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CALIFORNIA
ENERGY COMMISSION

SOLAR ENERGY GENERATING SYSTEM UNITS III - VII (87-AFC-01C)

FACILITY DECOMMISSIONING PLAN

CEC STAFF ANALYSIS AND RECOMMENDATION

Pursuant to Condition of Certification **DECOM-1**, in the Final Commission Decision (Decision) for the Solar Energy Generating System Units III –VII (SEGS III-VII) (87-AFC-01C), CEC staff recommends that the California Energy Commission (CEC) approve the Facility Decommissioning Plan (Facility Plan) for the facility. CEC staff has reviewed the Facility Plan (revised April 20, 2021) and concludes that implementation of the plan would ensure facility decommissioning avoids significant effects on the environment and complies with all applicable and current laws, ordinances, regulations, and standards (LORS), as required by Section 20, Decommissioning. CEC staff's analysis identifies the conditions of certification (COCs) from the Decision that are applicable to decommissioning activities and necessary to ensure no significant effects and compliance with LORS. Additional conditions of certification proposed by the project owner in the Facility Plan and by CEC staff to ensure LORS conformance and to mitigate potential impacts from decommissioning activities are provided in this analysis for adoption by the CEC.

BACKGROUND

On April 20, 2021, NextEra Energy Resources-Operating Services (NEER), as agent for LUZ Solar Partners III-VII Ltd. (project owner), filed the Facility Decommissioning Plan (TN: 27500) with the CEC for the Solar Energy Generating Systems Unit III-VII (SEGS III-VII) facility, as required by COC, Requirement 1 in the "Decommissioning" section of the Decision. This condition is referred to as "DECOM-1" in this analysis.

SEGS III–VII consists of five 30-megawatt solar-thermal and natural-gas-fired units. These units use parabolic mirrors to concentrate solar energy for transfer into heat transfer fluid, which is then used to create steam to generate up to 150 megawatts net total of electricity for the Southern California Edison transmission grid. The CEC certified the SEGS III-VII project in May 1988. Construction was completed and the facility went online in February 1989. SEGS III-VII is located at 41100 U.S. Highway 395 in Boron, California, one mile north of the town of Kramer Junction in unincorporated San Bernardino County.

On February 12, 2021, NEER docketed a draft Decommissioning Plan (TN#: 236752) with the CEC requesting approval to begin decommissioning activities of the SEGS III-VII facility. Separately, NEER is seeking to redevelop the SEGS III-VII site with solar photovoltaic (PV) panels and supporting facilities. The proposed PV project would be under the local jurisdiction of the County of San Bernardino and would be permitted through the county's Conditional Use Permit process.

On March 15, 2021, CEC staff filed a notice in the SEGS III-VII docket of a public workshop held on March 30, 2021 to discuss the SEGS III-VII draft decommissioning plan. CEC staff mailed the notice to a list of property owners and interested agencies and distributed the notice electronically via the SEGS III-VII list serv. CEC staff did not receive any public comments on the draft decommissioning plan. The SEGS III-VII Facility Decommissioning Plan incorporates revisions to the draft plan in response to CEC staff comments provided at the March 30, 2021 workshop, and in response to additional written comments from CEC staff provided to the project owner on March 5, 2020.

DECOMMISSIONING PLAN APPROVAL PROCESS

The purpose of the CEC's review process is to analyze whether the proposed decommissioning would comply with applicable LORS and avoid significant effects on the environment.

CEC staff has concluded that decommissioning of the SEGS III-VII facility would have less than significant effects on the environment and would comply with all applicable LORS with the continued implementation of existing COCs in the Decision, and with the implementation of new conditions in the areas of Air Quality, Biological Resources, Cultural and Tribal Cultural Resources, Geological and Paleontological Resources, Hazardous Materials Management, Land Use, Public Health, Soil and Water Resources, Transportation, Waste Management and Worker Safety and Fire Protection. In addition, decommissioning would not affect any population including the environmental justice population as shown in **Environmental Justice Figure 1**, **Figure 2**, and **Table 1** in the CEC staff Analysis.

This CEC staff analysis is being e-mailed to the CEC's list of interested persons who have requested service by e-mail, affected public agencies, and owners and occupants of property contiguous to the project. It has also been sent electronically to the SEGS III-VII listserv in accordance with Title 20, California Code of Regulations, section 1209. The listserv is an automated system by which links to information about the facility are emailed to anyone who has subscribed. To subscribe, go to the CEC's webpage for the SEGS III-VII project (linked above), scroll down the right side of the project webpage to the box labeled "Subscribe," and provide the requested contact information.

CEC staff intends to recommend approval of the SEGS III-VII Facility Decommissioning Plan at the CEC's June 9, 2021, Business Meeting. At the business meeting, any person may present oral or written statements relevant to the proposed Facility Decommissioning Plan.

Any person may comment on the CEC staff Analysis. Those who wish to comment are asked to submit their comments by 5:00 p.m. on Tuesday, June 8, 2021.

The CEC encourages use of its electronic commenting system. Visit the project webpage following the links below:

SEGS III-VII:
https://ww2.energy.ca.gov/sitingcases/pre1999_page/index.php?xkm=ajdkha2385duhkasd166dsasjd5598fhajkhs

Provide an electronic comment using the "Submit e-comment" link. Enter your contact information and a comment title describing the subject of your comment(s). Comments may be included in the "Comment Text" box or attached in a downloadable, searchable Microsoft® Word (.doc, .docx) or Adobe® Acrobat® (.pdf) file. Maximum file size is 10 MB.

Written comments may be mailed to:

California Energy Commission
Docket Unit, MS-4
Docket No. 87-AFC-01C
1516 Ninth Street
Sacramento, CA 95814-5512

All comments and materials filed with the Docket Unit will be added to the facility docket log and become publicly accessible on the CEC's webpage for the facility.

For additional information, visit the CEC's webpage for this facility, https://ww2.energy.ca.gov/sitingcases/pre1999_page/index.php?xkm=ajdkha2385duhkasd166dsasjd5598fhajkhs, has a link to SEGS III-VII facility decommissioning plan (TN 237500) accessible through the webpage in the box labeled "Compliance Proceeding." Click on the "Documents for this Proceeding (Docket Log)" option.

If you have questions about this notice, please contact John Heiser, Compliance Project Manager, at (916) 628-5566, or via e-mail at John.Heiser@energy.ca.gov.

For information on participating in the CEC's review of the SEGS III-VII Decommissioning Plan, please contact the CEC's Public Advisor's Office at (916) 654-4489, (800) 822-6228 (toll-free in California), or via email at publicadvisor@energy.ca.gov.

Direct news media inquiries to (916) 654-4989, or via e-mail to mediaoffice@energy.ca.gov.

Date: June 1, 2021

Elizabeth Huber
Manager, Office of Compliance Monitoring and Enforcement
Siting, Transmission and Environmental Protection Division

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Listserv: Solar Energy Generating System III-VII

CEC STAFF ANALYSIS

SOLAR ENERGY GENERATING SYSTEM
UNITS III-VII
(87-AFC-01C)

FACILITY DECOMMISSIONING PLAN

SOLAR ENERGY GENERATING SYSTEM UNITS III-VII (87-AFC-01C)
FACILITY DECOMMISSIONING PLAN
CEC STAFF ANALYSIS

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FACILITY DECOMMISSIONING

John Heiser

INTRODUCTION

On February 12, 2021, NextEra Energy Resources-Operating Services (NEER), as agent for LUZ Solar Partners III-VII Ltd. (project owner), docketed a draft Decommissioning Plan (TN#: 236752) with the California Energy Commission (CEC) requesting approval to begin decommissioning activities of the Solar Energy Generating System (SEGS) III-VII facility. Separately, NEER is seeking to redevelop the SEGS III-VII site with solar photovoltaic (PV) panels and supporting facilities. The proposed PV project would be under the local jurisdiction of the County of San Bernardino and would be permitted through the County's Conditional Use Permit process.

On April 20, 2021, NEER, docketed a Facility Decommissioning Plan (TN: 237500), revised in accordance with oral and written comments provided by CEC staff. This CEC staff analysis refers to it as "the Facility Plan."

The project owner suspended operation of SEGS Units VI and VII pursuant to a cold layup plan that was submitted to the CEC in September 2018. In October 2019, the project owner submitted a new cold layup plan to suspend operation at all five units (SEGS III-VII). Cold layup activities have been completed for SEGS III-VII per the plan submitted in 2019.

SEGS Units III-VII was designed as a solar thermal and natural-gas-fired power plant consisting of five 30-megawatt units (150 megawatts net total). These units use parabolic mirrors to concentrate solar energy into heat transfer fluid, which is then used to create steam to spin turbine units to generate electricity for the Southern California Edison (SCE) transmission grid. The CEC certified SEGS III-VII in May 1988 and the facility went online in February 1989. It was in operation for more than 30 years.

SEGS III-VII is located at 41100 U.S. Highway 395 in Boron, California, one mile north of the town of Kramer Junction in unincorporated San Bernardino County.

The Facility Decommissioning Plan fulfills the compliance requirement of Condition of Certification (COC), Requirement 1 in the "Decommissioning" section of the Commission Final Decision (Decision) for SEGS III-VII. This condition is referred to as "DECOM-1" in this analysis.

On March 15, 2021, CEC staff filed a notice in the SEGS III-VII docket of a public workshop held on March 30, 2021 to discuss the SEGS III-VII draft decommissioning plan. CEC staff mailed the notice to a list of property owners and interested agencies and distributed the notice electronically via the SEGS III-VII listserv. CEC staff did not receive any public or agency comments on the draft decommissioning plan. The SEGS III-VII

Facility Decommissioning Plan incorporates revisions to the draft plan in response to CEC staff comments provided at a publicly noticed, CEC staff Workshop held on March 30, 2021, and in response to additional written comments provided by CEC staff on March 5, 2020.

After decommissioning and demolition activities have been completed, the project owner will request termination of the CEC license for SEGS III-VII. Upon termination, the County of San Bernardino would assume jurisdiction over the SEGS III-VII site.

CONDITIONS FOR FACILITY DECOMMISSIONING

The project owner filed the Facility Decommissioning Plan with the CEC for approval pursuant to Condition of Certification, Requirement 1 (DECOM-1) in the "Decommissioning" section of the Commission Decision. Requirement 1 states:

1. Prior to commencing decommissioning activities for the Luz-SEGS Units III, IV, V, VI, or VII, Luz Engineering (project owner) shall file a decommissioning plan with the CEC Compliance Project Manager (CPM). The decommissioning plan shall:
    A. Identify and discuss the proposed decommissioning activities and schedule for the power plant site, transmission line corridor, and all appurtenant facilities constructed as a part of/or because of the project;
    B. Identify all applicable laws, ordinances, regulations, standards (LORS) and local/regional plans applicable at that time;
    C. Discuss how the specific proposed decommissioning activities will comply with those identified LORS and plans;
    D. Contain an analysis of all decommissioning alternatives considered, including restoration of the site to its preconstruction, natural state; and
    E. Discuss the reasons for selecting the preferred proposal.

Requirement 1 also specifies that the project owner shall not commence decommissioning activities of SEGS III-VII until approval of the decommissioning plan is obtained from the CEC CPM. It further specifies that the project owner shall comply with any requirements incorporated by the CEC as a condition of the decommissioning plan.

NECESSITY FOR FACILITY DECOMMISSIONG

The project supplies electricity to the California Independent System Operator (CAISO) on a merchant basis. The project sells both Local and System Resource Adequacy (RA) and bids daily into the merchant energy markets.

The decommissioning of SEGS III-VII is a result of economic considerations, maintenance costs and the evolving energy markets of California.

Once decommissioning and demolition of certain plant facilities and operational equipment is complete, the project owner intends to request termination of the SEGS III-VII CEC license and ultimately re-use the site for a solar PV facility. The solar PV facility will be constructed and operated under the jurisdiction of San Bernardino County.

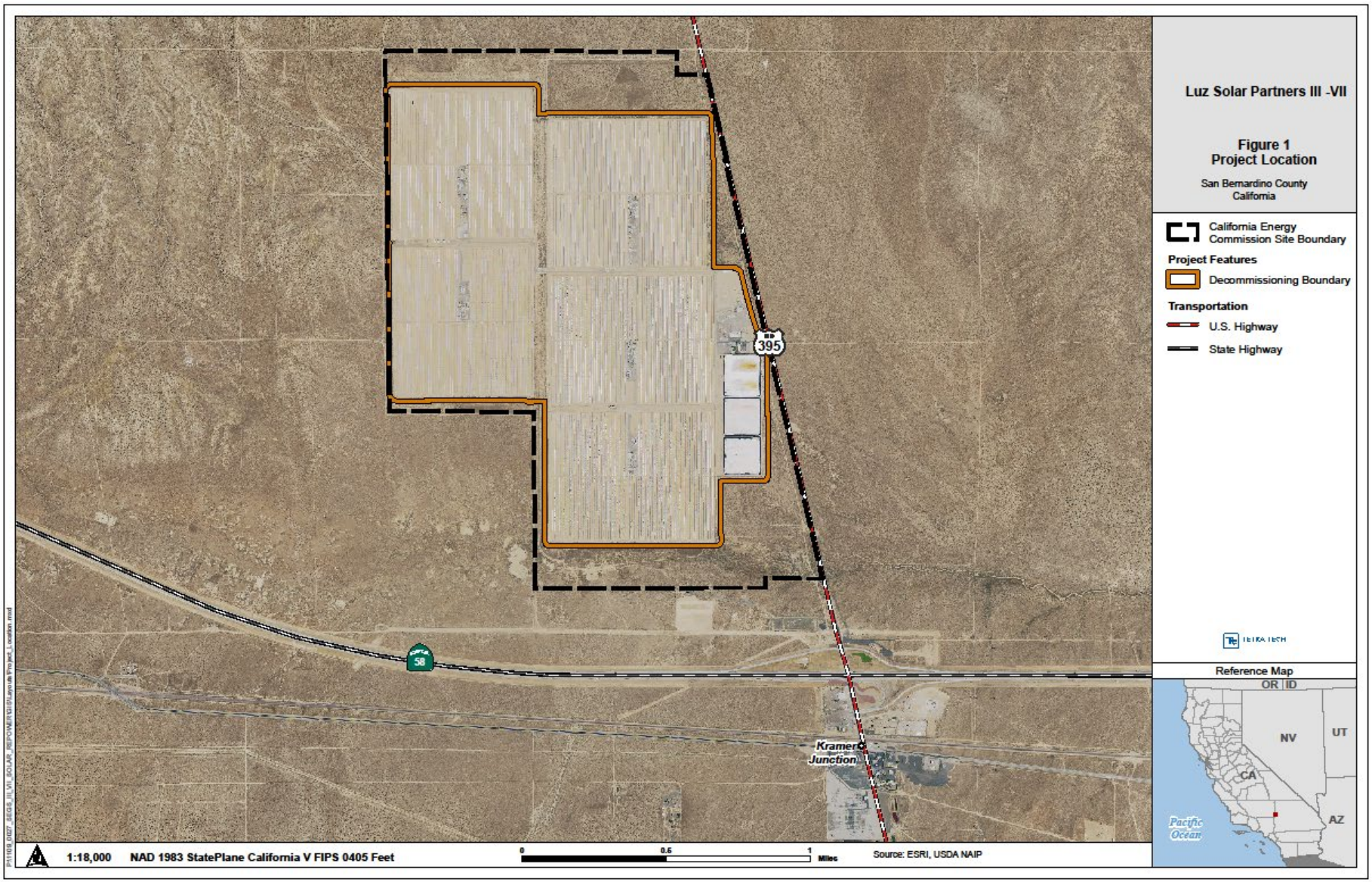
FACILITY DECOMMISSIONING ACTIVITIES

While SEGS III-VII shares numerous project facilities, this plan is for the decommissioning of SEGS III-VII only.

