

**CALIFORNIA STATE LANDS COMMISSION**

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*Established in 1938*

July 12, 2016

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## NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT AND NOTICE OF PUBLIC SCOPING MEETINGS

File Ref: SCH No. 2016071025  
CSLC EIR No. 784; W30209

**NOTICE IS HEREBY GIVEN** that the California State Lands Commission (CSLC), as Lead Agency under the California Environmental Quality Act (CEQA), will prepare an Environmental Impact Report (EIR) and that CSLC staff will conduct public scoping meetings for the project listed pursuant to CEQA (Pub. Resources Code, § 21083.9, subd. (a)(2)) and the State CEQA Guidelines (§§ 15082, subd. (c) and 15083).<sup>\*</sup> The meetings will be held in the city of Oceanside, San Diego County (the county in which the project is located), and the city of San Clemente, Orange County (the nearest city).

**Project Title:** **SAN ONOFRE NUCLEAR GENERATING STATION UNITS 2 & 3  
POST-SHUTDOWN DECOMMISSIONING PROJECT**

**Applicants:** Southern California Edison (SCE) and Co-Participants<sup>\*\*</sup>

**Project Location:** The offshore portion of the Project lies on State sovereign land under the jurisdiction of the CSLC; the onshore Project site lies entirely within the boundaries of the Marine Corps Base Camp Pendleton, approximately 51 miles north-northwest of the city of San Diego, San Diego County, California.

<b>Meeting Information:</b>	<b>Tuesday, July 26, 2016</b>	<b>Oceanside City Hall, Civic Center</b>
	<b>5 PM:</b> Open House <b>6 PM:</b> Start of Meeting	Library 300 North Coast Highway Oceanside CA 92054
	<b>Wednesday, July 27, 2016</b>	<b>San Clemente High School, Theater</b>
	<b>12 PM:</b> Open House <b>1 PM:</b> Start of Meeting	700 Avenida Pico San Clemente, CA 92673

<sup>\*</sup> CEQA is found in Public Resources Code section 21000 et seq. The State CEQA Guidelines are found in California Code of Regulations, title 14, section 15000 et seq.

<sup>\*\*</sup> The Co-Participants are parties to a Decommissioning Agreement between SCE, San Diego Gas and Electric (SDG&E), and the cities of Anaheim and Riverside. The Agreement identifies the separate rights, duties, and obligations of the Co-Participants as the entities responsible for the SONGS decommissioning work and costs thereof.

The CSLC staff has prepared this Notice of Preparation (NOP) in order to obtain agency and the public's views, in writing and/or at the public meetings, as to the scope and content of the environmental analysis, including the significant environmental issues, range of alternatives, and mitigation measures that should be included in the EIR. Responsible agencies will need to use the EIR when considering related permits or other approvals for the Project. This Notice is also available online at [www.slc.ca.gov](http://www.slc.ca.gov) (under the "Information" tab and "CEQA Updates" link).

**Written comments must be received or postmarked by August 15, 2016.** (State CEQA Guidelines, § 15103 requires that responses to a NOP must be provided within 30 days.) Please send your comments at the earliest possible date to:

Cynthia Herzog Senior Environmental Scientist California State Lands Commission 100 Howe Avenue, Suite 100-South Sacramento, CA 95825	<b>E-mail:</b> <a href="mailto:CEQAcomments@slc.ca.gov">CEQAcomments@slc.ca.gov</a> <b>FAX:</b> (916) 574-1885 <b>Phone:</b> (916) 574-1890
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## PROJECT SUMMARY

SCE and its Co-Participants have applied to the CSLC to implement the San Onofre Nuclear Generating Station Units 2 & 3 Post-Shutdown Decommissioning Project (Project). The proposed Project has four phases.

Phase	Activities	Anticipated Date
Phase 1	Decontamination and Dismantlement	2017-2025
Phase 2	Partial Site Restoration and Offshore Conduit Disposition	2020-2035
Phase 3	Independent Spent Fuel Storage Installation (ISFSI) Operation and Maintenance	2035-2049
Phase 4	ISFSI Removal and Final Site Restoration	2049-2051

## PUBLIC SCOPING MEETING

One hour prior to each scoping meeting, CSLC staff and the Project applicant will be available to discuss the EIR and proposed Project, respectively, and answer questions pertaining to the description of the Project. Following this "open house," the formal scoping meeting noticed above will begin with a brief presentation on the proposed Project. CSLC staff will then receive comments on the potential significant environmental issues, potential Project alternatives, and mitigation measures that should be included in the EIR, until all persons present who wish to provide oral comments have done so, at which time staff will close the session. A 3-minute time limit on oral comments may be imposed.

