mesa Facility - Request for Radiological Assessment

Dear Ms. Acharya,

This letter responds to one request in your letter dated February 16, 2016 to Ms. Phuong Tran of Southern California Edison Company (SCE) regarding the activities associated with the Voluntary Cleanup Agreement for the SONGS Mesa Facility, Parcels 5, 6, and 7 (the "Mesa Facility"). In addition, your letter requests that SCE perform a radiological assessment of the Mesa Facility due to its proximity and supporting operations to the SONGS plant site. You also recommended that the Nuclear Regulatory Commission (NRC) and the California Department of Public Health (DPH) be contacted to review and approve the radiation-related assessments.<sup>1</sup> In response, this letter submits radiological assessments completed for the Mesa Facility. Also provided is the NRC correspondence that supports the findings in those assessments. These radiological assessments demonstrate that:

1. Reports produced for the SONGS Radiological Environmental Monitoring Program (REMP) demonstrate that no detectable radioactive contamination from SONGS plant-related activities is at the Mesa Facility or the surrounding areas.
2. No detectable radioactive contamination from SONGS plant-related activities is present on the Mesa Facility from material inadvertently transferred to the Mesa Facility.

The radiological assessment documents are contained on each of the enclosed two CDs and are summarized below.

### **Annual Radiological Environmental Operating Report**

SCE instituted the radiological environmental monitoring required by NRC and U.S. Environmental Protection Agency regulations on an annual basis since the SONGS plants started operating. The REMF objective is to provide measurements of SONGS plant-related radionuclides in the areas surrounding the plant and monitoring of potential exposure

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<sup>1</sup> Your March 23, 2016 letter also requested that "Radiological assessment for the Mesa Facility should be completed and approved by the NRC and/or CDPH prior to closure of Parcel 5."

pathways. The Annual Radiological Environmental Operating Reports (AREOR) document the comprehensive monitoring undertaken to demonstrate the negligible impact of SONGS operation on the local environment. CD Tabs 1 through 5 are the 2015 through 2011 AREORs, respectively.<sup>2</sup>

Pre-operational<sup>3</sup> sampling was performed at control locations both within the SONGS plant area and well away from the SONGS area<sup>4</sup>. The pre-operational sampling identified radioactive material primarily due to weapons testing at locations away from the SONGS plant. Subsequent testing has also shown the effects of the Chernobyl and Fukushima incidents. Sampling pathways consist of air, drinking water, ocean water, fish, crustaceans, soil/sediment, sand, kelp, local crops and direct radiation.<sup>5</sup> The enclosed reports, and past AREORs, have shown that SONGS plant-related activities have caused no detectable radioactive contamination. Several REMP data collection stations are located on the Mesa Facility, including an air sampler, local garden for crops and direct radiation monitoring stations, which directly correlate to a conclusion of no detectable radioactive contamination on the Mesa Facility from SONGS plant-related activities.

### **Mesa Facility Specific Radiological Assessment**

During the 1980s, some limited radiological material was inadvertently transferred from the SONGS plant site to the Mesa Facility. The radiological material was primarily contamination on tools and equipment. As the SONGS NRC License did not allow for the contaminated material to be on the Mesa Facility, upon discovery of contaminated material, such material was immediately secured, transferred back to the appropriate location within the SONGS plant area, and the Mesa Facility area was verified to have no detectable radioactive contamination from this material.

At the request of the Department of the Navy (DoN),<sup>6</sup> the NRC sent a December 1, 2015 letter to Commander Fletcher of the DoN (CD Tab 12) affirming that SCE appropriately addressed and remediated these incidents, as supported by the NRC's Inspection Report (IR) # 50-206/81-02 (CD Tab 13). Further support that the Mesa Facility does not have detectable radioactive contamination from SONGS plant-related activities is shown in the documentation on the enclosed CD. Certified Health Physicists hired by SCE prepared memoranda (CD Tabs 7 - 10) that discuss (i) the assessment of the incidents when radiological material was inadvertently transferred to the Mesa Facility area from the SONGS plant, (ii) how the incidents were addressed and remediated, if needed, and (iii) the steps taken, including additional surveys, to

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<sup>2</sup> Link to SCE AREORs at NRC's website: <http://www.nrc.gov/reactors/operating/ops-experience/tritium/plant-specific-reports/sano2-3.html>

<sup>3</sup> Prior to the operation of SONGS Unit 1 in 1968.