The following initial decommissioning activities would take place to remove SEGS III-VII from service:

- Draining of any fluid systems not previously drained during cold layup, collect all contents, and dispose of or recycle per applicable LORS to ensure public health and safety, and protection of the environment.
- Categorization of all wastes including any remaining heat transfer fluid (HTF), lubricating oils, fuels, water treatment chemicals, universal waste, and possible lead and asbestos-containing materials, etc., and manage the materials for proper containerization, profiling, and shipment off-site for disposal or recycling.
- Identification of utility systems required for the future solar PV project.
- Design and installation of temporary facilities for support of SEGS decommissioning and contractor personnel such as office trailers, temporary power, potable water, and sanitary service.
- Equipment liquidation/sales, recycling, or disposal activities.

SEGS III-VII Project Location



POWER PLANT CEC STAFFING AND SECURITY

Select CEC staff representatives would remain on site throughout decommissioning activities. Existing security measures on site would restrict public access during decommissioning and layup. The entire site would continue to have the existing chain-link security fencing around the site with electronic gate access. Controlled access gates would be located at the entrance to the facility and access through the main gate would require an electronic control number input or be opened by control room personnel once identification is confirmed, preventing unaccompanied visitors from accessing the facility.

SAFE POWER PLANT EQUIPMENT LOCKOUT

The safe layup process would include the de-energization of certain control systems and the partial de-energization of others. The project owner would lockout specific equipment according to the project lockout/tagout procedures to ensure unintentional operation does not occur.

Some of the major equipment to be locked out is listed below. All equipment requiring lockout/tagout would be appropriately locked out and de-energized before handling and removal:

- Generators
- Natural gas fired boilers
- Boiler feed water pump motors
- Condensate pump motors
- Cooling tower fan motors
- Large circulating water pumps
- Heat transfer fluid pumps
- Solar field
- Steam trains

REMOVAL OF HAZARDOUS MATERIALS

Table 2.1 in the facility decommissioning plan lists the primary hazardous materials expected to be handled during the decommissioning process. These materials include heat transfer fluid (HTF), lead acid batteries, diesel, hydraulic oil, lubricating oil, and mineral oil. Any additional operational chemicals listed as hazardous in the Spill Prevention, Control, and Countermeasure (SPCC) plan, or otherwise used at the site, would also be removed as part of the terminal shutdown of the plant prior to decommissioning activities. Lead and asbestos-containing structures and materials are not known to be present on site, but testing would be performed prior to the start of demolition.

All residual materials and chemicals would be removed prior to demolition for recycling or proper disposal at licensed facilities. Fuel, HTF, hydraulic fluids and oils would be transferred directly to a tanker truck from the respective tanks and vessels. Storage tanks/vessels would be rinsed and rinsate would also be transferred to tanker trucks.

Transportation of removed hazardous materials would comply with regulations for transporting hazardous materials, including those set by the United States Department of Transportation, United States Environmental Protection Agency, California Department of Toxic Substances Control, California Highway Patrol, and California State Fire Marshal. Table 2.2 in the facility decommissioning plan lists the properties and toxicity of the primary hazardous waste materials that are expected to be removed.

The SPCC plan for the site would be updated to cover spill prevention, control, and countermeasures for handling of these materials during decommissioning. A site-specific Health and Safety Plan would document health and safety requirements for establishing and maintaining a safe working environment during the implementation of the planned site activities. Additional procedures to decrease the potential release of contaminants to the environment and contact with storm water would be specified in the Storm Water Pollution Prevention Plan (SWPPP), which would be updated for decommissioning activities, if necessary.

GENERATOR TIE-LINE

The existing 1.4-mile 115 kilovolt generator tie-line that connects SEGS III-VII to Southern California Edison's Kramer Junction Substation will remain in place and be utilized for the future solar PV project. On-site transmission poles and conductors will remain in place.

NATURAL GAS SUPPLY LINE

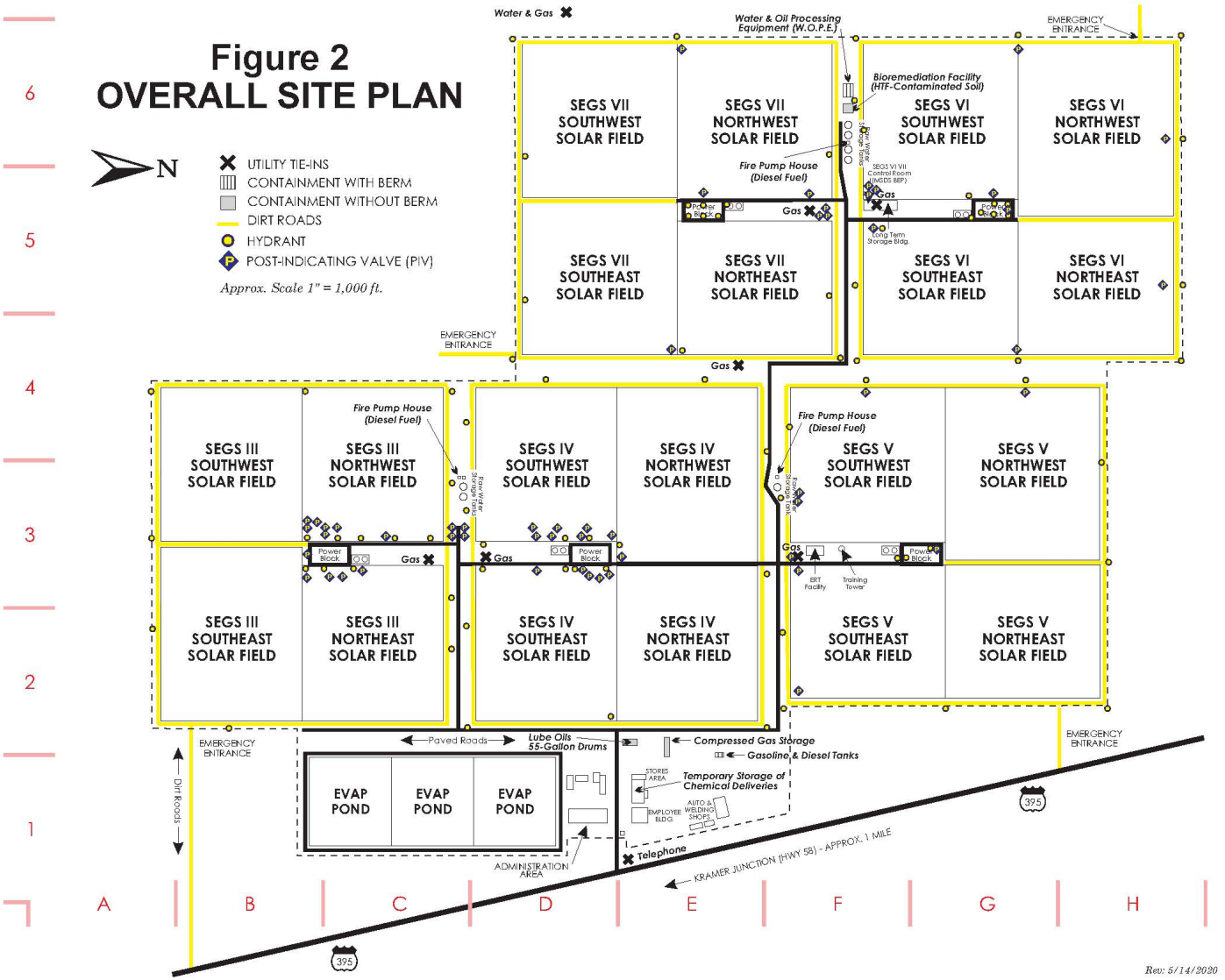
During safe layup for SEGS III-VII, the natural gas pipeline serving SEGS III-VII would be cut and capped in place at the on-site isolation point at the natural gas distribution yard. After the pipeline is purged, it would be grouted, prior to being left in place in accordance with applicable LORS and/or removed if deemed to be in the way of the proposed solar PV project.

FACILITIES TO REMAIN IN PLACE

Some of the SEGS III-VII facilities may remain in place, including solar tracker foundations, and underground utilities and installations, the switchyards and off-site generator-tie line for future use by the proposed solar photo voltaic (PV) projects.

Facilities to remain in place, both within the SEGS III-VII footprint and within the shared facilities (SEGS III-VII) footprint, are listed below. A plot plan of existing facilities is included as Figure 2.

SEGS III-VII Existing Plot Plan



Facilities to Remain in Place within SEGS III-VII Footprint

- Substation (if it can be upgraded for solar PV use, otherwise it would be removed)
- Electrical lines and poles (if they can be reused for a future solar PV project, otherwise they would be removed)

SEGS III and SEGS VII Shared Facilities to Remain in Place

- Switchyard
- Administration building
- Employee building
- Warehouse building
- Perimeter fencing, including desert tortoise fencing
- Access gates
- On-site water wells*
- Septic system**
- Natural gas supply line***
- Electrical generation-tie line
- Generator Step-up Transformers
- Site access roads
- Parking lot
- Concrete foundations (may remain in place if they do not interfere with future solar PV facilities)
- Several support and miscellaneous buildings (e.g., sheds and mechanical shop, etc.)
- Water evaporation ponds****
- Water tanks to support construction of the solar PV project.

* On-site water wells: all onsite wells that would not be used to service the PV facility would be properly abandoned in accordance with California Department of Water Resources Bulletin 74 series (74-81, 74-90, and updates).

** Septic system: the septic system would be drained and properly abandoned in accordance with the California Plumbing Code, Section 722, and San Bernardino County Land Use Services Department Building and Safety Division Demolition Guidelines. This would entail a final inspection from the County of San Bernardino, Building & Safety Division.

*** The portion of the natural gas supply line serving only SEGS III-VII would be purged, cut and capped in place.

****Water evaporation ponds: The three on-site evaporation ponds, the bioremediation unit, and the land treatment unit will be closed pursuant to the Waste Discharge Requirements (WDR) issued by the Lahontan Regional Water Quality Control Board (RWQCB).

FACILITIES TO BE REMOVED

The following lists facilities that would be removed from the SEGS III-VII site. Figure 2, plot plan, shows the location of the existing facilities.

- Substation (would be removed if upgrade of existing substation for future use is not viable)
- Onsite electrical transmission lines and towers (if they cannot be reused for future solar PV project)
- SEGS III-VII cooling towers: This includes an evaporative cooling tower system.
- Power block: This includes storage tanks, steam turbine generator, transformers, heat exchangers, power block, pumps, and other ancillary equipment.
- Parabolic mirrors, above-ground supports, above-ground HTF piping, and related equipment.
- Some of the support and miscellaneous buildings (e.g., sheds, mechanical shop, etc.) currently on site, which are not listed in the list of facilities to remain, may be removed if they would not be reused for the solar PV facility.

The facilities planned for removal would be disconnected from existing electrical, fuel, lubrication, and other lines and removed from their foundations. Above-ground demolition entails breakdown and removal of above-ground structures and facilities. Residual materials from these activities would be transported via heavy haul dump truck to one or more central recycling/staging areas where the debris would be processed for transport to an off-site recycler or a licensed disposal facility.

The strategy for demolition consists of the use of mechanized equipment and trained personnel in the safe dismantling and removal of the following above-ground structures.

- Parabolic mirrors, supports, and related equipment using low environmental impact equipment.
- Support and miscellaneous buildings using conventional dismantling, deconstruction, and demolition techniques. Temporary or stationary facilities such as storage buildings, containers, and small tanks would be detached, disassembled to the extent possible for safe transport, then hauled off for reuse or recycling.

- Storage tanks would be emptied of all remaining residues and products such as HTF, diesel, hydraulic oil, lubricating oil, and mineral oils, and other materials (where feasible) to reduce potential personnel and environmental exposure, and to facilitate decommissioning. Hazardous material and petroleum containers and pipelines would be rinsed clean when feasible and the rinsate collected for off-site disposal. In general, these materials would be placed directly into tanker trucks or other transport vessels and removed from the site at the point of generation to reduce the need for hazardous material and waste storage at the site.
- Turbine generator, heaters, condenser and related equipment, transmission lines and towers that cannot be reused on site, and above-ground pipelines using conventional deconstruction and demolition equipment and techniques would all be removed.

DECOMMISSIONING AND RECYCLING

Materials and equipment at the project site that will not be reused for the proposed solar PV project will be decommissioned, removed, and transported for re-use, recycling, and/or salvage value to the greatest extent possible. This includes the cooling towers, power block, heaters, and water treatment facility, as well as other ancillary equipment. These materials will be transported off-site by the contractor to be sold for salvage value (e.g. any working equipment), or recycling/scrap value (e.g., metal scrap, piping, etc.).

The project owner intends to limit concrete and foundation removal to the extent practical. Where practical, concrete may be crushed to 1 or 2 inches-minus size and backfilled into open pits and/or maybe used as road base for the proposed PV facility, as allowed by the CEC CPM or a delegate chief building official.

The natural gas pipeline serving SEGS III-VII would be cut and capped in place at the on-site natural gas distribution yard. The pipeline would be left in place in accordance with applicable LORS, unless it is deemed to be in the way of the proposed solar PV facility, in which case it will be removed.

Other underground utility lines and piping that will would not be reused for the future PV facility would be cut, grouted, and capped at or below the ground surface but not removed. A map of the buried utilities that are abandoned in place shall be prepared and submitted at the conclusion of decommissioning activities. SEGS maintains their current as-built construction plans including underground pipe locations. These can be updated as necessary to reflect abandoned lines and provided to San Bernardino County upon request.

SCHEDULE

Decommissioning is anticipated to begin as early as June 2021, pending the CEC's approval of the Facility Decommissioning Plan and market-driven business decisions, and would occur over approximately a 7 to 8-month duration. Decommissioning would be

completed using traditional heavy construction equipment including but not limited to front-end loaders, track-mounted and rubber-tired excavators, bulldozers, concrete crushers, dump trucks and heavy haul trucks.

The decommissioning and demolition work would require approximately 15 to 20 environmental specialists and 40 to 50 on-site demolition workers. Truck traffic would consist of flatbed and lowboy delivery trucks (5-axle) for mobilization and demobilization, and dump trucks (4-axle) during the demolition phase of the project.

Decommissioning and demolition related vehicle ingress/egress would be scheduled to minimize traffic obstructions and not interfere with peak-hour traffic. Also, a flag person shall be retained to maintain efficient traffic flow and safety adjacent to existing roadways.

The following table provides the total number of truck trips for materials that would be hauled off site during decommissioning and the anticipated number of trips per day.

Materials to be Hauled Offsite During Decommissioning	**Quantity of Material**	**Total Number of Truck Haul Trips During Decommissioning**	**Maximum Number of Haul Trips per day**
Contaminated Concrete	54 tons	4	2
Glass	14,000 tons	700	12
Other non-recyclable waste	3,500 tons	250	5
Metal	12,500 tons	570	10
HTF Material	532,000 gallons	46	8
Totals		1,570	37

Although various types of decommissioning and demolition equipment would be utilized to dismantle each type of structure or equipment, dismantling would proceed according to the following general staging process.

The first stage consists of safe layup of project facilities including removal of HTF, which would take approximately 30 to 60 days.

The second stage consists of dismantling and demolition of above-ground structures to be removed. This is anticipated to take approximately 3 months.

The third stage consists of concrete removal and crushing as needed to ensure that no concrete structure remains within 3 feet of final grade (i.e., floor slabs, below-ground walls, and footings) in areas that need to be cleared for future solar PV project facilities. This stage would take approximately 30 to 60 days.

The fourth stage consists of removal/dismantling of underground utilities within 3 feet of final grade if the underground utility conflicts with placement of PV equipment.