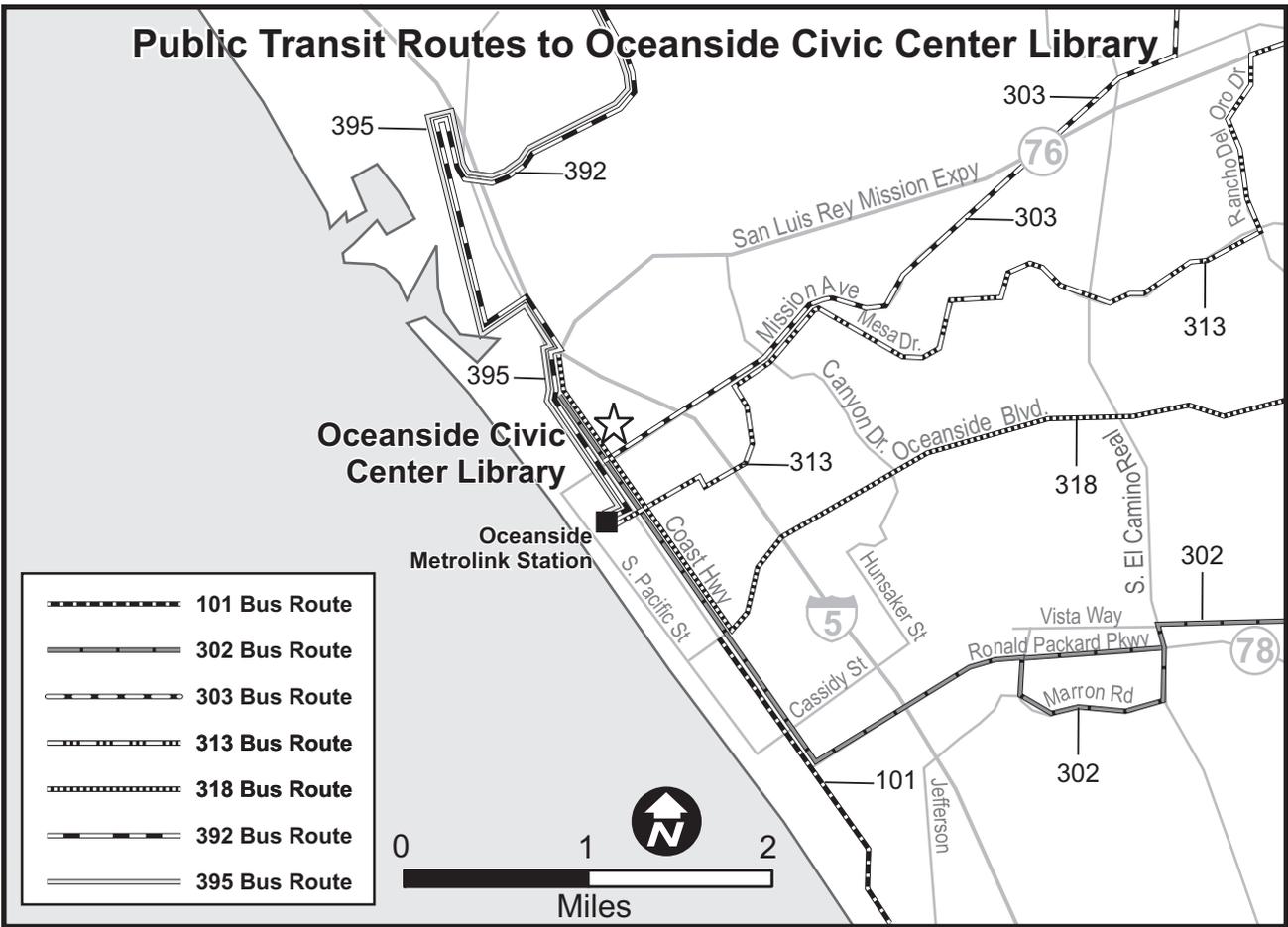
## IMPORTANT NOTES TO COMMENTERS

1. If you submit written comments, you are encouraged to submit electronic copies by email to [CEQAcomments@slc.ca.gov](mailto:CEQAcomments@slc.ca.gov) and write “**SONGS Decommissioning NOP Comments**” in the subject line of your email. If written comments are faxed, please also mail a copy to ensure that a readable copy is received by this office.
2. Before including your mailing or email address, telephone number, or other personal identifying information in your comment, please be aware that the entire comment—including personal identifying information—may become publicly available, including in the EIR and posted on the Internet. The CSLC will make available for inspection, in their entirety, all comments submitted by organizations, businesses, or individuals identifying themselves as representatives of organizations or businesses.
3. If you represent a public agency, please provide the name, email address, and telephone number for the contact person in your agency for this EIR.
4. If you require a sign language interpreter or other reasonable accommodation to conduct business with CSLC staff at the scoping meeting for a disability, as defined by the Federal Americans with Disabilities Act and California Fair Employment and Housing Act, please contact the CSLC staff person listed in this NOP at least 48 hours in advance of the meeting to arrange for such accommodation.
5. Please contact the staff person listed in this NOP by phone at (916) 574-1890 or by email at [Cynthia.Herzog@slc.ca.gov](mailto:Cynthia.Herzog@slc.ca.gov) if you have any questions.

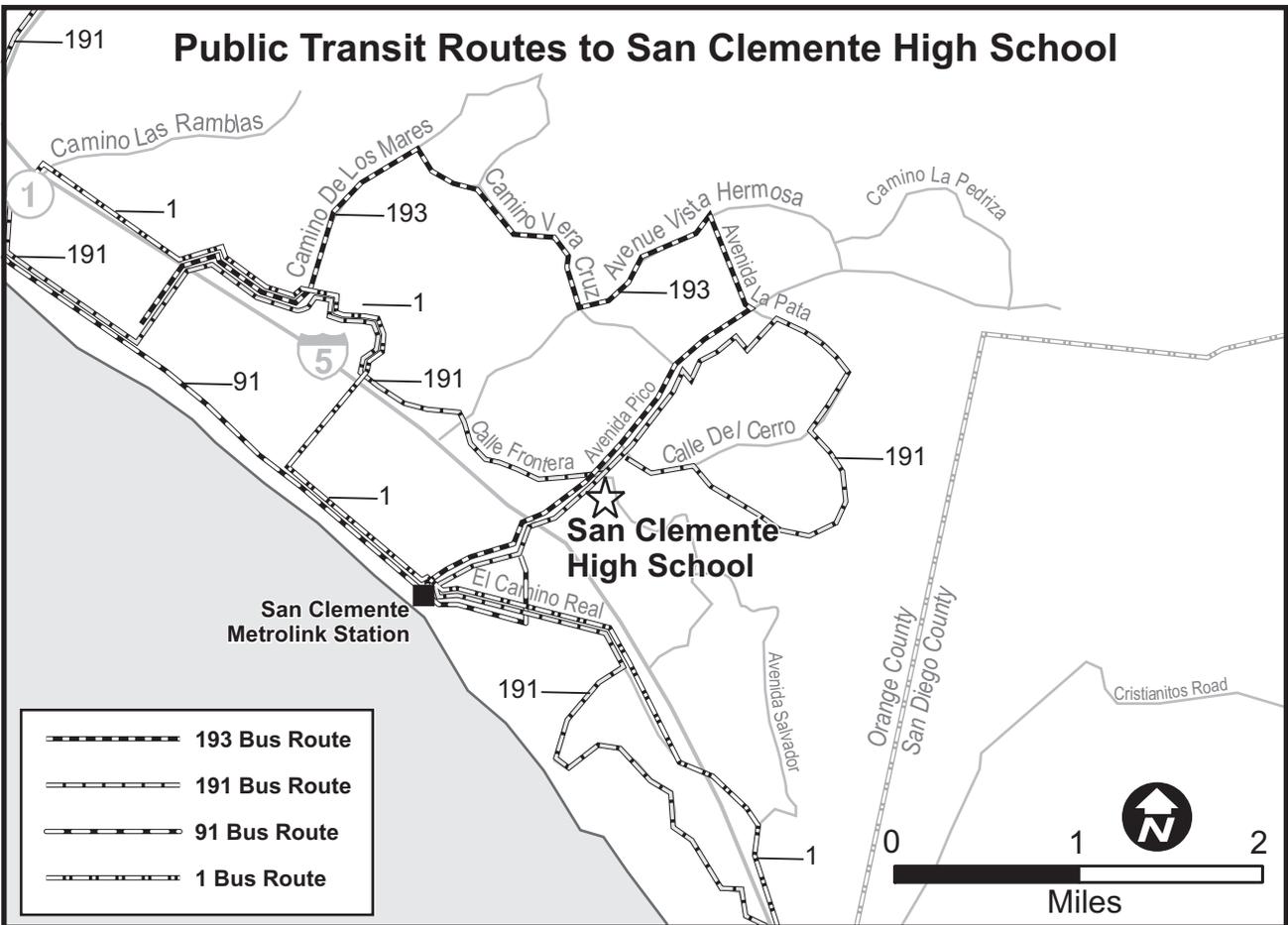
Signature:   
\_\_\_\_\_  
Cynthia Herzog  
Senior Environmental Scientist