<sup>4</sup> The AREORs identify the sampling locations.

<sup>5</sup> Split sampling is performed with the DPH.

<sup>6</sup> The Mesa Facility is located on DoN land.

show that no detectable radioactive contamination remained on Parcels 5, 6, and 7 due to such incidents.

### **Conclusion Regarding Radiological Contamination on the Mesa**

The REMP AREORs (current and historical) show that SONGS plant-related activities have not caused any detectable radioactive contamination on the Mesa Facility through analysis of environmental media, such as soil, air, and water. Additionally, the areas where radioactive material was inadvertently brought to the Mesa Facility have been fully remediated and surveys were conducted to demonstrate that no detectable radioactive contamination from SONGS plant-related activities is on the Mesa Facility.

### **Contact with NRC and DPH**

As noted above, similar to the DTSC's request that SCE contact the NRC regarding the Mesa Facility radiation-related assessment, the DoN had previously requested the NRC provide an opinion regarding detectable radioactive contamination on the Mesa Facility from the incidents mentioned above. The NRC's December 1, 2015 letter (CD Tab 12) indicates that SCE has appropriately addressed and remediated any SONGS plant-related radioactive materials contamination, also citing to the SONGS REMP. Thus, as no detectable radioactive contamination from SONGS plant-related activities is at the Mesa Facility, the NRC concludes that the Mesa Facility is not subject to NRC licensing. SCE has briefly discussed the DTSC request with DPH representatives, who have informed SCE that DPH will respond to a DTSC request for review of the information enclosed with this letter. SCE has copied DPH on this transmittal. In light of the enclosed information, including the NRC's December 1, 2015 letter, if DTSC believes that DPH's review is no longer necessary, please let me know.

We would be pleased to discuss the radiological assessments with you and other DTSC staff. Should you have any questions, please contact Mr. Brian Metz at 949.368.7311.

Sincerely,



Chris Ahola, CHP  
Radiation Protection Manager

cc: Gonzalo Perez, DPH, Chief Radiological Health Branch  
Nino Mascolo, SCE  
Stevie Vaughan, SCE  
Brian Metz, SCE  
Phuong Tran, SCE

List of documents contained within each enclosed CD

Tab	Document
1	SONGS 2015 Annual Radiological Environmental Operating Report (AREOR)
2	SONGS 2014 Annual Radiological Environmental Operating Report (AREOR)
3	SONGS 2013 Annual Radiological Environmental Operating Report (AREOR)
4	SONGS 2012 Annual Radiological Environmental Operating Report (AREOR)
5	SONGS 2011 Annual Radiological Environmental Operating Report (AREOR)
6	DTSC February 16, 2016 letter to SCE requesting a radiological assessment of Mesa Lease Parcels 5, 6, and 7
7	May 28, 2015 Memo to File (amending April 10, 2014 Memo to File) Assessing Radiological Events at the Mesa and recommending additional surveys
8	April 11, 2014 Addendum to Memo to File regarding Adequacy of 1981 Radiological Surveys for Mesa Locations "a" and "b"
9	April 30, 2014 Mesa Survey Plan. Describes the plan for conducting the surveys for residual contamination on the Mesa
10	July 2, 2014 Memo to File regarding "Results of Confirmatory Radiological Survey at the Mesa" summarizing survey results to confirm no evidence is present of detectable radioactive contamination compared to background
11	Surveys that document the tools and equipment located on the Mesa prior to their sale were not contaminated
12	December 1, 2015 letter from U.S. Nuclear Regulatory Commission to Commander Douglas Fletcher, Department of Navy
13	February 13, 1981 letter from U.S. Nuclear Regulatory Commission to SCE. a. Inspection Report 50-206/81-02