The project owner intends to limit the needs for underground utility removal to the maximum extent practical. This stage would take approximately 30 days.

SUMMARY OF CEC STAFF'S ANALYSIS OF THE FACILITY DECOMMISSIONING PLAN

CEC staff reviewed the Facility Decommissioning Plan for potential environmental effects and consistency with applicable LORS.

CEC staff has concluded that the technical areas of Efficiency and Reliability, Facility Design, and Transmission System Engineering are not affected by decommissioning of SEGS III-VII.

CEC staff has concluded that in the following technical areas, impacts to the environment are less than significant and the project would remain in compliance with all applicable LORS with the continued implementation of existing conditions of certification (COCs) in the SEGS III-VII Final Decision: Noise, Socioeconomics, Transmission Line Safety and Nuisance, and Visual Resources.

For the technical areas of Air Quality, Biological Resources, Cultural and Tribal Cultural Resources, Geology and Paleontological Resources, Hazardous Materials Management, Land Use, Public Health, Soil and Water Resources, Transportation, Waste Management, and Worker Safety and Fire Protection, CEC staff has concluded that impacts on the environment would be less than significant and decommissioning would comply with all applicable LORS with the continued implementation of existing conditions of certification in the Decision, and with the implementation of new decommissioning-specific COCs in these technical areas. As part of the new decommissioning-specific COCs, CEC staff has included verification language that requests monthly compliance reports to be submitted to the CPM within prescribed time frames.

In addition, decommissioning would not significantly impact any population, including the environmental justice population as shown in **Environmental Justice Figure 1**, **Figure 2**, and **Table 1** in the Environmental Justice section of the CEC staff Analysis.

CEC staff's conclusions for each technical or environmental area are shown in **Facility Decommissioning Table 1** on the following page and summarized below the table. For details, see the individual technical sections of the CEC staff analysis.

Facility Decommissioning Table 1

Technical Areas Reviewed	Technical Area Not Affected	New Conditions of Certification (COCs) Proposed	Conforms with Applicable LORS	CEQA		
				Potentially Significant Impact	Less Than Significant Impact with New COCs	Less Than Significant Impact
Air Quality and Greenhouse Gases		X	X		X	
Biological Resources		X	X		X	
Cultural and Tribal Cultural Resources		X	X		X	
Efficiency and Reliability	X					
Facility Design	X					
Geology and Paleontological Resources		X	X		X	
Hazardous Materials Management		X	X		X	
Land Use		X	X		X	
Noise			X			X
Public Health		X	X		X	
Socioeconomics			X			X
Soil and Water Resources		X	X		X	
Transportation		X	X		X	
Transmission Line Safety and Nuisance			X			X
Transmission System Engineering	X					
Visual Resources			X			X
Waste Management		X	X		X	
Worker Safety and Fire Protection		X	X		X	

Air Quality and Greenhouse Gases. The proposed decommissioning of SEGS III-VII would generate emissions of criteria pollutants, including oxides of nitrogen (NOx), carbon monoxide (CO), volatile organic compounds (VOC), particulate matter less than 10 microns (PM10), fine particulate matter less than 2.5 microns (PM2.5) and oxides of sulfur (SOx), as well as greenhouse gases (GHGs). The proposed decommissioning and demolition activities are scheduled to be complete within approximately 7 to 8 months.

The decommissioning and demolition activities would generate emissions from fugitive dust, exhaust emissions from construction equipment used, waste/pickup/delivery truck trips, and construction worker commutes.

The emissions from the proposed decommissioning and demolition of SEGS III-VII are temporary and less than Mojave Desert Air Quality Management District (MDAQMD) significance thresholds. CEC staff concludes that with the adoption of the attached new Conditions of Certification **D-AQ-1** to **D-AQ-6**, the decommissioning activities would not result in significant adverse air quality and GHG emissions impacts. The proposed COCs, **D-AQ-1** to **D-AQ-6**, are discussed in the Air Quality technical analysis below.

Biological Resources. No special-status plant or wildlife species were observed during field surveys. Based on literature review, database searches, and on-site habitat suitability assessments, it has been determined that the project site does not contain suitable habitat for any special-status plant or wildlife species. Birds that may nest on the site or adjacent to it could be impacted by plan activities. CEC staff concludes that the proposed activities would not result in potentially significant adverse impacts on biological resources, with implementation of Biological Resources COCs, **Requirements BIO 5-4**, **5-5**, **5-6**, and **5-7** in the Commission Decision, and the approval of the project owner's newly proposed decommissioning conditions **D-BIO-1** and **D-BIO-2**, as modified by CEC staff. CEC staff also recommends approval of new owner-proposed decommissioning conditions **D-BIO-3** and **D-BIO-4**, as modified by CEC staff, as necessary to supplement the project's existing conditions of certification **BIO 5-5** and **5-7**, which were specific to SEGS VII and provide clarifications for measures required for decommissioning. Implementation of these conditions of certification would ensure activities comply with applicable LORS. The proposed COCs, **D-BIO-1**, **D-BIO-2, D-BIO-3** and **D-BIO-4**, are discussed in the Biological Resources technical analysis below.

Cultural and Tribal Cultural Resources. CEC staff concludes that decommissioning and demolition of the facility would have a less than significant impact to cultural or tribal cultural resources with implementation of the COCs proposed by the project owner, and the COCs in the Decision. The project owner would monitor any ground-disturbance in areas that were not already disturbed during construction and that could potentially contain any buried, as-yet unknown cultural or tribal cultural resources. Decommissioning and demolition of the facility would not cause any impacts to any California Register of Historical Resources (CRHR)-eligible resources near the project site.

The three new decommissioning and demolition related COCs, **D-CUL-1**, **D-CUL-2**, and **D-CUL-3**, in combination with three of the existing Cultural Resources COCs, **Requirements 4-4 and 4-5**, would be sufficient to reduce impacts from the proposed decommissioning and demolition to a less than significant level to both cultural resources and tribal cultural resources, and ensure compliance with applicable LORS.

The proposed COCs, **D-CUL-1**, **D-CUL-2**, and **D-CUL-3**, are discussed in the Cultural Resources technical analysis section.

Efficiency and Reliability. Efficiency and Reliability are related to power plant operation, not plant decommissioning or demolition. There would be no impacts on efficiency and reliability as the result of the decommissioning and demolition.

Facility Design. There would be no construction as the result of decommissioning, and thus, there would be no impact on Facility Design.

Geology and Paleontological Resources. CEC staff concludes the proposed decommissioning of the facility would not result in significant environmental impacts in terms of geologic resources, paleontological resources, or geologic hazards, provided the owner complies with existing Cultural Resources COCs, **Requirements 1**, **2**, and **3**, and decommissioning conditions **D-PAL-1** through **D-PAL-3**. The proposed decommissioning would not require any change to the COCs related to geology or geologic hazards in the Decision for SEGS III-VII.

The proposed COCs, **D-PAL-1** through **D-PAL-3**, are discussed in the Geology and Paleontological Resources technical analysis section.

Hazardous Materials Management. CEC staff reviewed the decommissioning plan identifying all decommissioning activities which include handling, recycling, and disposal of hazardous materials once the facility ceases operation. The hazardous materials to be handled during decommissioning include heat transfer fluid (HTF), lead acid batteries, diesel fuel, hydraulic oil, lubricating oil, and mineral oil. Condition of Certification **D-HAZ-1** proposed in the decommissioning plan would have the project owner update the Hazardous Materials Business Plan (HMBP) as needed to reflect new hazardous materials used during decommissioning.

CEC staff recommends adoption of the decommissioning and demolition plan and concludes that with the implementation of condition **D-HAZ-1**, the hazardous material impacts to the environment would be less than significant and decommissioning would comply with applicable LORS.

The proposed COC, **D-HAZ-1**, are discussed in the Hazardous Materials Management technical analysis section.

Land Use. The project owner would obtain a demolition permit from the County of San Bernardino's Land Use Services Department, Building and Safety Division. With implementation of the project owner's proposed condition, **D-LU-1**, the project would comply with applicable land use LORS. No COCs in the Decision pertaining to Land Use apply to the decommissioning and demolition activities at the SEGS VIII site. Decommissioning and demolition activities would not physically divide an established

community or cause a significant environmental impact due to a conflict with LORS adopted for the purpose of avoiding or mitigating an environmental effect. Additionally, the activities would not result in the conversion of farmland or forest land.

The proposed COC, **D-LU-1**, are discussed in the Land Use technical analysis section.

Noise. The decommissioning and demolition activities would temporarily elevate the ambient noise levels in the surrounding areas. Decommissioning and demolition activities would be limited to the hours of 7 a.m. to 7 p.m., Monday through Saturday, in accordance with the County of San Bernardino Development Code. The decommissioning and demolition activities would also comply with occupational noise safety requirements and provide hearing protection to workers during demolition activities. Noise generated during these activities would be controlled with implementation of the existing Noise COCs in the Decision. Construction equipment would be muffled in accordance with manufacturers' specifications and given that the nearest sensitive receptor is over 0.75 mile from the facility site, the demolition activities would not exceed the acceptable noise levels for residential areas.

CEC staff concludes that decommissioning and demolition activities would comply with the applicable LORS and create less-than-significant noise impacts.

Public Health. Potential risks to public health during decommissioning would be associated with contact or exposure to hazardous waste, exposure to toxic substances in contaminated soil, as well as diesel exhaust from off-road equipment operation during demolition activities. CEC staff concludes that implementation of the revised COC **2-4,** the proposed new COCs **D-PH-1** and **D-PH-2**, in addition to proposed conditions in the **Air Quality**, **Hazardous Materials**, **Worker Safety and Fire Protection**, and **Waste Management** sections of this CEC staff analysis, would ensure that the decommissioning activities outlined in the SEGS III-VII Decommissioning Plan, would comply with applicable LORS and would not result in significant impacts to public health.

The proposed COCs, **D-PH-1** and **D-PH-2**, are discussed in the Public Health technical analysis section.

Socioeconomics. The decommissioning activities associated with SEGS III-VII would take approximately 7 to 8 months to complete and require a peak workforce of approximately 125 workers. The large workforce in the Riverside-San Bernardino-Ontario Metropolitan Statistical Area is sufficient for the activities associated with decommissioning of SEGS III-VII. If some workers were to temporarily relocate closer to the facility site, there is sufficient housing in the nearby City of Barstow. The decommissioning of SEGS III-VII would have less than significant socioeconomic impacts.

Soil and Water Resources. Decommissioning activities would take place within the existing facility footprint. The existing COCs in the Commission Decision and subsequent

amendments are still applicable to minimize unmitigated significant impacts to soil and water resources. The proposed decommissioning of the facility would not result in any necessary changes to the existing COCs for **Soil and Water Resources** (formerly titled Water Resources).

Decommissioning activities would take place within the existing facility footprint. In addition to the existing COCs in the Decision, the project owner is proposing two additional COCs, **D-S&W-1** and **D-S&W-2**, to ensure that impacts of the decommissioning and closure activities on soil and water resources would be less than significant. COC **D-S&W-1** requires the project owner to develop and implement a Storm Water Pollution Prevention Plan (SWPPP) for the decommissioning and demolition of SEGS III- VII. The SWPPP would identify erosion control measures to be implemented and maintained during decommissioning and demolition activities. The SWPPP would be submitted to San Bernardino County for review and approval prior to the start of decommissioning activities. COC **D-S&W-2** requires the project owner to prepare a map showing any underground utility lines and piping that will be abandoned in place at or below the ground surface. The utility map shall be prepared and submitted before decommissioning and closure are finalized.

CEC staff concludes that the proposed decommissioning of the facility would not result in significant environmental impacts in terms of soil and water resources, provided that the owner complies with the existing COCs in the Decision as well as COCs proposed by the project owner, **D-S&W-1** and **D-S&W-2**.

The proposed COCs, **D-S&W-1** and**D-S&W-2**, are discussed in the Soil and Water Resources technical analysis section.

Transportation. The decommissioning activities would require a maximum of approximately 125 construction workers and 37 daily truck haul trips during the 7 to 8-month decommissioning and demolition period. Decommissioning-related vehicle ingress/egress would be scheduled to minimize traffic obstructions and not interfere with peak-hour traffic. Also, a flag person would be retained to maintain efficient traffic flow and safety adjacent to existing roadways. The Transportation COC **24-1** in the Final Decision is applicable to decommissioning and demolition. COCs **24-2** and **24-3** were applicable to initial project construction but are not applicable to decommissioning and demolition. The project owner has proposed **D-TRAFFIC-1** and **D-TRAFFIC-2** to be implemented during decommissioning and demolition. **D-TRAFFIC-1** would require the use of licensed haulers and approved vehicles to ensure compliance with all applicable regulations for the transport of hazardous, toxic, and flammable materials. **D-TRAFFIC-2** would require preparation of a decommission management plan to ensure compliance with the San Bernardino County Congestion Management Program's objectives and policies.

The SEGS III-VII decommissioning and demolition activities would generate a negligible amount of temporary vehicle trips, which would not conflict with CEQA Guidelines section 15064.3, subdivision (b), with regards to vehicle miles traveled. Additionally, with the implementation of COC **24-1** in the Final Decision and the adoption of **D-TRAFFIC-1** and **D-TRAFFIC-2**, as supplemented by CEC staff above, the proposed activities would not conflict with LORS addressing the circulation system, substantially increase hazards, or result in inadequate emergency access. Therefore, the decommissioning and demolition of SEGS III-VII would result in less than significant impacts to transportation.

The proposed COCs, **D-Traffic-1** and **D-Traffic-2**, are discussed in the Soil and Water Resources technical analysis section.

Transmission Line Safety and Nuisance. The existing 1.4-mile 115 kilovolt generator tie-line that connects SEGS III-VII to Southern California Edison's Kramer Junction Substation will remain in place and be utilized for the future solar PV Project. On-site transmission poles and conductors will remain in place.

No conditions of certification in the Decision apply to the demolition from a transmission Line Safety and Nuisance perspective.

CEC staff concludes the decommissioning activities outlined in the SEGS III-VII Facility Decommissioning Plan would not result in significant transmission line safety and nuisance impacts. Any onsite worker safety considerations associated with the transmission line decommissioning activity would be addressed through Worker Safety and Fire Protection requirements.

Transmission System Engineering. The demolition activities would not involve the generator tie-line. The existing 1.4-mile 115 kilovolt generator tie-line that connects SEGS III-VII to Southern California Edison's Kramer Junction Substation will remain in place and be utilized for the future solar PV Project. On-site transmission poles and conductors will remain in place.

No conditions of certification in the Decision apply to the demolition from a transmission system engineering perspective. Therefore, decommissioning would not affect Transmission System Engineering.

Visual Resources. CEC staff concludes decommissioning and demolition of the facility would comply with LORS and would not substantially damage or degrade a scenic vista, scenic resources, or the existing visual character or quality of public views of the site and its surroundings. Removing the parabolic troughs and cooling tower would eliminate the glare and visible water vapor plumes associated with these facilities.

Waste Management. Based on facility decommissioning plan provided by the owner after cessation of operations, all remaining nonhazardous wastes would be collected and disposed of, in appropriate recycling centers, landfills, or waste collection facilities

according to all applicable LORS. Hazardous wastes would be disposed of as required by applicable LORS. The site would be secured 24 hours per day during the decommissioning activities.

Based on the information provided by the project owner, CEC staff concludes the proposed decommissioning of the facility would not result in significant waste management impacts. The proposed decommissioning would not require any changes to the COCs related to waste management adopted by the Energy Commission in its Final Decision or subsequent amendments. However, the applicant proposed four demolition measures **D-WM-1** through **D-WM-4** that would provide additional insurance that environmental impacts from demolition would be minimized.