Date: July 12, 2016

## Public Transit Routes to Oceanside Civic Center Library



## Public Transit Routes to San Clemente High School



## **ATTACHMENT: PROJECT DESCRIPTION**

### **San Onofre Nuclear Generating Station Units 2 & 3 Post-Shutdown Decommissioning Project**

#### **1.0 PROJECT LOCATION AND BACKGROUND**

The San Onofre Nuclear Generating Station (SONGS) is located in northern San Diego County, approximately 51 miles north-northwest of the city of San Diego (Figure 1). The onshore SONGS site lies entirely within the boundaries of the Marine Corps Base Camp Pendleton (Camp Pendleton) under a grant of easement between the U.S. Department of the Navy (DoN) and Southern California Edison (SCE), which owns SONGS subject to a license from the U.S. Nuclear Regulatory Commission (NRC).<sup>1</sup> The offshore area is located on land leased by the California State Lands Commission (CSLC) (Lease No. PRC 6785.1). At full operation, SONGS had three operating units. In 1992, Unit 1 shut down and was subsequently decommissioned. In June 2013, SCE, on behalf of the Co-Participants,<sup>2</sup> announced its intention to cease power operation at and permanently shut down SONGS Units 2 and 3, and submitted a Certification of Permanent Cessation of Power Operations to the NRC seeking termination of the NRC license (in accordance with 10 Code of Federal Regulations [CFR] 50.83). In 2015, SCE, SDG&E, and the city of Riverside (Applicants)<sup>3</sup> submitted an application to the CSLC to decommission the Units 2 and 3 Lease Facilities. The CSLC, as lead agency under the California Environmental Quality Act, will prepare an Environmental Impact Report (EIR) for the proposed SONGS Units 2 & 3 Post-Shutdown Decommissioning Project (Project).

With the exception of communities within Camp Pendleton, the nearest developed community is San Clemente, in Orange County, which is 3 miles north-northwest of SONGS. To the west of the site is the Pacific Ocean, to the north and south along the coastline is San Onofre State Beach, and to the east are Interstate Highway 5 (I-5) and railroad tracks owned by the North County Transit District of San Diego. Offshore conduits, associated appurtenances, monitoring and navigational buoys, and portions of riprap along the shoreline seaward of the ordinary high water mark (Lease Facilities) are located on tide and submerged lands southwest of Unit 2 and Unit 3 in the Pacific Ocean (Figure 2). An adjacent public walkway permits transit between open beach areas upcoast and downcoast of the site. The coastal side of the owner-controlled area (OCA) is an industrial area protected by a seawall (Figure 3). Onshore and offshore Project areas are described in more detail below.

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<sup>1</sup> The DoN Easement covers approximately 83.63 acres. SCE and San Diego Gas & Electric Company (SDG&E) also lease approximately 14.90 acres of other areas from the DoN that support the SONGS facility (e.g., parking lots), which are considered part of the Project.

<sup>2</sup> The Co-Participants are parties to a Decommissioning Agreement between SCE, San Diego Gas & Electric (SDG&E), and the cities of Anaheim and Riverside. The Agreement identifies the separate rights, duties, and obligations of the Co-Participants as the entities responsible for the SONGS decommissioning work and costs thereof.

<sup>3</sup> The city of Anaheim is a former co-owner of SONGS Units 2 and 3 and is not a party to the CSLC lease. However, all Co-Participants are responsible for their respective shares of SONGS decommissioning costs.

**Figure 1. Project Location**



**Figure 2. Project Overview**



**Figure 3. Major Project Areas**



**MAP DISCLAIMER:** Map features depicted herein are planning level accuracy, and intended for informational purposes only. Distances and locations may be distorted at this scale. Always consult with the proper legal documents or agencies regarding such features. © Southern California Edison, GIS Mapping.

## 1.1 Onshore Site

SONGS Unit 2 and Unit 3 each consist of a containment building that houses the nuclear reactor and other equipment, a turbine building, a fuel handling building, an emergency diesel generator building, and circulating water conduits. Facilities common to both units include an auxiliary building, security building, maintenance buildings and shops, and office buildings. On the southeastern side of the DoN Easement area, both SCE and SDG&E have switchyards that previously provided a connection for electricity generated by Units 2 and 3 and transmission lines feeding the SCE and SDG&E electrical transmission grids. As Units 2 and 3 no longer generate electricity and have transitioned to shutdown status, power is now provided to SONGS from the SCE switchyard. As proposed, the switchyards would not be removed as part of the Project and would remain under a DoN real estate agreement.

Units 2 and 3 are situated immediately adjacent to and southeast of the former Unit 1 area, which is now known as the North Industrial Area (NIA) and which includes a sewage treatment plant and remaining subsurface structures associated with the former Unit 1. As noted above, SCE shut down Unit 1 in 1992. The majority of SONGS Unit 1 onshore, above-ground structures, systems, and components (SSCs)<sup>4</sup> were dismantled and removed by 2009, and the offshore conduits and appurtenances were dispositioned in 2014. The NRC license termination for Unit 1 is not anticipated to occur until Units 2 and 3 are decommissioned (i.e., concurrent license termination).

In August 2015, the California Coastal Commission (CCC) approved Coastal Development Permit (CDP) No. 9-15-0162 for the installation and operation of an independent cooling system, known as a “Spent Fuel Pool Island” (SFPI), onshore to replace the existing once-through cooling system at SONGS Units 2 and 3 (<http://documents.coastal.ca.gov/reports/2015/8/th15a-8-2015.pdf>). In October 2015, the CCC approved CDP No. 9-15-0228 to allow the Applicants to construct and operate a partially below-grade Independent Spent Fuel Storage Installation (ISFSI) within the NIA to store spent nuclear fuel from SONGS Units 1, 2 and 3 (an above-grade ISFSI approved in 2001 does not have capacity to hold remaining spent fuel). The expanded ISFSI is under construction (<http://documents.coastal.ca.gov/reports/2015/10/Tu14a-10-2015.pdf>).

## 1.2 Shoreline and Offshore Sites

The seaward boundary of the DoN Easement area is protected by a seawall that is approximately 2,049 feet long (total). Seaward of the former Unit 1, the seawall is made of steel sheet pile for a length of approximately 673 feet. Seaward of Units 2 and 3, the seawall is comprised of reinforced concrete topped with a security fence for a length of approximately 1,376 feet. Additional onshore and offshore facilities located seaward of the seawall include cooling system intake and discharge conduits, a fish return system conduit, a public beach access walkway and associated riprap, and environmental

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<sup>4</sup> SSCs are structures, systems, and components necessary for plant operations.

monitoring and navigational buoys. The public beach access walkway and riprap are located between the seawall and the beach (see Figure 2). The public beach access walkway in front of the seawall and portions of the riprap landward of the ordinary high water mark are located within the DoN Easement area. The CSLC lease covers the portion of the riprap seaward of the ordinary high water mark along with the environmental monitoring buoys near the offshore conduit.

### 1.3 Decommissioned Material Transportation Routes

Decommissioned equipment and materials that are removed from the immediate Project area will be transported by rail or road. Rail and truck transit routes will be determined by the Decommissioning General Contractor. Counties crossed by the rail route may include San Diego, Orange, Los Angeles, Riverside, and San Bernardino. For truck trips, California Department of Transportation (Caltrans) Districts crossed by potential transit routes may include Districts 11, 12, 7, and 8 (the same counties as for rail, plus Imperial County).

### 1.4 Lease and Easement Information

A brief history of the major milestones related to plant construction and operation of Units 2 and 3, which will be the subject of the CSLC's EIR, is as follows.

Milestone	Unit 2	Unit 3
Construction Permit Issued	October 18, 1973	October 18, 1973
Operating License Issued	February 16, 1982	November 15, 1982
Full Power Operation	June 15, 1983	November 18, 1983
Final Reactor Operation	January 9, 2012	January 31, 2012

On November 12, 2015, the Applicants submitted to the CSLC an application requesting modifications to its existing CSLC Lease No. PRC 6785.1 to allow for decommissioning of SONGS Units 2 and 3; a lease application supplement was also submitted on June 2, 2016. The proposed modifications may result in the CSLC's termination of the existing lease and the issuance of a new lease to allow for the disposition of the Lease Facilities during decommissioning. The Lease Facilities represent only a portion of the proposed decommissioning project area; the onshore portion of the SONGS facilities is on federal land. As part of its CEQA review, however, the CSLC is responsible for evaluating the potential environmental impacts for the entire Project, which includes both the offshore and onshore components.

Lease PRC 6785.1 provides the CSLC with discretion to determine the end state requirements for the Lease Facilities including, potentially, full removal of the offshore conduits. The Applicants have requested that CSLC approve the partial removal and abandonment-in-place most of the conduits (similar to the Unit 1 conduits end-state configuration), and disposition of the other components. The Applicants also requested a lease term beyond 2023 to allow for the use of the conduits during decommissioning. The Applicants' requested end state is subject to further discussions between the CSLC, DoN, U.S. Army Corps of Engineers (USACE), and CCC.

The easement between SCE and the DoN for the SONGS onshore facilities expires in 2024. An extension of the easement or a new real estate agreement is needed for the Co-Participants to continue to occupy the SONGS site to complete decommissioning and establish the desired end state. The issuance of an amended or new real estate agreement would be subject to the National Environmental Policy Act (NEPA). It is expected that DoN will impose site restoration requirements, which would include non-radiological and radiological decontamination standards and a determination of which improvements, if any, may remain on site. The DoN has stated its intent to coordinate with CSLC staff during the CEQA process regarding potential Project alternatives.

## 2.0 PROJECT DESCRIPTION

Under 10 CFR 50.82, the NRC requires a licensee to decommission a nuclear facility within 60 years after power operations cease. The SONGS Co-Participants plan to complete decommissioning within 40 years, with the majority of decontamination and dismantlement of the facility occurring within the first 20 years. According to the NRC:

*Decommissioning involves removing the spent fuel (the fuel that has been in the reactor vessel), dismantling any systems or components containing activation products (such as the reactor vessel and primary loop), and cleaning up or dismantling contaminated materials from the facility. All activated materials<sup>5</sup> generally have to be removed from the site and shipped to a waste processing, storage, or disposal facility. Contaminated materials may either be cleaned of contamination on site; the contaminated sections may be cut off and removed (leaving most of the component intact in the facility); or they may be removed and shipped to a waste processing, storage, or disposal facility. The licensee decides how to decontaminate material; the decision is usually based on the amount of contamination, the ease with which it can be removed, and the cost to remove the contamination versus the cost to ship the entire structure or component to a waste disposal site.<sup>6</sup>*

For this Project, as part of decommissioning, the SONGS Co-Participants must comply with site restoration requirements specified by the underlying landowners (i.e., DoN and CSLC) and other jurisdictional agencies. Decommissioning would include remediating non-radiological hazards to levels that are acceptable to jurisdictional agencies.

### 2.1 Project Areas and Components

For purposes of the Project description, the SONGS site is described in geographic Major Project Areas. These areas, depicted in Figure 3, cover onshore and offshore components and above- and below-grade facilities. Within each Major Project Area are Major Components, which include buildings, SSCs, and infrastructure (e.g., roads). Major Components associated with each Major Project Area are listed below.

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<sup>5</sup> Radioactive material created during power operations.

<sup>6</sup> See [www.nrc.gov/waste/decommissioning/faq.html#4](http://www.nrc.gov/waste/decommissioning/faq.html#4).

Major Project Areas	Major Components
South Yard Facility Area (SYFA)	Multi-Purpose Handling Facility (MPHF) Building Hazardous Material Pad Radioactive Equipment and Material Radioactive Equipment and Material Storage (REMS) Staging Pad South Yard Facility Building Parking Lot 1 South Access Road (portion) Gunite Slope Protection
Make Up Demineralizer Area (MUDA)	Parking Lot 2 (upper and lower) Make Up Demineralizer Make Up Demineralizer Control Building Demineralized Water Tanks Office Building (K-40/K-50) Decommissioning Power Supply Backup Diesel Microwave Building South Access Road (portion) Switchyard Access Road Gunite Slope Protection
South Protected Area Yard (SPAY)	Unit 3 Diesel Generator Building Unit 3 Main and Unit Auxiliary Transformers Emergency Diesel Generator Tanks / Pumps South Services Building (K-10/K-20/K-30) South Security Processing Facility (K-70) Unit 3 Cable Tunnel Unit 2 and Unit 3 Seawall South Road (Protected Area) Gunite Slope Protection
East Road Area (ERA)	East Road (Protected Area) Hazardous Material Area Spent Fuel Pool Island (SFPI) System Railroad Spur
Unit 2 Area (U2A)	Containment Building Containment Contents (e.g., reactor vessel, reactor vessel internals, reactor vessel head, steam generator, pressurizers) Fuel Handling Building Auxiliary Building Penetration Area Tank Enclosure Building Auxiliary Feedwater (AFW) Pump Room AFW Piping Tunnel Main Stream Isolation Valve (MSIV) Area Safety Equipment Building Underground Electrical Tunnel Railroad Spur
Unit 3 Area (U3A)	Containment Building Containment Contents (e.g., reactor vessel, reactor vessel internals, reactor vessel head, steam generator, pressurizers) Fuel Handling Building Auxiliary Building Penetration Building Tank Enclosure Building

Major Project Areas	Major Components
	AFW Pump Room AFW Piping Tunnel MSIV Area Safety Equipment Building Underground Electrical Tunnel Railroad Spur
Auxiliary Building Area (ABA)	Auxiliary Building Radwaste Area Auxiliary Building Control Area Railroad Spur
Turbine Building Area (TBA)	Unit 2 Turbine Generator Building Unit 3 Turbine Generator Building Unit 2/Unit 3 Steam Generator Blowdown (SGBD) System Unit 2 Full Flow Condensate Polishing Demineralizer (FFCPD) Building Unit 3 FFCPD Building
Intake Structure Area (ISA)	Unit 2 Intake Structures and Related Systems Unit 3 Intake Structures and Related Systems Unit 2/Unit 3 Radwaste/SGBD Discharge Lines Forebay Access Bridge Traveling Screens Circulating Water Pumps Salt Water Pump Room Fish Elevator and Return Line Carbon Dioxide Tank
West Road Area (WRA)	Turbine Plant Cooling Water Surge Tanks Office Buildings Maintenance Buildings Clean/Dirty Oil Tank Area Chemical Tank Area Various Pumps Unit 3 Radwaste Line/Pump Chemical Storage Building West Road (Protected Area) Underground Fuel Tanks for Auxiliary Boiler Units 2 and 3 Seawall Intake Structure below Seawall Intake Structure Gates
North Protected Area Yard (NPAY)	Unit 2 Hold Down Area Maintenance Buildings Unit 2 Diesel Generator Building Office Building (B-68/B-69) Oily Waste Holding Sump/Separator Fire Water Tanks/Pumps Diesel Fuel Tanks/Pumps Secondary Water Hold Up Tank Unit 2 Main Transformers Unit 2 Auxiliary Transformers Unit 2 Cable Tunnel Units 2 and 3 Seawall