The proposed COCs, **D-WM-1** through **D-WM-4**, are discussed in the Waste Management technical analysis section.

Worker Safety and Fire Protection. Industrial environments are potentially dangerous during the demolition of facilities. Workers involved in the proposed demolition of SEGS III-VII would be exposed to loud noises, moving equipment, trenches, and confined space ingress and egress problems. Workers may experience falls, trips, burns, lacerations, or numerous other injuries. They have the potential to be exposed to falling equipment, materials or structures, chemical spills, hazardous waste, fires, explosions, and electrical sparks and electrocution.

The project owner has proposed two additional conditions of certification, **D-WS-1** and **D-WS-2**, to be implemented during decommissioning and demolition. CEC staff recommends adoption of the decommissioning and demolition plan and concludes that with the implementation of new conditions **D-WS-1, and D-WS-2**, the impacts on worker safety and fire protection would be less than significant and decommissioning would comply with applicable LORS.

The proposed COCs, **D-WS-1** and **D-WS-2**, are discussed in the Worker Safety and Fire Protection technical analysis section.

Environmental Justice. CEC staff concludes that implementation of the SEGS III-VII Facility Decommissioning Plan would not result in significant adverse environmental impacts, and would comply with all applicable and current LORS, with implementation of existing conditions of certification in the SEGS III-VII Decision and the additional proposed COCs, and thus impacts would be less than significant on any population including the environmental justice population represented in **Environmental Justice Figure 1**, **Figure 2**, and **Table 1** in the CEC staff Analysis.

CEC STAFF RECOMMENDATIONS AND CONCLUSIONS

CEC staff concludes that implementation of the SEGS III-VII Facility Decommissioning Plan would not result in significant adverse environmental impacts, and would comply with all applicable and current LORS with implementation of existing COCs in the SEGS III-VII Decision and the additional proposed conditions in the areas of Air Quality, Biological Resources, Cultural and Tribal Cultural Resources, Geology and Paleontological Resources, Hazardous Materials Management, Land Use, Public Health, Soil and Water Resources, Transportation, Waste Management, and Worker Safety and Fire Protection. CEC staff recommends that the Commissioners approve the Facility Decommissioning Plan and adopt the new proposed COCs to make them binding and enforceable by CEC staff during the decommissioning process.

AIR QUALITY AND GREENHOUSE GASES

Tao Jiang, Ph.D., P.E.

INTRODUCTION

In this section, CEC staff discusses the proposed SEGSIII-VII decommissioning, as described in the Facility Decommissioning Plan for NextEra 2021d in relation to the technical areas of **Air Quality and Greenhouse Gases** (GHG). The purpose of this analysis is to determine whether the facility decommissioning would be undertaken in a manner that avoids significant impacts on air quality and GHG and would be in compliance with applicable LORS.

EXISTING SETTING

The project owner proposes to replace the current solar thermal facilities with cleaner solar PV facilities. The proposed solar PV project would reuse existing project transmission equipment and some of the existing structures which would result in reduced operational emissions. However, decommissioning of the current facility would generate short-term decommissioning related emissions.

Implementation of solar PV technologies would not be subject to the jurisdiction of the CEC. The decommissioning would represent a net air quality and GHG benefit due to the elimination of the natural gas fired heaters and cooling tower emissions.

LAWS, ORDINANCES, REGULATIONS, AND STANDARDS

The following federal, state, and local LORS and policies pertain to the emissions and the mitigation of air quality and GHG impacts during the decommissioning. CEC staff's analysis describes or evaluates the facility's decommissioning compliance with these requirements, shown in **Air Quality Table 1**.

Air Quality Table 1
Laws, Ordinances, Regulations, and Standards

Applicable LORS	Description	SEGS III-VII Consistency
Federal		
40 Code of Federal Regulations Part 60 – NSPS, Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	Establishes emission standards for stationary compression ignition internal combustion engines, including emergency fire water pump and generator engines over a specific size.	Consistent: No Mojave Desert Air Quality Management District (MDAQMD) permits would be required for the decommissioning activities. If portable equipment requiring permits is used, that equipment would be registered through, and comply with the California Air Resources Board (CARB), Portable Equipment Registration Program (PERP).

Applicable LORS	Description	SEGS III-VII Consistency
Title V Permits	Sets forth permitting requirements for major sources of emissions across the country.	Consistent: No MDAQMD permits would be required for the decommissioning activities and, the Title V permit for SEGS III-VII will be retired. The MDAQMD requires a signed original application to change ownership of an existing permitted unit. Name change can be made by the MDAQMD in response to a written letter.
State		
Title 17 California Code of Regulations (CCR), Section 93115, Airborne Toxic Control Measure for Stationary Compression Ignition Engines	Establishes emission limits, operating limits, fuel use restrictions, monitoring and recordkeeping requirements for large (>50 hp) stationary compression ignition engines, including emergency fire water pump and generator engines.	Consistent: No MDAQMD permits would be required for the decommissioning and demolition activities. If portable equipment requiring permits is used, that equipment would be registered through the CARB PERP.
California Health & Safety Code(H&SC) §41700 (Nuisance Regulation)	Prohibits discharge of such quantities of air contaminants that cause injury, detriment, nuisance, or annoyance.	Consistent: The project owner would ensure the contractor would comply with this requirement.
California H&SC §2451, et seq. (Portable Equipment Registration Program – PERP)	Allows the permitting of portable equipment under a Statewide registration program.	Consistent: If portable equipment requiring permits is used for the decommissioning and demolition activities, that equipment would be registered through the CARB PERP.
Title 13, CCR, Article 4.8, Chapter 9, Section 2449, Regulation for In-Use Off-Road Diesel-Fueled Fleets	Establishes requirements for diesel fueled, mobile off-road vehicle fleets in order to reduce criteria pollutant emissions from engines greater than 25 hp, including requirements on excess idling, CARB assigned equipment identification numbers, and year-by-year fleet average requirements, as well as recordkeeping and reporting.	Consistent: An Air Quality Supervisor (AQS) shall be responsible for determining the compliance status mobile off-road equipment that would be operated during decommissioning at the project site, including verifying that all equipment is properly identified and that equipment fleets meet the appropriate annual reporting and compliance schedules.
Title 13, CCR, Division 3, Chapter 1, Section 2025, Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants for In Use Heavy Duty Diesel-Fueled Vehicles.	Regulates diesel–fueled, on highway vehicles over 14,000 pounds Gross Vehicle Weight Rating (GVWR) by establishing dates by which certain model year engines can no longer be operated in California, with separate requirements for medium-duty (14,000-26,000 GVWR) and heavy duty (over 26,000 GVWR) vehicles,	Consistent: The AQS shall be responsible for determining the compliance status of all mobile on-road vehicles over 14,000 GVWR that are used in any capacity during the decommissioning and demolition of the project.

Applicable LORS	Description	SEGS III-VII Consistency
	including recordkeeping and reporting for some vehicles.	
Local	**Mojave Desert Air Quality Management District (MDAQMD)**	
Rule 201 – Permit to Construct, Rule 202- Temporary Permit to Operate, Rule 203 – Permit to Operate	Rules 201, 202 and 203 require that permits be obtained for any equipment that emits air contaminants.	Consistent: No MDAQMD permits would be required for the decommissioning activities. If portable equipment requiring permits is used, that equipment would be registered through the CARB PERP.
Rule 401 – Visible Emissions	Limits visible emissions from applicable equipment or processes to values no darker than Ringelmann #1 for periods greater than 3 minutes in any hour.	Consistent: The project owner would ensure that the demolition contractor complies with this requirement through compliance with proposed **D-AQ-4**.
Rule 402 – Nuisance	Prohibits emissions in quantities that would adversely affect public health, other businesses, or property.	Consistent: The project owner would ensure that the demolition contractor complies with this requirement.
Rule 403.2 – Fugitive Dust	Limits fugitive PM emissions from transport, construction, handling and storage activities.	Consistent: The project owner would ensure the contractor uses appropriate dust suppression mitigation to limit fugitive PM emissions consistent with the requirements outlined in Rule 403.2, including preparing a Dust Control Plan that describes all applicable dust control measures that will be implemented. Implementation of proposed condition **D-AQ-1** will ensure compliance with this rule.
Rule 404 – Particulate Matter Concentration	Limits PM emissions concentration from point sources.	Consistent: No MDAQMD permits would be required for the decommissioning activities. This requirement would not apply to PERP registered equipment.
Rule 405 – Solid Particulate Matter Weight	Limits PM emissions based on process weight.	Consistent: No MDAQMD permits would be required for the decommissioning activities. This requirement would not apply to PERP registered equipment.
Rule 407 – Liquid and Gaseous Contaminants	Limits CO emissions from combustion sources.	Consistent: No MDAQMD permits would be required for the decommissioning activities. This requirement would not apply to PERP registered equipment.
Rule 409 – Combustion Contaminants	Limits emissions of combustion contaminants.	Consistent: No MDAQMD permits would be required for the

Applicable LORS	Description	SEGS III-VII Consistency
		decommissioning activities. This requirement would not apply to PERP registered equipment.
Rule 431 – Sulfur Content of Fuels	Limits sulfur content of liquid and solid fuels.	Consistent: No MDAQMD permits would be required for the decommissioning activities. This requirement would not apply to PERP registered equipment
Regulation II– Permits	Sets forth permitting requirements for large stationary sources.	Consistent: No MDAQMD permits would be required for the decommissioning activities. This requirement would not apply to PERP registered equipment.
Regulation XIII – New Source Review	Sets forth the preconstruction review requirements for new, modified or relocated facilities.	Consistent: No MDAQMD permits would be required for the decommissioning activities. This requirement would not apply to PERP registered equipment.
Regulation XV – Emission Standards for Specific Toxic Air Contaminants	Sets limits on toxic air contaminants from stationary sources.	Consistent: No MDAQMD permits would be required for the decommissioning activities. If portable equipment requiring permits is used for the decommissioning activities, that equipment will be registered through the CARB PERP.
Regulation XVI- Prevention of Significant Deterioration	Sets forth the pre-construction review of all new Major Prevention of Significant Deterioration (PSD) Facilities and Major PSD Modifications requirements for stationary sources.	Consistent: No MDAQMD permits would be required for the decommissioning activities. This requirement would not apply to PERP registered equipment.

APPLICABLE CONDITIONS OF CERTIFICATION

None of the COCs in the Decision (or subsequent amendments) would apply during the decommissioning to mitigate air quality and GHG effects or ensure LORS compliance.

ADDITIONAL PROPOSED MEASURES

The project owner proposed the following COCs during decommissioning to ensure that activities conform with applicable LORS. CEC staff's proposed changes to the existing COCs are shown in **bold/underline** and ~~strikethrough~~ text. Any portion of the condition of certification that are not applicable have not been included. They retain original numbering.

D-AQ-1 Prior to the issuance of decommissioning permits or approvals, the project owner shall develop a Dust Control Plan (DCP) per the requirements of Mojave Desert Air Quality Management District (MDAQMD) Rule 403.2. The DCP shall comply with MDAQMD Rules 403 and 403.2 to control fugitive dust, including particulate matter less than 10 microns in size (PM10), by addressing objectives, key contacts, roles and responsibilities, dust sources, and control measures. ~~The project owner shall submit the DCP and any modifications to the Compliance Project Manager (CPM) within five working days of its submittal to MDAQMD.~~

Verification: The project owner shall submit the DCP and any modifications to the Compliance Project Manager (CPM) within five working days of its submittal to MDAQMD.

D-AQ-2 On-road trucks shall comply with United States Environmental Protection Agency (USEPA) 2010 on-road emission standards or better, unless the contractor can reasonably demonstrate that such equipment is unavailable to the satisfaction of the MDAQMD. ~~The project owner shall submit to the CPM a Monthly Compliance Report (MCR) to demonstrate compliance.~~

Verification: The project owner shall submit to the CPM a Monthly Compliance Report (MCR) within 30 days of the end of each month to demonstrate compliance with condition D-AQ-2.

D-AQ-3 The project owner shall ensure that all applicable portable equipment used by the demolition contractor shall be registered through the California Air Resources Board (CARB) Portable Equipment Registration Program (PERP). ~~The project owner shall submit to the CPM an MCR to demonstrates compliance.~~

Verification: The project owner shall submit to the CPM a MCR within 30 days of the end of each month to demonstrate compliance with condition D-AQ-3.

D-AQ-4 The project owner shall ensure that equipment used during decommissioning complies with MDAQMD Rule 401 to ensure visible emissions from applicable equipment would avoid visible emissions darker than Ringelmann #1 for periods greater than 3 minutes in any hour. ~~The project owner shall submit an MCR to the CPM to demonstrate compliance.~~

Verification: The project owner shall submit to the CPM a MCR within 30 days of the end of each month to demonstrate compliance with condition D-AQ-4.

D-AQ-5 Off-road construction equipment shall comply with the United States Environmental Protection Agency's final Tier 4 exhaust emission standards.

Verification: The project owner shall submit to the CPM a MCR within 30 days of the end of each monthto demonstrate compliance with condition D-AQ-5.

D-AQ-6 The project owner shall ensure that the Air Quality Supervisor (AQS) performs oversight of compliance with the decommissioning measures and applicable laws, ordinances, regulations, and standards (LORS) during decommissioning activities. ~~At least 60 days prior to the start of decommissioning, the project owner shall submit to the CPM, for approval, the name and contact information for the AQS and/or AQS delegates. The project owner shall also submit an MCR to the CPM to demonstrate compliance.~~

Verification: At least 60 days prior to the start of decommissioning, the project owner shall submit to the CPM, for approval, the name and contact information for the AQS and/or AQS delegates. The project owner shall submit to the CPM a MCR within 30 days of the end of each month to demonstrate compliance with condition D-AQ-6.

ANALYSIS

The proposed decommissioning of SEGS III-VII would generate emissions of criteria pollutants, including oxides of nitrogen (NOx), carbon monoxide (CO), volatile organic compounds (VOC), particulate matter less than 10 microns (PM10), fine particulate matter less than 2.5 microns (PM2.5) and oxides of sulfur (SOx), as well as GHG. The proposed decommissioning phase and anticipated duration are provided in **Air Quality Table 2**.

Air Quality Table 2
SEGS III-VII Decommissioning Schedule

Phase	Duration (days)
Mobilization	10
HTF Removal and De-energize	9
Mirror Farm Removal	90
Power Generation Facility Demolition	66

Source: NextEra 2021d, Appendix D.

Decommissioning activities would generate emissions from fugitive dust, exhaust emissions from construction equipment used, waste/pickup/delivery truck trips, and construction worker commutes. Total estimated criteria pollutant and GHG emissions during decommissioning as estimated by the project owner are summarized in **Air**

Quality Table 3 and **4.** The emissions are also compared with MDAQMD emissions thresholds.

Air Quality Table 3
SEGS III-VII Decommissioning Maximum Daily Emissions(lbs/day)

	CO	VOC	NOx	SOx	PM10	PM2.5	CO2e
Maximum Daily Emissions	174.3	15.0	135.2	0.5	25.9	12.1	53,936
MDAQMD Threshold	548	137	137	137	82	65	548,000
Exceedance	No	No	No	No	No	No	No

Source: NextEra 2021d, Appendix D.

Air Quality Table 4
SEGS III-VII Decommissioning Maximum Annual Emissions (tons/year)

Construction Stage	CO	VOC	NOx	SOx	PM10	PM2.5	CO2e
Total Annual Emissions	13.5	1.2	10.7	0.04	2.0	0.9	3,872
MDAQMD Threshold	100	25	25	25	15	12	100,000
Exceedance	No	No	No	No	No	No	No

Source: NextEra 2021d, Appendix D.