Major Project Areas	Major Components
	North Road (Protected Area) Railroad Spur
North Industrial Area (NIA)	Sewage Treatment Plant NIA Sump Demineralized Water Storage Tank Remnant Subsurface Structures and Soil ISFSI and Associated Facilities Unit 1 Reactor Vessel NIA Seawall NIA Road Railroad Spur
North Owner Controlled Area (NOCA)	Administrative, Warehouse, and Shop (AWS) Building North Security Processing Facility Central Processing Building (L-50) Reservoir/Helicopter Pad Areas Former N-Building Foundations Gunite Slope Protection North Owner Controlled Area Road Railroad Spur
Supplemental Support Areas (SSA)	Parking Lot 3 Parking Lots 4/4A Oil Separators in Storm Drain North Plant Access Road Railroad Spur
Shoreline and Offshore Facilities (SOF)	Offshore Circulating Water Systems Conduits (Unit 2 and Unit 3) Fish Return System Conduit Public Beach Access Walkway and Associated Riprap Environmental Monitoring Buoys Navigational Buoys

## 2.2 Decommissioning Schedule

As proposed, the Project would essentially proceed in four Decommissioning Phases that cover the period from 2017 to 2051, by which time the Co-Participants expect to fully complete restoration of the SONGS site. The Decommissioning Phases and associated activities are described below.

### 2.2.1 Phase 1: Decontamination and Dismantlement (2017-2025)

With the exception of the ISFSI (and the SONGS Unit 1 remnants below it), the bulk of radiological decontamination would occur during Phase 1. The Applicants' stated objective is to reduce radioactivity on the SONGS site in accordance with NRC regulations for unrestricted use. This would involve the removal of certain above- and below-grade SSCs, which would be transported to an appropriate disposal facility. In addition to decontamination-related removal, all remaining above-grade facilities (except the ISFSI) would be dismantled and removed.

More specifically, the activities proposed during Phase 1 include:

- Reconfigure and/or reinforce site access roads and entrances, as needed for construction equipment access
- Install, modify, or upgrade rail infrastructure
- Perform site preparations and establish equipment and material staging yards
- Provide temporary utilities including water, electricity, and ventilation
- Complete radiological remediation pursuant to applicable NRC regulations
- Remediate non-radiological hazards
- Segment reactor vessel internals and package for shipment and disposal
- Remove and dispose of large components such as the Unit 1 reactor vessel and Units 2 and 3 reactor vessels, steam generators, pressurizers, and turbine-generators
- Dismantle containment buildings
- Remove all remaining above-grade structures
- Partially remove onshore subsurface SSCs in connection with decontamination work with some additional non-radiological removal below that level
- Remove retaining wall between NIA and Units 2 and 3 area
- Remove security features no longer required by the ISFSI-only Physical Security Plan
- Process waste water
- Dispose of all solid waste in accordance with applicable regulations

Phase 1 work would be performed in areas that have improvements above existing grade, including the areas labeled (see Figure 3 and the table above): ABA, ERA, ISA, MUDA, NOCA, NPAY, SPAY, SYFA, TBA, U2A, U3A, and WRA. No work is anticipated within the SYA or the portion of the NIA where the ISFSI facility is located, including an appropriate work buffer around it. Remnants of the Unit 1 SSCs remaining below the existing NIA would be addressed as part of Phase 1, with the exception of those located below the ISFSI.

### **2.2.2 Phase 2: Partial Site Restoration and Offshore Conduit Disposition (2020-2035)**

Phase 2 is expected to partially overlap with Phase 1 and would involve the disposition of the offshore conduits. Additional Phase 2 activities may involve the possible removal of onshore subsurface structures and site restoration in accordance with DoN requirements. Because DoN requirements would not be established until a later date, the CEQA process will evaluate Phase 2 potential impacts for subsurface structure removal based on the Co-Participants' proposed Project. In addition, alternatives to the

proposed project would be identified in consultation with DoN and based on public input. Activities proposed during Phase 2 include:

- Remove below-grade structures in the Onshore Site and restore the site as required by DoN, and ensure no long-term exposure resulting from future coastal erosion processes
- Remove Parking Lots 1, 2, 3, and 4, except as required to support remaining phases
- Reconfigure access roads to maintain switchyard and ISFSI access and infrastructure support
- Partially revegetate site, if required, where above- and below-grade structure removal is complete
- Remove all gunite except in locations required to support ISFSI, switchyards, and remaining access roads
- Prepare spent fuel for shipment offsite (assumes a permanent repository or interim storage location is available)
- Plug the intake and outfall conduits in the forebay area
- Remove waste water treatment plant and replace with pump-out tank(s)
- Partially remove intake and discharge conduits and remove buoys (end of Phase 2)

Phase 2 work may be performed in the following areas (see Figure 3 and the table above): ABA, ERA, FSS, ISA, MUDA, NOCA, NPAY, SPAY, SYFA, TBA, U2A, U3A, and WRA. As with Phase 1, no work is anticipated within the SYA or the portion of the NIA where the ISFSI facility is located, including an appropriate work buffer around it.

Upon completion of Phase 2, all below-grade structures would be removed from the site as required by Federal regulations. The Shoreline Site components, the ISFSI, Unit 1 subsurface materials under the ISFSI, access roads, necessary parking areas, gunite slope protection, security features, switchyard and related appurtenances, and utilities supporting the NIA and SYA would remain.

### **2.2.3 Phase 3: ISFSI Operation and Maintenance (2035-2049)**

Phase 3 involves ISFSI operation and maintenance. In addition, spent fuel would continue to be packaged and shipped offsite, which may be a continuation of activities commenced during Phase 2. The ISFSI currently consists of two separate facilities: (1) the existing above-grade ISFSI approved by the CCC in June 2001 under CDP No. E-00-014, and (2) the partially below-grade ISFSI expansion (currently under construction) approved by the CCC in October 2015 under CDP No. 9-15-0228. The CDP issued in 2015 includes a condition requiring the Co-Participants to return to the CCC for a permit amendment in 2035 to authorize the retention, removal, or relocation of the ISFSI

facility. Therefore, Phase 3 activities would be dependent on the outcome of the CCC proceeding in 2035.

#### **2.2.4 Phase 4: ISFSI Removal and Final Site Restoration (2049-2051)**

The Co-Participants are proceeding under an assumption that all spent fuel will be shipped offsite by 2049, at which point the ISFSI would be dismantled. The DoN is required to determine the end state of the seawall, public beach access walkway, and a portion of the riprap located within the DoN Easement; therefore, the required disposition of these components is unknown at this time. For the purposes of the CSLC Lease, the Co-Participants are proposing to remove the exposed riprap above the beach surface and to abandon in-place any remaining riprap.

Phase 4 also involves final site restoration activities that are contingent on the removal of the ISFSI, and would conclude with any activities needed for final NRC license termination. Depending on any jurisdictional agency permit conditions, other activities may be required during this phase.

### **2.3 Ongoing Site Activities during Decommissioning**

A number of ongoing activities, which are not specific to the four phases described above, would occur throughout decommissioning. These activities include the following.

- **ISFSI Spent Fuel Management** – The ISFSI expansion is expected to be completed in 2017, with transfer of the spent fuel from the fuel pools (wet storage) into the ISFSI (dry storage) by 2019. After the spent fuel is transferred, the spent fuel pools would be dismantled as part of the final SONGS Decommissioning. The ISFSI would remain onsite throughout decommissioning, until the fuel is moved offsite for disposal.
- **Emergency Planning** – The SONGS emergency plan was revised and approved by the NRC to account for the non-operation of the reactors. The emergency plan elements would continue during decommissioning, including radiological and environmental monitoring of the site, emergency preparedness drills, NRC inspections, and having an emergency plan staff person located onsite around the clock to address unanticipated events.
- **Security Response** – Personnel and physical security requirements would continue to be maintained throughout decommissioning, but would evolve as the configuration or quantities of radiological material change.
- **Radiation Protection** – The Radiation Protection Program would continue, which ensures that personnel radiation exposure and offsite doses are kept as low as reasonably achievable and within regulatory guidelines.
- **Hazardous and Non-hazardous Waste Characterization and Management** – Hazardous material abatement would be performed prior to and throughout decommissioning. In addition to radioactive materials regulated by the NRC, the primary non-radioactive hazardous materials include asbestos, chromates, lead

paint, and polychlorinated biphenyls (i.e., PCBs). These materials would be removed, packaged, and/or disposed of in accordance with applicable regulations. Additionally, a waste management plan would be developed for each waste type. SONGS has contracted with two waste disposal facilities located in Clive, Utah, and one in Andrews County, Texas. Other facilities may be identified in the future as they become available.

- **Ground Water Monitoring** – Groundwater would continue to be monitored in accordance with the groundwater protection program on a regular basis, consistent with Industry Ground Water Protection Initiative guidance.
- **Spill Prevention and Response** – Existing Plan requirements (e.g., Spill Prevention Control and Countermeasure Response Plan, HazMat Business Plan) would continue to be implemented. These Plans would be updated as plant systems are removed from service and/or as petroleum/fuel tanks are added.
- **Equipment Refueling** – Designated areas would be established for refueling of equipment. A plan/procedure would be developed to control equipment refueling activities.

## 2.4 Permits and Permitting Agencies

In addition to action by the CSLC, the Project may also require permits and approvals from other reviewing authorities and regulatory agencies that may have oversight over aspects of the proposed Project including, but not limited to, those listed below.

### Potential Responsible, Coordinating, and Consultation Agencies/Entities

<b>Local</b>	San Diego County Air Pollution Control District (SDCAPCD)
	South Coast Air Quality Management District (SCAQMD)
	San Diego County Department of Environmental Health (DEH)
	San Diego Regional Water Quality Control Board (RWQCB)
	North County Transit District (NCTD)
	Other local jurisdictions along decommissioned material transit routes
<b>State</b>	California State Lands Commission (CSLC)
	California Coastal Commission (CCC)
	California Department of Fish and Wildlife (CDFW)
	California Department of Parks & Recreation (CDPR)
	California Department of Toxic Substances Control (DTSC)
	California Department of Transportation (Caltrans)
	California Energy Commission (CEC)
	California Highway Patrol (CHP)
	California State Historic Preservation Officer (SHPO)
	California Highway Patrol (CHP)
	California State Historic Preservation Officer (SHPO)
	San Diego Regional Water Quality Control Board (SDRWQCB)
	State Water Resources Control Board (SWRCB)

### Potential Responsible, Coordinating, and Consultation Agencies/Entities

<b>Federal</b>	Federal Aviation Administration
	Federal Railroad Association
	National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NOAA Fisheries or NMFS)
	U.S. Army Corps of Engineers (USACE)
	U.S. Coast Guard (USCG)
	U.S. Department of the Navy (DoN)
	U.S. Department of Transportation (DoT)
	U.S. Environmental Protection Agency (USEPA)
	U.S. Fish and Wildlife Service (USFWS)
	U.S. Nuclear Regulatory Commission (NRC)
<b>Tribal</b>	The CSLC will follow State policy in accordance with applicable Tribal Consultation Policies (the CSLC is in the process of adopting a Policy [see <a href="http://www.slc.ca.gov">www.slc.ca.gov</a> ]; the California Natural Resources Agency adopted a policy on November 20, 2012 [see <a href="http://resources.ca.gov/docs/Final_Tribal_Policy.pdf">http://resources.ca.gov/docs/Final_Tribal_Policy.pdf</a> ]) and Executive Order B-10-11 (see <a href="http://gov.ca.gov/news.php?id=17223">http://gov.ca.gov/news.php?id=17223</a> ). The CSLC has also designated a Tribal Liaison to consult and coordinate with Tribal representatives.

## 3.0 SCOPE OF THE ENVIRONMENTAL IMPACT REPORT (EIR)

### 3.1 Introduction

Pursuant to State CEQA Guidelines section 15060, CSLC staff conducted a preliminary review of the proposed Project and determined that an EIR was necessary based on the potential for significant impacts resulting from the Project. A preliminary list of environmental issues and alternatives to be discussed in the EIR is provided below. Additional issues and/or alternatives may be identified at the public scoping meeting, and in written comments, as part of the EIR process. The CSLC invites comments and suggestions on the scope and content of the environmental analysis, including the significant environmental issues, reasonable range of alternatives, and mitigation measures that should be included in the EIR.

The CSLC uses the following designations when examining the potential for impacts according to CEQA issue areas:

<b>Potentially Significant Impact</b>	Any impact that could be significant, and for which feasible mitigation must be identified and implemented. If any potentially significant impacts are identified but cannot be mitigated to a less than significant level, the impact would be <i>significant and unavoidable</i> ; if any potentially significant impacts are identified for which feasible, enforceable mitigation measures are developed and imposed to reduce said impacts to below applicable significance thresholds, the impact would be <i>less than significant with mitigation</i> .
<b>Less Than Significant Impact</b>	Any impact that would not be considered significant under CEQA relative to the applicable significance threshold, and therefore would not require mitigation.

<b>No Impact</b>	The Project would not result in any impact to the resource area considered.
<b>Beneficial Impact</b>	The Project would provide an improvement to an issue area in comparison to the baseline information.

The estimations of impact levels used for this Notice of Preparation are based solely on preliminary documents and do not preclude findings of significance that would be made during the preparation of the EIR, including findings that could change the significance of an impact and how it would need to be addressed within the EIR.

### 3.1.1 Federal Pre-emption

The construction and operation of new facilities at SONGS are subject to the approval and oversight of the NRC, pursuant to NRC regulations. The NRC has exclusive jurisdiction over radiological aspects of the proposed Project. The State is preempted from imposing upon operators of nuclear facilities any regulatory requirements concerning radiation hazards and nuclear safety. The State may, however, impose requirements related to other issues. The U.S. Supreme Court, in *Pacific Gas and Electric Company v. State Energy Commission*, 461 U.S. 190, 103 S.Ct. 1713 (1983), held that the federal government has preempted the entire field of “radiological safety aspects involved in the construction and operation of a nuclear plant, but that the States retain their traditional responsibility in the field of regulating electrical utilities for determining questions of need, reliability, costs, and other related state concerns.” The CSLC, therefore, will address only those State concerns related to conformity to applicable policies of CEQA, and will not evaluate or condition the proposed Project with respect to nuclear safety or radiological issues.