As shown in **Air Quality Tables 3** and **4**, the emissions from the decommissioning activities would not exceed the MDAQMD significance thresholds for any criteria pollutants and GHG emissions. Therefore, the air quality and GHG impact from the project decommissioning would be less than significant. To ensure the decommissioning activities would conform with applicable LORS, the project owner proposed new COCs **D-AQ-1** through **D-AQ-6**, as shown above. CEC staff concurs with project owner's proposal and makes minor modifications to these COCs.

CONCLUSIONS AND RECOMMENDATIONS

The emissions from the proposed decommissioning of the SEGS III-VII are temporary and less than MDAQMD significance thresholds. CEC staff concludes that with the adoption of the attached new conditions of certification **D-AQ-1** to **D-AQ-6**, the decommissioning activities would not result in significant adverse air quality and GHG emissions impacts.

REFERENCE

NextEra 2021d – Tetra Tech, Inc. / Jennifer Merrick, Applicant Consultant for project owner, Luz Solar Partners III-VII, (tn 237500). *SEGS III-VII Facility Decommissioning Plan, dated, 04/20/2021*. Submitted to CEC/Dockets on 04/20/2021

BIOLOGICAL RESOURCES

Ann Crisp

INTRODUCTION

In this section, CEC staff discusses the SEGS Units III-VII Decommissioning Plan for NextEra 2021d in relation to the technical area of **Biological Resources**. The purpose of this analysis is to determine whether decommissioning and demolition activities of the facility would be undertaken in a manner that avoids significant impacts on biological resources and would be in compliance with applicable LORS.

EXISTING SETTING

The project owner submitted a biological survey report to support decommissioning of the existing SEGS III-VII solar thermal facility for future redevelopment of the site for a solar PV facility. The SEGS III-VII site consists of highly disturbed areas of bare ground and developed areas (i.e., solar fields and associated infrastructure, evaporation ponds, and open areas) almost entirely devoid of any habitat for plants or wildlife. Soils within the existing facility are very compacted and vegetation is very sparse and limited to prickly non-native Russian thistle (*Salsola tragus*) and non-native grasses. The three lined evaporation ponds did not have standing water during the survey (NextEra 2021d). Surrounding land is primarily open space with Highway 395 directly to the east.

Based on topographic 9-quadrangle database record searches, there are 11 special-status plants species and 7 special-status wildlife species known to occur within the vicinity of the site. Most are either not expected or have a low potential to occur within or surrounding the site. No special-status plant or wildlife species or vegetation communities were observed within the existing facility site during the survey. However, two special-status species, western Joshua tree (*Yucca brevifolia*) and western burrowing owl (*Athenecunicularia*) were observed during surveys of the surrounding buffer area (500-foot to 2,000-foot around the site). In addition, there is high potential for four additional special-status species to occur in the area surrounding the existing facility site, including Barstow woolly sunflower (*Eriophyllummohavense*), desert tortoise (*Gopherusagassizii*), desert kit fox (*Vulpesmacrotisarsipus*), and Mohave ground squirrel (*Xerospermophilusmohavensis*). Sign of desert kit fox or another large mammal was detected within the site during surveys. There are gaps and erosional features along the security fence that could allow this species and other species to access the interior of the facility.

Critical habitat is a formal designation under the federal Endangered Species Act for specific, legally defined areas that are essential for the conservation of desert tortoise, that support physical and biological features essential for desert tortoise survival, and that may require special management considerations or protection. The project area does not overlap with any designated or proposed critical habitat units; however, the western

edge of the Western Mojave Recovery Unit of desert tortoise critical habitat is located immediately across Highway 395 directly to the east (USFWS 2021).

Bird nesting opportunities and wildlife movement are limited and relatively restricted throughout most of the site, respectively, due to a lack of vegetative cover onsite, and development and infrastructure within the site. However, existing structures and ornamental trees may provide habitat for nesting birds and raptors, specifically, the three ornamental pine trees (*Pinus* sp.) that line the north and east sides of the northern most evaporation pond.

LAWS, ORDINANCES, REGULATIONS, AND STANDARDS

The following LORS related to biological resources apply to the facility. No new LORS have been enacted since the project was permitted in 1988; although the San Bernardino County General Plan was updated in 2007. LORS are listed below in **Table 1-1**.

Technical Section Table 1
Laws, Ordinances, Regulations, and Standards

Applicable LORS	Description	Consistency
Federal		
Endangered Species Act of 1973 Title 16, United States Code, section 1531 et seq., and Title 50, Code of Federal Regulations, part 17.1 et seq.	Designates and provides for the protection of threatened and endangered plant and animal species, and their critical habitat. The administering agency is the United States Fish and Wildlife Service (USFWS).	Consistent: Implementation of existing COCs and proposed decommissioning conditions **D-BIO-2**, **D-BIO-3**, and **D-BIO-4** would ensure the project would not result in impacts and would ensure consistency.
Migratory Bird Treaty Act: 16 USC Sections 703-721	Makes it unlawful to take or possess any migratory nongame bird (or any part of such migratory nongame bird including nests with viable eggs). The administering agency is the USFWS.	Consistent: Implementation of existing COCs and proposed decommissioning conditions **D-BIO-1**, **D-BIO-2**, **D-BIO-3**, and **D-BIO-4**would ensure the project would not result in impacts and would ensure consistency.
Clean Water Act (CWA) of 1977 Title 33, USC, sections 1251- 1376, and Code of Federal Regulations, part 30, sections 330.5(a)(26)	Prohibits the discharge of dredged or fill material into the waters of the United States without a permit.	Consistent: Decommissioning and demolition activities would not result in any impacts to waters of the United States.
State		
Native Plant Protection Act of 1977, Fish and Game Code sections 1900–1913	Prohibits taking of endangered and rare plants from the wild and requires that California Department of Fish and Wildlife (CDFW) be notified at least 10 days in advance of any change in land use that would adversely impact listed plants.	Consistent: Decommissioning and demolition would be limited to previously disturbed and developed areas. All Joshua trees are located outside the facility fence and would not be impacted. Implementation of existing COCs and proposed decommissioning conditions **D-BIO-3**, and **D-BIO-4** would ensure the

Applicable LORS	Description	Consistency
		project would not result in impacts and would ensure consistency.
California Endangered Species Act of 1984, Fish and Game Code sections 2050 through 2098;	Protects California's rare, threatened, and endangered species. The administering agency is CDFW.	Consistent: Implementation of existing COCs and proposed decommissioning conditions **D-BIO-2, D-BIO-3**, and **D-BIO-4** would ensure the project would not result in impacts and would ensure consistency.
California Code of Regulations Title 14, Division 1, Subdivision 3, Chapter 3, sections 670.2 and 670.5	Lists the plants and animals of California that are declared rare, threatened, or endangered. The administering agency is CDFW.	Consistent: Implementation of existing COCs and proposed decommissioning conditions **D-BIO-2, D-BIO-3**, and **D-BIO-4** would ensure the project would not result in impacts and would ensure consistency.
California Code of Regulations (Title 14, sections 460)	Provides information regarding the protection and take of fur bearing mammals. This regulation makes it unlawful to take fisher, marten, river otter, desert kit fox and red fox. The administering agency is CDFW.	Consistent: Implementation of existing COCs and proposed decommissioning conditions **D-BIO-2**, **D-BIO-3**, and **D-BIO-4** would ensure the project would not result in impacts and would ensure consistency.
Fully Protected Species (Fish and Game Code, sections 3511, 4700, 5050, and 5515)	Designates certain species as fully protected and prohibits the take of such species or their habitat unless for scientific purposes (see also Title 14, California Code of Regulations, section 670.7). The administering agency is CDFW.	Consistent: Decommissioning and demolition activities would not result in any impacts to fully protected species.
Nest or Eggs (Fish and Game Code, section 3503)	Protects California's birds by making it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. The administering agency is CDFW.	Consistent: Implementation of existing COCs and proposed decommissioning conditions **D-BIO-1**, **D-BIO-3**, and **D-BIO-4** would ensure the project would not result in impacts and would ensure consistency.
Migratory Birds (Fish and Game Code section 3513)	Protects California's migratory birds by making it unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame birds. The administering agency is CDFW.	Consistent: Implementation of existing COCs and proposed decommissioning conditions **D-BIO-1**, **D-BIO-2**, **D-BIO-3**, and **D-BIO-4** would ensure the project would not result in impacts and would ensure consistency.
Lake and Streambed Alteration (Fish and Game Code, sections 1600 et seq.)	Regulates activities that may divert, obstruct, or change the natural flow or the bed, channel, or bank of any river, stream, or lake in California designated by CDFW in which there is at any time an existing fish or wildlife resource or from which these resources derive	Consistent: Decommissioning and demolition activities would not result in any impacts to waters of the state or state jurisdictional stream bed features.

Applicable LORS	Description	Consistency
	benefit. Impacts to vegetation and wildlife resulting from disturbances to waterways are also reviewed and regulated during the permitting process. The administering agency is CDFW.	
Local		
San Bernardino County General Plan (2007) – Conservation Element	This General Plan contains general policies regarding the protection and preservation of habitat and sensitive plant and wildlife species.	Consistent: Activities associated with decommissioning have the potential to facilitate the introduction of invasive species due to ground disturbance. Invasive plant species growth could suppress native vegetation and infest agricultural lands. However, the project site is developed and decommissioning activities would be restricted to the site and therefore would not impact habitat. Decommissioning and demolition activities would not result in any conflicts with the General Plan Goals, Policies, or Objectives.

APPLICABLE CONDITIONS OF CERTIFICATION

The following COCs reflect those originally imposed on the facility including those modified through subsequent amendments. These COCs were developed to reduce the significant biological impacts of the SEGS Units III-VII facility to acceptable levels and are now considered appropriate to reduce any potential impacts from the decommissioning of SEGS III-VII to below the level of significance. SEGS VII was the only remaining undisturbed unit at the time of licensing so the verifications are specific to start of construction of SEGS VII, however avoidance and minimization measures included in the following COCs should apply to decommissioning of the entire SEGS III-VII facility.

Again, CEC staff proposes changes to the existing COCs are shown in **bold/underline** and ~~strikethrough~~ text. Any portion of the condition of certification that are not applicable have not been included. They retain original numbering.

BIO 5-4 ~~[Luz Solar III-VII]~~ Project owner shall designate a qualified biologist to advise on the implementation of these conditions of certification pertaining to on-site mitigation and to supervise or conduct mitigation, monitoring, and other compliance efforts.

Minimum qualifications include:

(1) A bachelor's degree in biological science, zoology, botany, ecology, or a closely related field and

(2) Current certification of a nationally recognized biological society, such as the Ecological Society of America or Wildlife society or a minimum of three years' experience in field biology.

~~[Luz Solar III-VII]~~ Project owner must demonstrate to the satisfaction of CEC staff that the designated biologist has appropriate education and experience for the biological tasks described in the biological resources mitigation implementation plan (BRMIP) developed for this project. CEC CPM approval of the designated biologist shall not be unreasonably withheld. The supervising construction or operation engineer shall act on the advice of the biologist to ensure conformance with the BRMIP and the terms and conditions of the CEC certification.

Verification: Before starting **decommissioning activities** for ~~site preparation~~ of SEGS **III**-VII, ~~Luz~~Solar ~~III-VII~~ project owner, will provide to the CEC CPM for review and approval, the name, qualifications, email address, and telephone number of the designated biologist. If there is a change in biologist, ~~Luz~~ the project owner will notify the CEC CPM and provide the name, qualifications, email address, and telephone number of the proposed replacement **at least 10 working days prior to the termination or release of the preceding designated** biologist. ~~in the next construction progress report~~**.**

BIO 5-5 ~~[Luz Solar III-VII]~~ Project owner shall submit a detailed BRMIP to the CEC CPM before the initiation of any clearing, earth moving, or other construction activities on SEGS VII. The BRMIP shall include details for designing and implementing the following measures:

a. For SEGS VII, if there is an indication of tortoises having been on the site, a final preconstruction site clearance shall be conducted, with emphasis on finding and relocating any desert tortoises that may have reinhabited the site;

b. For SEGS VII, a final preconstruction walk-through to verify that no foxes are inhabiting a den system on site and to collapse any dens found in order to preclude the potential for direct impacts on foxes during site clearing;

d. An employee education program to provide construction and operation employees with information to help them avoid impacts on the key species and resources addressed in this document. The program shall be designed to inform personnel about these Mojave Desert animals and plants and to cover both potential direct, on-the-job impacts, as well as the potential indirect impacts associated with the dwelling places and leisure activities of employees and their families. The latter are to be

included because of the in-migration associated with the project and the possibility of significant impacts that may be inadvertently caused by the in-migrant employees, their families, or pets. The program should cover laws pertaining to desert wildlife and plants, the use of firearms, off-road recreational vehicle use, and other applicable regulations.

The program shall be administered to each new employee as part of his or her orientation and all CEC staff members shall be required to review the information and be apprised of new information annually. Verification of the program's use can be accomplished by documenting its presentation date and content via statements signed by individual employees to whom the program has been presented.

Verification: At least 45 days prior to commencing site preparation decommissioning activities, ~~Luz~~ project owner will submit the draft BRMIP to the CEC CPM for review and approval, and to the CDFW CEC staff. The CEC Biological Resources CEC staff will review and comment on the draft BRMIP within 30 days of receipt. Decommissioning activities ~~Site preparation~~ will not begin until the final BRMIP is approved by the CEC CPM.

BIO 5-6: ~~[Luz Solar III-VII]~~ Project owner shall allow access by CEC, or its designated representative, to inspect or monitor conditions of biological resources, impacts, mitigation measures, and study areas prior to and during preconstruction, construction and operation activities on the SEGS site and adjacent areas. The access shall be provided upon request and at all times necessary to conduct biological field observations.

Verification: Prior to commencing **decommissioning** ~~site preparation~~ activities, ~~Luz~~ **Solar** ~~III-VII~~ project owner will provide a letter of authorization to conduct site visits as specified above.

BIO 5-7: ~~[Luz Solar III-VII]~~ Project owner shall implement the monitoring and mitigation measures contained in the approved BRMIP and CEC Decision.

Verification: The approved BRMIP will be submitted to the CEC CPM prior to ~~site preparation on SEGS VII~~ **decommissioning activities for SEGS III-VII**. Implementation of the measures shall be reported in the Monthly Compliance Reports by the Designated Biologist. ~~Luz~~ Project owner will notify the CEC CPM, in writing, within 15 days of successfully satisfying each condition in the BRMIP. If any conditions of the plan are not successfully satisfied, ~~Luz~~ project owner will submit proposed corrective actions within 30 days of the CEC CPM for comment and approval. The ~~Luz~~ project owner qualified biologist will submit to the CEC CPM ~~semiannual~~ statements **as part of the Monthly Compliance Report** verifying activities conducted in compliance with the approved BRMIP permit conditions listed here, and any additional portions of the CEC decision pertinent to biological resources. ~~These semiannual~~ These statements will be submitted ~~beginning six months after the start of site preparation and will continue~~ until all compliance activities have been completed.

~~Luz **Solar III** VII~~ The project owner will **immediately** report any adverse impacts, including deaths or injury, on rare, threatened, or endangered species by telephone to the CEC CPM **as well as the USFWS and/or CDFW** ~~within two working days~~ during the normal work week or by ~~the end of~~ **noon the next working day** following a weekend or holiday and will submit a follow-up written report within ~~10~~ **3** days after contact with the CEC CPM. **Injured animals shall be immediately reported to CDFW and/or USFWS and the CEC CPM and the project owner shall follow instructions that are provided by CDFW or USFWS. If CDFW or USFWS cannot be immediately reached, consideration should be given to taking the animal to a veterinary hospital.**

ADDITIONAL PROPOSED MEASURES

The project owner proposes the following design measures to ensure that decommissioning activities conform with applicable LORS and to reduce impacts to less than significant levels. These are presented below and are considered appropriate to ensure that activities conform with applicable LORS and reduce potential impacts to less than significant levels.

As noted, CEC staff proposes additions as depicted in **bold/underline** and deletions are shown in ~~strikethrough~~.

D-BIO-1 If ~~construction~~ **decommissioning and** demolition during the breeding bird season (typically January 1 through July for raptors and February 1 through August 31 for other avian species) cannot be avoided, a pre-construction nesting bird survey shall be performed on and adjacent to the decommissioning site. The Designated Biologist or Biological Monitor shall perform surveys in accordance with the following guidelines:

1. Surveys shall cover all potential nesting habitat in the project site and within 500 feet of the boundaries of the plant site;
2. Surveys shall be conducted within the 10-day period preceding initiation of any **decommissioning and** demolition activity. Additional follow-up surveys may be required if periods of **decommissioning and** demolition inactivity exceed three weeks in any given area, an interval during which birds may establish a nesting **territory**;
3. If an active nest is found, an appropriate no-disturbance buffer shall be established around the nest by the Designated Biologist based on the bird species occupying the nest and the type of project activities that are occurring. The buffer shall be flagged in the field and a monitoring plan shall be developed. Nest locations shall be mapped using GPS technology and submitted, along with survey report stating the survey results, to the CEC CPM. Weekly updates shall be submitted via email to the CEC CPM that provides the status of all active and fledged nests; and

4. The Designated Biologist or Biological Monitor shall monitor the nest until he or she determines that nestlings have fledged and dispersed; activities that might, in the opinion of the Designated Biologist in consultation with the CPM, disturb nesting activities (e.g., excessive noise above 60 dBA), shall be prohibited within the buffer zone until such a determination is made. The Designated Biologist shall determine if any work can occur within the buffer, on a case by case basis, in consultation with the CEC CPM.
5. A final nesting bird survey and monitoring report containing photos, survey methodology, site conditions, a list of species observed, and description of any avoidance measures (such as buffers) implemented during each survey shall be provided to the CEC CPM at the conclusion of each nesting season.

Verification: The project owner shall provide notification to the CPM, CDFW, and USFWS at least 2 weeks prior to initiating surveys; notification shall include the name and resume of the biologist(s) conducting the surveys and the timing of the surveys. Prior to the start of any site mobilization activities, the project owner shall provide the CPM, CDFW, and USFWS a letter-report describing the findings of the nest surveys. A final nesting bird survey and monitoring report shall be prepared and submitted to the CPM at the conclusion of each nesting season while work is being performed, and any special-status species (including raptor) nesting behavior shall be reported within three business days. All impact avoidance and minimization measures related to nesting birds shall be included in the Biological Resources Mitigation Implementation Plan (BRIMP) and implemented.

D-BIO-2 The project owner shall inspect the existing perimeter fencing and repair any gaps or holes to prevent desert tortoise or other wildlife from entering the site. Repairs will extend to existing grade and will not require ground disturbance of previously un-disturbed areas outside of the facility site. **Impact avoidance and minimization measures related to fence repairs shall be included in the BRMIP. If any special-status species, including desert tortoise, are detected, they shall not be handled and work shall stop until the animal leaves the area. The Designated Biologist shall contact the USFWS, CDFW and the CEC CPM for further guidance.**

After fence repairs are complete, and prior to the start of decommissioning activities, the Designated Biologist or Biological Monitor shall conduct a survey for special status species, including desert tortoise, burrowing owls, and desert kit fox, to confirm these species are not present on the facility site. If any special status species are found inside the fence line the Designated Biologist shall contact the CPM, CDFW, and USFWS for further guidance.

Verification: All impact avoidance and minimization measures related to fence repairs shall be included in the BRMIP and implemented.

Implementation of the measures will be reported in the Monthly Compliance Reports by the Designated Biologist.

D-BIO-3 The **Biological Resources Mitigation Implementation Plan (**BRMIP**)** will be revised ~~for~~ **to discuss biological resources avoidance and minimization measures for SEGS III-VII and will include measures to** address specific circumstances related to project decommissioning to ~~minimize or totally~~ avoid or reduce impacts to a less than significant level for ~~to~~ biological resources.

Verification: At least 45 days prior to commencing decommissioning activities, the project owner will submit the draft BRMIP to the CEC CPM for review and approval, and to the CDFW CEC staff. The CEC Biological Resources CEC staff will review and comment on the draft BRMIP within 30 days of receipt. Decommissioning activities will not begin until the final BRMIP is approved by the CEC CPM.

D-BIO-4 The employee education program, included as part of the BRMIP, will be revised and will include measures to address specific circumstances related to project decommissioning. The project owner shall ensure that all SEGS III-VII employees, contractors, and visitors that will be on site during decommissioning receive the employee education program (also known as worker environmental awareness program (WEAP)) training.

Verification: At least 45 days prior to commencing decommissioning activities, the project owner will submit the draft employee education program, as part of the BRMIP, to the CEC CPM for review and approval, and to the CDFW CEC staff. The CEC Biological Resources CEC staff will review and comment on the draft BRMIP within 30 days of receipt. Decommissioning activities will not begin until the final BRMIP is approved by the CEC CPM.

ANALYSIS

CEC staff has reviewed the Facility Decommissioning Plan for conformance with applicable LORS and potential environmental effects.

LORS Conformance

With implementation of applicable COCs and newly proposed decommissioning conditions, as revised by CEC staff, the decommissioning of the project would conform with all federal, state, and local LORS.

Environmental Impacts

Based on literature review, database searches, and on-site habitat suitability assessments, it has been determined that the existing facility site does not contain suitable habitat for special-status plant or wildlife species. As stated above, no special-

status plant or wildlife species were observed on the project site during the field surveys (NextEra 2021d). However, there is habitat for special-status plant and wildlife species located adjacent to the site and special-status species were observed outside the site fence, including Joshua tree and western burrowing owl. In addition, sign of burrowing animals was detected within the facility fence and large mammals, such as desert kit fox, could access the site, including to visit the evaporation ponds, via gaps in the existing fence. However, no water was observed during surveys and the project is in cold layup (i.e., non-operational) so no additional water should be added to the ponds.

To prevent desert tortoise and other wildlife from entering the facility site prior to and during decommissioning activities, the project owner will inspect the existing perimeter fencing and repair any gaps or holes. To minimize disturbance to native habitats outside of the fence, repairs will extend to existing grade and will not require ground disturbance of previously un-disturbed areas outside of the facility site. All work related to fence repair would be completed from inside the fence line and no work would occur outside of the facility site fence (Merrick 2021). Additionally, although desert tortoise and Mohave ground squirrel may access the site via these gaps, these species would likely not remain on site due to lack of suitable habitat, including foraging habitat.

Impacts to special-status species detected during surveys could occur in the absence of avoidance and minimization measures. Impacts to Joshua tree would likely not occur as work would not occur outside the facility fence and therefore not be near the known occurrences detected during surveys. Impacts to western burrowing owl would likely not occur as the known burrow complex was over 500 feet from the project site and no known or potential burrows are located within the site. In addition, implementation of existing COCs and proposed decommissioning conditions **D-BIO-1**, **D-BIO-2**, **D-BIO-3**, and **D-BIO-4** would further reduce impacts to less than significant levels. Proposed decommissioning condition **D-BIO-1** would require conducting nesting bird surveys prior to initiation of any type of decommissioning or demolition activities during the nesting period, and to establish buffers to avoid disturbance of nesting birds, including western burrowing owl, if active nests are detected, as well as for the ornithologist to consult with CEC staff and CDFW on the extent of modifications to buffer zones. Proposed decommissioning condition **D-BIO-2**, as modified by CEC staff, would require surveying the site for special-status species upon completion of fence repairs and prior to decommissioning or demolition activities. Proposed decommissioning condition **D-BIO-3** requires the BRMIP be revised to discuss biological resources avoidance and minimization measures for SEGS III-VII and would include measures to address specific circumstances related to project decommissioning. Proposed decommissioning condition **D-BIO-4** would require that all employees, contractors, and visitors to the SEGS III-VII site during decommissioning activities participate in an environmental awareness program designed to provide information and training regarding covered species.

Impacts to desert tortoise could occur from direct mortality, injury, or harassment of desert tortoise, which could result from encounters with construction vehicles or heavy

equipment. However, work would take place inside the fence of the existing facility and no desert tortoises have been observed on-site during operations, and no observations of desert tortoise or their sign were made within the facility during the biological survey conducted in December 2020. Desert tortoise are known to occur in the area in low numbers and critical habitat is located immediately across Highway 395. Desert tortoise could be attracted to any pooled water in the decommissioning area that results from application of water to control dust, placing them at higher risk of injury or mortality from construction activities or predators (e.g., ravens, coyotes) that are also attracted to the water and human-provided scavenging opportunities.

To avoid and minimize these direct and indirect impacts, the project owner shall repair all gaps in the fence and conduct a survey prior to initiation of decommissioning activities, implement a worker environmental awareness training program, and implement other general measures as included in the updated BRMIP, such as controlling standing water. All work to repair gaps would occur within the existing facility site fence and would not cause any ground disturbance to previously undisturbed areas. Implementation of existing conditions of certification and proposed decommissioning conditions **D-BIO-2**, **D-BIO-3**, and **D-BIO-4** would further reduce the potential for adverse impacts to desert tortoise to less than significant

Impacts to Mohave ground squirrel could occur but are unlikely due to lack of suitable habitat and lack of burrows on site. Proposed decommissioning condition **D-BIO-3** requires the BRMIP be revised to discuss biological resources avoidance and minimization measures for SEGS III-VII and would include measures to address specific circumstances related to decommissioning activities including the requirement that Mohave ground squirrel attractants (e.g., human food, trash) be removed from the facility area thereby further reducing the potential for adverse impacts to Mohave ground squirrel. Implementation of existing conditions of certification and proposed decommissioning conditions **D-BIO-2**, **D-BIO-3**, and **D-BIO-4** would reduce the potential for adverse impacts to Mohave ground squirrel to less than significant.

Impacts to desert kit fox could occur from decommissioning activities, including use of heavy equipment operation, which could kill or injure desert kit foxes from contact with construction equipment or entombment in their den. Decommissioning activities could also result in disturbance or harassment of individuals. Impacts to desert kit fox would be avoided or minimized by excluding these animals from the facility area prior to decommissioning and demolition activities. Implementation of **D-BIO-2** would ensure all gaps and holes in the fence are repaired prior to decommissioning activities to limit access to the site by desert kit fox and other wildlife. In addition, the designated biologist or biological monitor shall survey the site for desert kit fox prior to initiation of decommissioning activities. Avoidance and minimizations measures included in the BRMIP from 1988, as required by **BIO 5-4**, shall be updated to reflect current practices, as described in **D-BIO-3**. For example, it shall be clarified that desert kit fox dens located on site shall not be collapsed during the whelping season (February 1 to September 30).

Outside of the whelping season individuals may be excluded from onsite dens and any onsite dens would be collapsed, as necessary, once confirmed vacant. Implementation of these conditions would reduce the potential for adverse impacts to desert kit fox to less than significant.

Birds may nest on the site in landscape vegetation. Birds, including western burrowing owl, may also nest adjacent to the site in areas such as the vegetated, man-made earthen bottom channel. Decommissioning and demolition activities could result in indirect disturbance of nesting birds on or near the project site causing nest abandonment by the adults and mortality of chicks and eggs. Destruction of active bird nests, nest abandonment, and/or loss of reproductive effort caused by disturbance are considered "take" by the CDFW, and therefore would be significant impacts. Implementation of **D-BIO-1** would reduce potential impacts to protected raptors and other migratory birds to less than significant.

CEC staff concludes that implementation of the proposed Facility Decommissioning Plan would not result in potentially significant adverse impacts on biological resources, with implementation of existing Biological Resources COCs, **BIO 5-4**, **5-5**, **5-6**, and **5-7** in the Commission Decision, and the approval of the project owner's newly proposed decommissioning conditions **D-BIO-1** and **D-BIO-2**, as modified by CEC staff. CEC staff also recommends approval of new owner-proposed decommissioning conditions **D-BIO-3** and **D-BIO-4**, as modified by CEC staff, as necessary to supplement the project's existing COCs **BIO 5-5** and **5-7**, which were specific to SEGS VII and provide clarifications for measures required for decommissioning. Therefore, decommissioning activities would not have a substantial adverse effect on special-status species and impacts would be less than significant.

CONCLUSIONS AND RECOMMENDATIONS

CEC staff concludes that the implementation of the proposed Facility Decommissioning Plan would have a less than significant impact on Biological Resources with incorporation of CEC staff's revisions to the proposed decommissioning conditions. Implementation of conditions **5-4**, **5-5**, **5-6**, and **5-7** as well as the newly proposed decommissioning conditions **D-BIO-1, D-BIO-2**, **D-BIO-3**, and **D-BIO-4**, as revised by CEC staff, would reduce the severity of any decommissioning-phase impacts on biological resources to a less-than-significant level and ensure consistency with applicable LORS.

REFERENCES

Merrick 2021 – Jennifer Merrick, Applicant Consultant for project owner, Luz Solar Partners III-VII, Electronic communication with Ann Crisp, California Energy Commission, on April 30, 2021 clarifications in re: Memorandum: SEGS III-VII Decommissioning Plan, San Bernardino County, California Wildlife Fencing. TN 237944

NextEra 2021d – Tetra Tech, Inc. / Jennifer Merrick, Applicant Consultant for project owner, Luz Solar Partners III-VII, (tn 237500). SEGS III-VII Facility Decommissioning Plan, dated, 04/20/2021. Submitted to CEC/Dockets on 04/20/2021

NextEra 2021e – Tetra Tech, Inc. / Jennifer Merrick, Applicant Consultant for project owner, Luz Solar Partners III-VII, Memorandum: SEGS III-VII Decommissioning Plan, San Bernardino County, California Wildlife Fencing. TN237501

USFWS 2021 – United States Fish and Wildlife Service (USFWS), USFWS Critical Habitat for Threatened & Endangered Species, US Fish and Wildlife Service Environmental Conservation Online System (ECOS).https://www.arcgis.com/home/webmap/viewer.html?url=https://services.arcgis.com/QVENGdaPbd4LUkLV/ArcGIS/rest/services/USFWS_Critical_Habitat/FeatureServer&source=sd. Accessed 2021

CULTURAL AND TRIBAL CULTURAL RESOURCES

Gabriel Roark

INTRODUCTION

In this section, SEGS III–VII Facility Decommissioning and Demolition Plan (NextEra 2021d) in relation to **Cultural** and **Tribal Cultural Resources**. The purpose of this analysis is to determine whether decommissioning and demolition of the facility would be undertaken in a manner that avoids significant impacts on cultural and tribal cultural resources and would be in compliance with applicable LORS.

EXISTING SETTING

The site comprises the SEGS III–VII power plant. Ground disturbance occurred throughout the project site since its construction. The cultural resources literature prepared during the licensing and construction phases of SEGS III–VII indicates that four previous cultural resource studies were conducted on or adjacent to the project site (Lerch 1986; Norris and Carrico 1978; Reynolds 1986; Reynolds et al. 1987).

In addition, the literature review reveals that 15 previously recorded cultural resources are located on the facility site, summarized as follows.