### 3.1.2 EIR Alternatives Analysis

In addition to analyzing the potential impacts associated with the proposed Project, in accordance with the State CEQA Guidelines, an EIR must:

*...describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives (§ 15126.6).*

The State CEQA Guidelines also require that the EIR evaluate a “no project” alternative and, under specific circumstances, designate an environmentally superior alternative from among the remaining alternatives. Alternatives will be identified as a result of the environmental analysis and information received during scoping. The EIR will:

- Provide the basis for selecting alternatives that are feasible and that would reduce significant impacts associated with the proposed Project;
- Provide a detailed explanation of why any alternatives were rejected from further analysis; and
- Evaluate a reasonable range of alternatives, including the “no project” alternative.

Examples of possible alternatives are included below.

Location	Examples of Potential Alternatives
Below-Grade Infrastructure	<ul style="list-style-type: none"> <li>• Full removal</li> <li>• Partial removal</li> <li>• Removal consistent with radiological remediation requirements</li> </ul>
Above-Grade Buildings	<ul style="list-style-type: none"> <li>• Full removal</li> <li>• Retention of selected buildings</li> </ul>
Offshore Conduits	<ul style="list-style-type: none"> <li>• Full removal (with alternatives for construction methods)</li> <li>• Partial removal: remove terminal structures, diffusers, and manhole access port structures (MAPS) to top of conduit or top of riprap (where present); cover with mammal exclusion barriers; and abandon remaining conduit in place.</li> <li>• Removal of nearshore components: remove conduits from seawall to approximately 300 feet offshore, leaving the remaining horizontal conduits, including the fish return conduit, in place. May include removal of vertical structures beyond 300 feet offshore.</li> <li>• Cut up conduits and remove terminal structures: remove terminal structures down to conduit; and cut up remaining conduits and MAPS.</li> <li>• Create artificial reef: remove top two sections of terminal structures and cover with mammal exclusion barriers; place dismantled sections of terminal structures on adjacent seafloor; and MAPS remain in place.</li> </ul>
End State	<ul style="list-style-type: none"> <li>• Public Beach Access Walkway and Riprap                             <ul style="list-style-type: none"> <li>○ Full removal</li> <li>○ Partial removal</li> <li>○ Retain in place</li> </ul> </li> <li>• Seawall                             <ul style="list-style-type: none"> <li>○ Full removal</li> <li>○ Partial removal</li> <li>○ Retain in place</li> </ul> </li> <li>• Gunite                             <ul style="list-style-type: none"> <li>○ Full removal (with alternative for replacement slope stabilization)</li> <li>○ Partial removal</li> <li>○ Retain in place</li> </ul> </li> <li>• Access Roads                             <ul style="list-style-type: none"> <li>○ Full removal</li> <li>○ Partial removal</li> <li>○ Retain in place</li> </ul> </li> <li>• Spent Fuel Storage                             <ul style="list-style-type: none"> <li>○ Remove</li> <li>○ Retain</li> <li>○ Relocate</li> </ul> </li> </ul>

### 3.2 Currently Identified Potential Environmental Impacts

Based on initial internal scoping, the Project is not anticipated to affect the following environmental factors identified in State CEQA Guidelines Appendix G (Environmental Checklist Form), which could therefore be eliminated from consideration in the EIR:

- Agriculture and Forestry Resources
- Mineral Resources
- Population and Housing
- Public Services
- Recreation

The following sections provide information on the currently identified issues that may have potentially significant environmental effects.

### **3.2.1 Aesthetics**

The EIR will evaluate visual impacts related to all Project components. As the removal of structures is generally considered beneficial, aesthetic impacts associated with decommissioning would be associated with construction, including the long-term removal of the existing infrastructure and associated equipment at the site. The visual intrusion as a result of decommissioning activities would be temporary.

### **3.2.2 Air Quality and Greenhouse Gases (GHGs)**

The EIR will analyze these issue areas in separate sections. The EIR will summarize the current air quality conditions in the Project vicinity and analyze the potential Project-related air quality and GHG emissions impacts using guidelines provided by the SDAPCD. Potential air quality and GHG impacts would result from decommissioning activities, including transport of demolished structures. Additionally, the Project would generate criteria air pollutants during decommissioning. If proposed emissions exceed SDAPCD emissions thresholds, the analysis will evaluate the ability of mitigation measures to reduce these emissions to a less-than-significant level.

### **3.2.3 Biological Resources (Marine and Terrestrial)**

The EIR will assess both direct and indirect impacts from the proposed Project on onshore and offshore biological resources. Proposed Project activities on federally or State-listed species or species proposed for listing will be addressed in the EIR, in consultation with CDFW, NMFS, and USFWS.

Offshore, a variety of habitat types surround the SONGS Units 2 and 3 conduits. The marine habitat offshore of SONGS consists of a mixture of sand, cobble, and isolated areas of exposed rock. The area of high marine productivity in the immediate vicinity of the Project site is a shallow sub-tidal zone, approximately 1,300 feet north of SONGS. This area supports a biological community dominated by surfgrass and feather boa kelp. The San Onofre kelp bed is approximately 650 feet south of SONGS Unit 2 diffusers in a water depth of 40 to 50 feet. The benthic fish community is generally dominated by queenfish (*Seriphus politus*), white croaker (*Genyonemus lineatus*), northern anchovy (*Engraulis mordax*), Pacific sardine (*Sardinops sagax*), slough anchovy (*Anchoa delicatissima*), walleye surfperch (*Hyperprosopon argenteum*), salema (*Xenistius californiensis*), and yellowfin croaker (*Umbrina roncadora*). Invertebrates commonly observed in the area include California spiny lobsters

(*Panulirus interruptus*), sheep crabs (*Loxorhynchus grandis*), and sand dollars (*Dendraster* sp.).

The onshore Project site is almost entirely paved and developed; however, small strips of intact scrub-shrub habitat and ornamental vegetation surround the parking lots and between developed areas of the plant. In addition, vernal pools are located northwest of SONGS Parking Lot #4. The onshore site also has undeveloped coastal bluffs that are protected from development under a CCC Guarantee Agreement. The onsite coastal bluff in the northwest area of SONGS is sparsely vegetated California desert-thorn scrub habitat. The larger onsite coastal bluff in the southeast area of SONGS is approximately 5 acres, and is dominated by California sagebrush scrub vegetation. This bluff is contiguous with the San Onofre bluffs of the San Onofre State Beach, which supports two native vegetation associations (Diegan coastal sage scrub and southern foredune) and small areas of disturbed coastal sage scrub habitat. The coastal bluff areas provide opportunity to support wildlife; however, the light, noise, and frequent human presence due to the proximity of SONGS and the State beach result in a more disturbed habitat than would otherwise be optimal for many species.