- CA-SBR-5726 (Luz SEGS III, Site #1): Native American lithic scatter
- CA-SBR-5728 (W 4-18.1): Native American lithic scatter with hearths and ground stone tools
- CA-SBR-5729H (R 1.10.1): Randsburg Railroad Camp
- CA-SBR-5730H (H 27.4): Kramer-Randsburg Railroad Crossing
- P-36-005731 (CA-SBR-5731H): A railroad grade (Randsburg Railway)
- A209-13 (Y-1 Isolate): Jasper flake, bifacial
- P209-4 (H27.1): Historic railroad debris, primarily domestic artifacts
- P209-5 (L 1.10.1): Chalcedony flake
- P209-6 (L. 1.10.2): Stone flake
- P209-7 (W 1.10.3): Chalcedony knife
- P209-8 (I.27.2): Stone flake
- P209-9 (I.27.3): Agate flake and chert flake
- P210-10 (I.27.4): Stone flake
- P209-11 (I 27.5): Jasper flake
- P209-12 (L 1.10.3): Chalcedony flake (possible tool)

CA-SBR-5726 (Luz SEGS III, Site #1): This Native American lithic scatter and plant-processing site yielded 206 artifacts—128 from the ground surface and 78 from two excavation units. The deepest subsurface artifacts occurred at 40–80 centimeters (1.3–2.6 feet) below the ground surface. (Reynolds et al. 1987, pages 37, 98.) Reynolds et al. (1987, pages 40–41) did not recommend further archaeological investigation of CA-SBR-5726.

CA-SBR-5728 (W 4-18.1): Archaeological materials were found to a depth of 0.7–1.0 foot (Reynolds et al. 1987, page 104). The investigators did not comment on the significance of the archaeological site.

CA-SBR-5729H (R 1.10.1): Also called the Randsburg Railroad Camp, this historic archaeological site consisted of tent stakes and other domestic artifacts. Associated with the materials were artifacts consistent with a work area—specifically, blacksmithing. Archaeologists working at CA-SBR-5729H concluded that the archaeological site was confined to the ground surface, although they did not conduct test excavations to verify this conclusion. (Reynolds et al. 1987, pages 58, 107–109.)

CA-SBR-5730H (H 27.4): Called the Kramer-Randsburg Railroad Crossing, this historic archaeological site represents another railroad work site at which workers consumed food. Investigators hypothesized that a road crossed the railroad (P-36-005731) at this point. (Reynolds et al. 1987, pages 58, 110.) Investigators did not directly address the significant of CA-SBR-5730H.

P-36-005731 (CA-SBR-5731H): This railroad grade marked the former location of the Randsburg Railway. Archaeologists identified discarded track plates, spikes, assorted hardware, and a table knife along the grade (Reynolds et al. 1987, page 58). No remnants of the railroad grade exist today on the project site, which was graded level prior to constructing the power plant.

Isolated Finds: Archaeologists collected isolated finds (P209-5 through P209-12 and A209-13) from the ground surface, removing them from the project site (Reynolds et al. 1987, page 26).

These cultural resources sat atop soils and sediments that investigators identified as Pleistocene older alluvium and Quaternary (Holocene to Pleistocene) alluvium (Reynolds et al. 1987, page 9). This is consistent with geologic maps of the project site. The San Bernardino geologic sheet covers the southern portion of the project site and maps the surface geology as Qal—Qc, indicating a continuum of Pleistocene to Recent (Holocene) alluvium (Rogers 1967). The Trona sheet, which covers the northern portion of the project site, maps the area as Recent (Holocene) alluvium with areas probably of Pleistocene-aged, dissected alluvium (Jennings et al. 1962). In short, the ground surface of the project site could be as old as 2,580,000 million years to as recent as the historic period. That a fossil locality is recorded on the project site near archaeological site CA-

SBR-5728 (Jensen and Reynolds 1986) suggests that the landform is a minimum of 5,000 years old, if not Pleistocene in age (minimum age of 11,700 years before present).

LAWS, ORDINANCES, REGULATIONS, AND STANDARDS

There are no cultural resources LORS pertinent to cultural resources for the SEGS III–VII power plant.

APPLICABLE CONDITIONS OF CERTIFICATION

The CEC Decision included COCs 4-1 through 4-8 to mitigate potential impacts to paleontological and cultural resources. Conditions 4-1 through 4-3 are related to paleontological resources and are discussed in a subsequent section of this analysis. Conditions 4-5(b), 4-5(c), 4-6, 4-7, and 4-8 are not relevant for decommissioning. Conditions 4-4 and 4-5a and 4-5d–h are relevant to decommissioning:

CUL 4-4: ~~[Luz Solar III-VII]~~ The project owner shall submit the name and qualifications of its designated cultural resources specialist (CRS) (e.g., someone with a graduate degree in anthropology, history, or cultural resource management and field experience) to the CEC CPM (compliance project manager) for review and approval. The CEC CPM must review the qualifications of and approve of in writing the [~~Luz Solar III-VII~~] project owner designated CRS before any ground disturbance may begin. After CEC approval, the designated CRS shall be on call during site preparation and construction activities for the ~~[Luz Solar III-VII]~~ SEGS III- VII project.

CUL 4-5: The designated CRS shall prepare and submit to the CEC CPM for review and approval, a cultural resources monitoring and mitigation plan (CRMMP) to minimize potential impacts to cultural resources. The plan shall include the following:

a. A provision that the designated CRS conducts a records search at such places as the San Bernardino County Museum and the California Archaeological Inventory for identification of cultural resources which may be affected by decommissioning activities of [~~Luz Solar III-VII~~] SEGS III-VII.

b. A provision that the designated CRS cultural resources specialist be on call to inspect any potentially significant cultural resources found during ground clearance and excavation in areas of sensitivity identified in the monitoring and mitigation plan.

c. Specific measures proposed to mitigate impacts to particular types of cultural resources which may be discovered during earth moving activities.

d. A provision that if potentially significant cultural resources are encountered during construction activities, work in the immediate vicinity of the find shall be halted until the designated CRS can determine the significance and sensitivity of the find. [~~Luz Solar III-VII's~~] Project owner designated CRS shall

act in accordance with the procedures set forth in the CRMMP which has been approved by the CEC CPM prior to the start of construction.

[~~Luz Solar III-VII~~] The project owner or its designated representative, shall inform the CEC CPM within one working day of the discovery of any potentially significant resources and discuss the specific measure(s) proposed to mitigate potential impacts to the resources.

The designated CRS, representatives of [~~Luz Solar III-VII~~] the project owner and the CEC CPM shall meet within seven working days of the notification of the CEC, if necessary, to discuss the disposition of any finds and any mitigation measures already implemented or to be implemented.

e. A provision that if human remains are encountered, work in the immediate vicinity shall stop and the county coroner and the CEC CPM shall be notified. Work in the vicinity of the find shall remain stopped until the coroner has determined if the remains are Native American in origin and any necessary mitigation measures have been implemented. If the remains are determined to be of Native American origin, the Native American Heritage Commission and appropriate Native American representatives shall be notified immediately. Any necessary mitigation measures shall be discussed and agreed upon by the interested parties and approved by the CEC CPM.

f. A provision that the CEC CPM shall have access to the ~~[Luz Solar III-VII]~~ SEGS Unit III-VII site to observe cultural resources monitoring and data recovery activities.

ADDITIONAL PROPOSED MEASURES

The project owner proposes the following design measures to ensure that decommissioning activities conform with applicable LORS and to reduce impacts to less than significant levels (NextEra 2021d, pages 4-11, 4-12). CEC staff's proposed changes to the existing COCs are shown in **bold/underline** and ~~strikethrough~~ text. Any portion of the condition of certification that are not applicable have not been included. They retain original numbering.

D-CUL-1: If the earth-disturbing activities associated with decommissioning extend into soils beyond what was previously disturbed on-site during facility construction or excavation occurs in an area not previously disturbed, a cultural monitor will be available to be on-site during the excavation, as outlined in the existing cultural resources COCs. The need for a cultural monitor will be determined in coordination with the Designated CRS, based on review of the planned areas of disturbance, and according to the CRMMP.

Verification:

1. **The project owner shall provide the designated CRS with a description of the planned ground-disturbing activities, including the expected depth and horizontal extent of ground disturbance, on a weekly basis. The designated CRS will use this information and the updated CRMMP (see D-CUL-3) to determine whether one or more qualified cultural resources monitors need to observe ground disturbance.**
2. **During decommissioning, the designated CRS shall email the CEC CPM at the beginning of the week (Monday, or the first day after receiving information about ground disturbance), indicating whether cultural resource monitors will be monitoring ground disturbance and where within the facility site. The designated CRS's email shall also identify what the criteria are for curtailing cultural resources monitoring in the affected areas.The designated CRS shall email the CEC CPM when curtailing cultural resources monitoring in any given area.**

D-CUL-2: The project owner shall update, if necessary, the cultural resources workers environmental awareness program (WEAP) training and present the WEAP training to all of its personnel and the personnel of its contractors and subcontractors who may be involved with ground clearance or earth moving, to develop an awareness of and sensitivity to potential project impacts on potentially significant cultural resources. This training shall include development of the ability to recognize potentially significant cultural resources.

Verification:

1. **At least 30 days prior to the beginning of ground disturbance, the designated CRS shall provide the draft WEAP text and graphics and the informational brochure to the CEC CPM for review and approval.**
2. **At least 15 days prior to the beginning of ground disturbance, the CEC CPM will provide to the project owner a WEAP Training Acknowledgement form for each WEAP trained worker to sign.**
3. **Monthly, until ground disturbance is completed, the project owner shall provide in the Monthly Compliance Report (MCR) the WEAP Training Acknowledgement forms of workers who have completed the training in the prior month and a running total of all persons who have completed training to date.**

D-CUL-3: The project owner shall update the CRMMP to minimize potential impacts to cultural resources for decommissioning activities. The CRMMP shall include the following:

a. A provision that the designated CRS be on call to inspect any potentially significant cultural resources found during ground clearance and excavation in areas of sensitivity defined in the monitoring and mitigation plan.

b. Specific measures proposed to mitigate impacts to particular types of cultural resources which may be discovered during earth-moving activities.

c. A provision that if potentially significant cultural resources are encountered during decommissioning activities, work in the immediate vicinity of the find shall be halted until the designated CRS can determine the significance and sensitivity of the find. The designated CRS shall act in accordance with the procedures set forth in the CRMMP. The project owner, or its designated representative, shall inform the appropriate overseeing agency (CEC or County of San Bernardino (County)) within one working day of the discovery of any potentially significant resources and discuss the specific measure(s) proposed to mitigate potential impacts to the resources.

The designated CRS, representatives of the project owner, and the appropriate overseeing agency shall meet within seven working days of the notification of the CEC or County, if necessary, to discuss the disposition of any finds and any mitigation measures already implemented or to be implemented.

d. A provision that if human remains are encountered, work in the immediate vicinity shall stop and the County coroner and the jurisdictional agency (CEC or County) shall be notified. Work in the vicinity of the find shall remain stopped until the coroner has determined if the remains are Native American in origin and any necessary mitigation measures have been implemented. If the remains are determined to be of Native American origin, the Native American Heritage Commission and appropriate Native American representatives shall be notified immediately. Any necessary mitigation measures shall be discussed and agreed upon by the interested parties and approved by the jurisdictional agency.

Verification:

1. **No less than 30 days prior to the start of ground disturbance, the project owner shall submit the CRMMP to the CEC CPM for review and approval.**
2. **At least 20 days prior to the start of ground disturbance, in a letter to the CEC CPM, the project owner shall agree to pay curation fees for any**

materials generated or collected as a result of the archaeological investigations (survey, testing, data recovery).

3. **At least 30 days prior to the initiation of ground disturbance, the project owner shall provide to the CEC CPM a copy of a letter from a curation facility that meets the standards stated in the California State Historical Resources Commission's Guidelines for the Curation of Archaeological Collections, stating the facility's willingness and ability to receive the materials generated by decommissioning-phase cultural resources activities and requiring curation. Any agreements concerning curation will be retained and available for audit for the life of the project.**

ANALYSIS

As noted in "Existing Setting" earlier in this section, fifteen cultural resources once existed on the project site. All of them were visible on the ground surface and comprised archaeological resources, both Native American and early twentieth-century historic archaeological sites. Two cultural resources, CA-SBR-5726 and CA-SBR-5728, possessed light- or medium-density archaeological deposits below the ground surface. These subsurface archaeological materials extended to a depth not exceeding 2.6 feet and 1.0 foot, respectively. The other thirteen cultural resources identified on the project site appear to be restricted to the ground surface. Archaeologists collected all surface and subsurface archaeological materials encountered prior to construction of the power plant. CEC staff has no record of project construction having unearthed additional cultural resources.

Subsurface archaeological materials seem to have been confined to archaeological sites CA-SBR-5726 and CA-SBR-5728. These two archaeological sites are located at opposite ends of the project site from one another, suggesting that the intervening terrain might contain subsurface archaeological materials. Given the relatively shallow depth of archaeological deposits at CA-SBR-5726 and CA-SBR-5728, near-surface character of Pleistocene-aged landforms, and previous construction impacts across the project site, CEC staff estimates the potential to encounter buried archaeological materials during decommissioning as low.

Implementation of conditions 4-4 and 4-5, as well as the newly proposed decommissioning conditions D-CUL-1 through D-CUL-3, would reduce the severity of any decommissioning-phase impacts on cultural resources to a less-than-significant level. These conditions require the oversight of a CRS to ensure that excavation into native soils are monitored for inadvertent discoveries, workforce training in the recognition of and response to inadvertent discoveries, and methods for avoiding or mitigating impacts on inadvertently discovered cultural resources.

CONCLUSIONS AND RECOMMENDATIONS

CEC staff reviewed the Facility Decommissioning Plan and previous cultural resources documentation relevant to the project site. Fifteen cultural resources once existed on the project site but were collected from the area and curated at the San Bernardino County Museum. CEC staff has no record of inadvertent cultural resources discoveries having occurred during construction of the power plant. Shallow, light- to medium-density archaeological deposits were located below the ground surface at two of the previously recorded archaeological sites. Nevertheless, the near-surface character of Pleistocene-age landforms in the project vicinity and pervasiveness of ground disturbance during construction of the power plant suggests that the potential to encounter buried archaeological resources during decommissioning activities is low. Existing COCs 4-4 and 4-5, as well as newly proposed decommissioning COCs D-CUL-1 through D-CUL-3, would reduce the severity of any decommissioning-phase impacts on cultural resources to a less-than-significant level.

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EFFICIENCY AND RELIABILITY

Kenneth Salyphone

INTRODUCTION

In this section, CEC staff discusses the SEGS III-VII Decommissioning and Demolition Plan in relation to the technical area of **POWER PLANT RELIABILITY**. The purpose of this analysis is to determine whether decommissioning and demolition of the facility would be undertaken in a manner that avoids significant impacts on **POWER PLANT RELIABILITY** and would be in compliance with applicable LORS.

EXISTING SETTING

The SEGS III – VII operated as a concentrated solar thermal power facility generating 150 megawatts of electricity. It would undergo decommissioning and demolition activities. Demolition activities would include the dismantling and removal of above-ground structures – parabolic mirrors and their supports, cooling towers, the power block (steam turbine generators, storage tanks, heat exchangers, pumps, and other ancillary equipment) and support and miscellaneous buildings.

The nearest residences are located approximately 3.56 miles south and nearest business/off-site worksite is approximately 0.52 mile southeast of the project. The nearest airport (Edward Air Force Base) is located 16.5 miles west of the project site.

LAWS, ORDINANCES, REGULATIONS, AND STANDARDS

None.

APPLICABLE CONDITIONS OF CERTIFICATION

None.

ADDITIONAL PROPOSED MEASURES

None.

ANALYSIS

The technical area of Efficiency and Reliability is related to power plant operation, not plant decommissioning or demolition. There would be no efficiency impacts as the result of decommissioning.

CONCLUSIONS AND RECOMMENDATIONS

Since Efficiency and Reliability is only related to plant operation, there would be no efficiency and reliability impacts.