Four special-status reptiles have the potential to occur within the offshore Project area including loggerhead sea turtle (*Caretta caretta*), green sea turtle (*Chelonia mydas*), leatherback sea turtle (*Dermochelys coriacea*), and olive ridley sea turtle (*Lepidochelys olivacea*). Marine mammals have also been documented during quarterly monitoring surveys conducted offshore of SONGS, including California sea lions (*Zalophus californianus californianus*), harbor seals (*Phoca vitulina richardsi*), common dolphin (*Delphinus delphis*), gray whales (*Eschrichtius robustus*), and blue whales (*Balaenoptera musculus*). Special-status species that have the potential to occur within the onshore Project site include the thread-leafed brodiaea (*Brodiaea filifolia*), San Diego fairy shrimp (*Branchinecta sandiegoensis*), Riverside fairy shrimp (*Streptocephalus woottoni*), Globose dune beetle (*Coelus globosus*), arroyo toad (*Anaxyrus californicus*), burrowing owl (*Athene cunicularia*), Western snowy plover (*Charadrius alexandrinus nivosus*), Coastal California gnatcatcher (*Poliophtilacalifornica californica*), Stephen's kangaroo rat (*Dipodomys stephensi*), and Pacific pocket mouse (*Perognathus longimembris pacificus*).

### **3.2.4 Cultural Resources**

Based on a review of the CSLC's shipwrecks database and initial information about the Project provided by the Applicants, offshore activities would not likely affect offshore cultural resources such as shipwrecks; however, the EIR will describe nearby offshore resources and evaluate the Project's potential disturbance of those resources. The EIR will also identify onshore cultural resources, as well as their potential sensitivity and proximity to the Project's nearshore and onshore activities. Documented sensitive resources will be avoided or mitigated to the maximum extent feasible in accordance with existing regulations in consultation with SHPO, local tribes, and the CSLC.

### **3.2.5 Geology and Soils**

The EIR will evaluate the potential geological hazards that could result in an impact to workers or remaining Project components under the proposed Project scenario and the other alternatives. The geologic impacts of the Project would be associated with seismic hazards and seismically induced hazards, including earthquakes, ground shaking, and tsunamis.

### **3.2.6 Hazardous / Radiological Materials**

The EIR will address potential conditions during decommissioning that could result in the release of hazardous and/or radiological materials, fire, explosion, or other conditions that could be hazardous to the public and environment. The EIR will also address the handling, storage, and disposal of hazardous and/or radiological materials that could result from primary Project activities. Detailed analyses of impacts on specific resources will be addressed in their respective sections (e.g., Biological Resources, and Hydrology, Oceanography, and Water Quality). Potential safety hazards of the proposed Project and alternatives will be based on a change from existing conditions.

Hazardous Waste and Substances Statement: The Project involves lands on a list enumerated under Government Code section 65962.5 (Cortese List); listed pursuant to Health and Safety Code section 25187.5; Regulatory identification number: 80001331; date of list: June 7, 2016. (State CEQA Guidelines, § 15072, subd. (g)(5).)

#### **Applicant:**

Southern California Edison Company (SCE)  
Attn: Government Lands  
P.O. Box 800  
Rosemead, CA 91770  
Phone: (626) 302-1212

### **3.2.7 Hydrology, Oceanography, & Water Quality**

The EIR will address potential impacts on surface water resources, groundwater, marine hydrology, and water quality resulting from the Project. The environmental setting will focus on the most relevant characteristics of existing marine resources in the Project vicinity. Issues such as offshore currents and marine water quality are important in understanding the effects of potential turbidity during riser removal, or other hazardous materials on these resources. In addition, the EIR will evaluate potential impacts to groundwater levels and groundwater quality associated with decommissioning, including any effects on the nearby vernal pools. This section will rely on information from various agencies including San Diego County, SDRWQCB, and NMFS.

### **3.2.8 Land Use, Planning**

The EIR will provide details on existing land use and planning conditions in the Project vicinity, and summarize potential land use and planning impacts associated with the Project.

### **3.2.9 Noise**

The EIR will examine the Project's potential noise impacts, both from onshore and offshore noise sources, on recreationists (e.g., divers, beachgoers), workers, and residents. Impacts of underwater noise (due to removal of intake risers or other structures) on marine life will be analyzed in the Biological Resources section of the EIR.

### **3.2.10 Transportation/Traffic**

Project-related onshore demolition and removal activities would increase traffic along local and regional roadways. Offshore, intake riser removal may conflict with offshore commercial and recreational vessel traffic in the Project area. Any traffic modifications associated with the Project will be addressed in the EIR.

### **3.2.11 Utilities and Service Systems**

The EIR will address impacts on utilities and other service systems. For example, the decommissioning of SONGS would generate substantial amounts of waste, which could affect local and regional landfills. No increase in wastewater discharges from the proposed Project is anticipated.

## **3.3 Special Impact Areas**

### **3.3.1 Cumulative Impacts**

The State CEQA Guidelines require an EIR to discuss the cumulative impacts of a project when the project's incremental effect is "cumulatively considerable" (§ 15130). A cumulative impact is created through a combination of the project being analyzed in an EIR and other projects in the area causing related impacts. The EIR will:

- Define the geographic scope of the Cumulative Projects Study Area (the area affected by cumulative projects), which would be considered for each issue area;
- Discuss the cumulative impacts of the Project, in conjunction with other approved and reasonably foreseeable projects in the study area; and
- Identify, if appropriate, feasible measures to mitigate or avoid the Project's contribution to cumulative effects.

### **3.3.2 Growth-Inducing Impacts**

CEQA requires a discussion of the ways in which a proposed project could foster economic or population growth, including the construction of additional housing, in the project's vicinity. Under State CEQA Guidelines section 15126.2, subdivision (d), a project is growth-inducing if it fosters or removes obstacles to economic or population growth, provides new employment, extends access or services, taxes existing services, or causes development elsewhere. Since the SONGS facility is non-operational and the onshore portion of the SONGS site will be returned to the DoN, no growth-inducing impacts associated with decommissioning are anticipated. The EIR will contain a discussion of this issue.

### **3.3.3 Socioeconomics and Environmental Justice**

The CSLC adopted an Environmental Justice Policy in 2002 to ensure equity and fairness in its own processes and procedures (see [www.slc.ca.gov](http://www.slc.ca.gov), under the "Information" tab and "Policy Statements" link). This Policy stresses equitable treatment of all members of the public and commits to consider environmental justice in the CSLC's processes, decisions, and programs. The policy is implemented, in part, through identification of, and communication with, relevant populations that could be adversely and disproportionately impacted by CSLC projects or programs, and by ensuring that a range of reasonable alternatives is identified that would minimize or eliminate environmental impacts affecting such populations.

The Environmental Justice section of the EIR will make a determination of the consistency of the Project with the CSLC's Environmental Justice Policy, and analyze the distributional patterns of high-minority and low-income populations on a regional basis. The consistency analysis will focus on whether the proposed Project would have the potential to affect area(s) of high-minority population(s) and low-income communities disproportionately. The site is located entirely within the boundaries of Camp Pendleton. The onshore property on which SONGS is built is subject to an easement from the U.S. Government. The nearest privately owned land is approximately 2.5 miles from the site.