REFERENCES

NextEra 2021d – Tetra Tech, Inc. / Jennifer Merrick, Applicant Consultant for project owner, Luz Solar Partners III-VII, (tn 237500). SEGS III-VII Facility Decommissioning Plan, dated, 04/20/2021. Submitted to CEC/Dockets on 04/20/2021

GEOLOGY AND PALEONTOLOGICAL RESOURCES

Gary Maurath

INTRODUCTION

In this section, CEC staff discusses the SEGS III-VII decommissioning and demolition, as described in the plan (NextEra 2021d) in relation to the technical area of **Geology and Paleontological Resources**. The purpose of this analysis is to determine whether decommissioning and demolition of the facility would be undertaken in a manner that avoids significant impacts on geology and paleontological resources and would be in compliance with applicable LORS.

EXISTING SETTING

The site occupies approximately 1,000 acres and is developed on generally level desert terrain within the Kramer Basin at an elevation of 2,450 feet. It is surrounded by discontinuous low-relief uplands including the Saddleback Mountains to the north and the Kramer Hills to the south and is classified as having a high desert climate. (CEC 2021).

A total of 243 vertebrate fossils were recovered from 20 discrete paleontological localities within the area monitored during excavation for SEGS VI and VII (Reynolds 1988). The fossils were recovered during execution of the construction monitoring and data recovery program developed for SEGS III-VII in consultation with a qualified paleontologist approved by the San Bernardino County Museum and the Natural History Museum of Los Angeles County (Lander 1988).

LAWS, ORDINANCES, REGULATIONS, AND STANDARDS

CEC staff reviewed the Plan for potential environmental effects and consistency with applicable LORS. Based on a review of LORS and potential environmental effects, CEC staff determined that decommissioning and demolition of the facility would have a less than significant impact on geologic and palaeontologic resources with implementation of the proposed additional decommissioning design Measures submitted by the project owner in the decommissioning plan and the COCs in the Decision. Applicable LORS are listed in the table below.

Geological and Paleontological Resources
Table 1

Applicable Laws, Ordinances, Regulations, and Standards

LORS	Description	Consistency
The California Building Code (CBC), 1998 edition, is based	The CBC is a series of standards that are used in project investigation, design (Chapters	Consistent: Basic grading and erosion control of soils would be implemented. Shoring is not

LORS	Description	Consistency
upon the Uniform Building Code (UBC), 1997 edition.	16 and 18) and construction (including grading and erosion control as found in Appendix Chapter 33). The CBC supplements the UBC's grading and construction ordinances and regulations.	anticipated to be needed. No excavation during decommissioning is expected to go significantly below the depth of previous disturbance.
California Public Resources Code (PRC) 5097.5	This law protects paleontological resources and establishes criminal and civil penalties for violations.	Consistent: As all decommissioning and demolition activities will take place entirely on site within the previously disturbed Project footprint, impacts to paleontological resources are not anticipated. If paleontological resources are encountered, the project will comply with the existing COC's and **D-PAL-1**, **D-PAL-2**, and **D-PAL-3** for appropriate handling, identification and reporting of findings of paleontological resources.
Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (Society of Vertebrate Paleontology, 2010)	Establishes procedures and standards for assessing and mitigating impacts to paleontological resources.	Consistent: As all decommissioning and demolition activities will take place entirely on site within the previously disturbed Project footprint, impacts to paleontological resources are not anticipated. If paleontological resources are encountered, the project will comply with the standard procedures for assessing and mitigating impacts to paleontological resources.
County of San Bernardino Development Code Section 82.20.030 (2009 edition)	This section of the Development Code sets forth the requirements of paleontological resource mitigation programs for projects in the County. These requirements include a field survey prior to grading, monitoring during grading, appropriate handling and identification of specimens, and reporting of findings.	Consistent: As all decommissioning and demolition activities will take place entirely on site within the previously disturbed Project footprint, impacts to paleontological resources are not anticipated. If paleontological resources are encountered, the project will comply with the existing COC's and **D-PAL-1**, **D-PAL-2**, and **D-PAL-3** for appropriate handling, identification and reporting of findings of paleontological resources.

LORS	Description	Consistency
County of San Bernardino General Plan, Section V – Conservation Element	This section of the General Plan outlines several programs for protecting paleontological resources during development, including requirements for surveys, monitoring, recovery, curation, and reporting of paleontological resources.	Consistent: As all decommissioning and demolition activities will take place entirely on site within the previously disturbed Project footprint, impacts to paleontological resources are not anticipated. If paleontological resources are encountered, the project will comply with the existing COC's and **D-PAL-1**, **D-PAL-2**, and **D-PAL-3** for appropriate handling, identification and reporting of findings of paleontological resources.

APPLICABLE CONDITIONS OF CERTIFICATION

The decommissioning activities will take place entirely on site within the previously disturbed facility footprint. If the excavation depth for decommissioning activities extends into soils beyond what was previously disturbed during construction of the original project, applicable paleontological resources COCs will be implemented. Adherence to the applicable geological and paleontological resources COCs and additional decommissioning design measures for the facility and compliance with the LORS applicable to these resources will ensure that potential impacts to geological and paleontological resources will be less than significant.

Three of the Paleontological and Cultural Resources COCs in the Commission Decision applicable during construction are applicable to the project during decommissioning and demolition. At the time of certification Paleontological Resources were categorized with Cultural Resources and were discussed in the **Paleontological and Cultural Resources Conditions of Certification** section of the amended Conditions of Certification, as amended (CEC 2019).

The applicable COCs are listed below. The name "Luz" has been replaced with "Project Owner" in these requirements.

Requirement 1 Project owner will comply with the palaeontologic resources mitigation requirements recommended by the CEC staff of the San Bernardino County Museum during construction at the SEGS Unit VI site, as stipulated during the CEC Pre-Hearing Conference Workshop on January 8, 1988.

These mitigation measures include monitoring and resource recovery, analysis and curation. Project owner will have a palaeontologic specialist monitor excavation and construction activities on the SEGS

Unit VI site, on an as-needed basis. Project owner also will be responsible for the recovery, preparation for analysis, analysis, and curation of any palaeontologic or cultural resource materials encountered during construction at the SEGS Unit VI site.

CEC staff requests that it receive information copies of communications related to any palaeontologic or cultural resources monitoring, and mitigation work being conducted at the SEGS Unit VI site. Such communications may include contracts with San Bernardino County, CEC staff of the San Bernardino County Museum, project owner contractors or subcontractors, and/or other parties interested in the monitoring and mitigation work.

Requirement 2 Project owner shall submit the name and qualifications of their designated palaeontologic specialist (e.g., someone with a graduate degree in geology or paleontology and field experience) to the CEC CPM for review and approval. The CEC CPM must review the qualifications of and approve in writing, project owners designated palaeontologic specialist prior to any ground clearance or disturbance at SEGS Unit VII. After CEC approval, the palaeontologic specialist shall be available to monitor, as needed, all site preparation and construction activities related to the SEGS Unit VII site.

Requirement 3 The designated palaeontologic specialist shall prepare a monitoring and mitigation plan to minimize potential impacts to palaeontologic resources. The plan shall be submitted to the CEC CPM for review and approval in writing. The plan shall include the following elements:

a. A provision that a records search be conducted at such places as the San Bernardino County Museum and the University of California Museum of Paleontology for identification of fossil resources which may be affected by construction and operation of SEGS Unit VII.

b. A provision that a palaeontologic resources survey be conducted for the SEGS VII site. All vertebrate and invertebrate fossil remains encountered during the survey will be mapped and locality records filed with appropriate entities.

c. A provision that the mitigation and monitoring plan will apply to those areas where significant fossil resources were encountered during the field survey (b, above), or where the designated palaeontologic specialist has determined there is a reasonable potential that fossil-bearing deposits would be encountered.

d. A provision that the designated palaeontologic specialist be on site during ground clearance and excavation in areas of sensitivity identified in the monitoring and mitigation plan, and that the

specialist be on call during earth moving activities in other project areas.

e. A provision that if, during monitoring of construction activities, the designated palaeontologic specialist determines the likelihood of encountering fossil resources is slight, monitoring can be halted in that locality.

f. A provision that if fossil resources are encountered during construction activities, work in the immediate vicinity of the find shall be halted until the designated palaeontologic specialist can determine the significance and sensitivity of the find. The designated palaeontologic specialist shall act in accordance with the procedures set forth in the monitoring and mitigation plan which has been approved by CEC CPM prior to the start of construction.

   Project owner, or its designated representative, shall inform the CEC CPM within one working day of the discovery of any potentially significant resources and discuss the specific measure(s) proposed to mitigate potential impacts to the resources.

   The designated palaeontologic specialist, representatives of owner, and the CEC CPM shall meet within seven working days of the notification of the CEC CPM, if necessary, to discuss the disposition of any finds and any mitigation measures already implemented or to be implemented.

g. A provision that all vertebrate fossil remains will be collected and any invertebrate fossil remains will be sampled. All fossil materials found shall be mapped, prepared, identified, and removed for analysis and curation in the retrievable storage collection at the San Bernardino County Museum in Redlands, California.

h. A provision that the CEC CPM shall have access to the SEGS Unit VII site to observe palaeontologic resources monitoring and data recovery activities.

ADDITIONAL PROPOSED MEASURES

The project owner submitted three additional design measures for implementation during decommissioning to ensure that activities conform with applicable LORS. CEC staff's proposed changes to the existing COCs are shown in **bold/underline** and ~~strikethrough~~ text. Any portion of the condition of certification that are not applicable have not been included. They retain original numbering.

D-PAL-1 **The project owner will have a paleontological specialist available on an as-needed basis, if the excavation depth for decommissioning activities extends into soils beyond what was previously disturbed during construction of the original project as outlined in the existing COCs.**

Verification: Prior to the start of decommissioning and demolition the project owner shall submit to the CEC CPM for review and written approval, the name, resume, telephone number, and indication of availability for its designated paleontologist resources specialist. When conditions warrant paleontology monitoring copies of the daily paleontology monitoring reports will be submitted with the monthly compliance report.

D-PAL-2 **The project owner shall update, if necessary, the paleontological resources worker environmental awareness program (WEAP) training (as outlined in COC CUL-7) and present the WEAP training to all of its personnel and the personnel of its contractors and subcontractors who may be involved with ground clearance or earth moving, to develop an awareness of and sensitivity to potential project impacts on potentially significant paleontological resources. This training shall include development of the ability to recognize potentially significant paleontological resources.**

Verification: In the Monthly Compliance Report (MCR), the project owner shall provide copies of the WEAP certification of completion forms with the names of those trained, trainer identification, and type of training (in-person and/or video) offered that month. The MCR shall also include a running total of all persons who have completed the training to date.

D-PAL-3 **The project owner shall update the project monitoring and mitigation plan (as outlined in COC CUL-3) to minimize potential impacts to paleontologic resources for decommissioning and demolition. The plan shall include the following elements:**

a. A provision that if fossil resources are encountered during decommissioning activities, work in the immediate vicinity of the find shall be halted until the designated, on-call paleontologic specialist can determine the significance and sensitivity of the find. The designated, on-call paleontologic specialist shall act in accordance with the procedures set forth in the monitoring and mitigation plan which has been approved by the overseeing agency (CEC or County of San Bernardino [County]) prior to the start of construction.

b. The project owner, or its designated representative, shall inform the overseeing agency within one working day of the discovery of any potentially significant resources and discuss the specific

measure(s) proposed to mitigate potential impacts to the resources.

c. **The designated, on-call paleontologic specialist, representatives of the project owner, and the overseeing agency shall meet within seven working days of the notification, if necessary, to discuss the disposition of any finds and any mitigation measures already implemented or to be implemented.**

d. **A provision that all vertebrate fossil remains will be collected and any invertebrate fossil remains will be sampled. All fossil materials found shall be mapped, prepared, identified, and removed for analysis and duration in the retrievable storage collection at the San Bernardino County Museum, California.**

Verification: The paleontologic specialist shall submit a summary of monitoring and paleontological activities in the monthly compliance report. A copy of the draft final paleontological resources report shall be submitted to the CEC for review and approval within 90 days following completion of the data recovery and mitigation work by the designated paleontological specialist for the project. The project owner shall maintain in its compliance files, copies of all documentation related to paleontology monitoring and the final paleontological resources report with the information on paleontological repository(ies) used for this project.

ANALYSIS

Based on Facility Decommissioning Plan provided by the owner, disturbance of soil at the site would be limited to areas immediately surrounding elements of the facility that would be removed, such as support structures and connections to buried utilities. It is highly unlikely that this disturbance would extend beyond the depth of soil that was disturbed during their construction. However, it is possible that excavations could extend to depth where undisturbed Pleistocene-age sediments are encountered. In the event excavation activities penetrate undisturbed material, the potential impacts to such resources can be effectively mitigated through application of the existing Cultural Resources Conditions of Certification, **Requirements 1, 2,** and **3**, in combination with three new proposed design measures **D-PAL-1** through **D-PAL-3.** Therefore, impacts to paleontological resources are expected to be less than significant. The proposed decommissioning of the project would not result in any necessary changes or deletions to the conditions of certification for engineering geology or paleontological resources.

CONCLUSIONS AND RECOMMENDATIONS

CEC staff concludes the proposed decommissioning of the facility would not result in additional significant environmental impacts in terms of geologic resources, palaeontologic resources, or geologic hazards in comparison with the original analysis for

the approved project, provided the project owner complies with existing Cultural Resources COCs **Requirements 1, 2,** and **3**, and proposed design measures **D-PAL-1** through **D-PAL-3**. The proposed decommissioning would not require any change to the conditions of certification related to geology or geologic hazards adopted by the Energy Commission in its Final Decision and any subsequent amendments for SEGS III-VII (CEC 1989).

REFERENCES

CEC 1989 – California Energy Commission final decision on the application for certification of SEGS III-VII Harper Dry Lake, 29 March 1989, Docket No. 87-AFC-01

CEC 2019 – SEGS III-VII Solar Project (87-AFC-O1C) Conditions of Certification as Amended, Updated August 23, 2019

CEC 2021 – SEGS III-VII Solar Project (87-AFC-O1C), California Energy Commission website (power plant tab). Available online at: https://ww2.energy.ca.gov/sitingcases/pre1999_page/index.php?xkm=ajdkha2385duhkasd166dsasjd5598fhajkhs. Accessed 11 Apr 2021

Lander 1988 – Engineering Science, Inc. Palaeontologic Resource Assessment. Solar Energy Generating System (SEGS) III-VII Kramer Junction Area, Kern and San Bernardino Counties, California

NextEra 2021a – Tetra Tech, Inc. / Jennifer Merrick, Applicant Consultant (tn 236752). SEGS III-VII Draft Decommissioning Plan, dated, 02/12/2021. Submitted to CEC/Dockets on 02/12/2021

NextEra 2021d – Tetra Tech, Inc. / Jennifer Merrick, Applicant Consultant for project owner, Luz Solar Partners III-VII, (tn 237500). SEGS III-VII Facility Decommissioning Plan, dated, 04/20/2021. Submitted to CEC/Dockets on 04/20/2021

Reynolds 1988 – Palaeontologic Salvage.Luz Solar Electric Generation Systems VI and VII.Kramer Junction, San Bernardino County, California

HAZARDOUS MATERIALS MANAGEMENT

Ryan Casebeer and Brett Fooks

INTRODUCTION

In this section, CEC staff discusses the SEGS III-VII decommissioning and demolition, as described in the Facility Decommissioning Plan (NextEra 2021d), in relation to the technical area of **HAZARDOUS MATERIALS MANAGEMENT**. The purpose of this analysis is to determine whether decommissioning and demolition of the facility would be undertaken in a manner that would avoid significant Hazardous Materials Management impacts to the environment and would be in compliance with applicable LORS.

LAWS, ORDINANCES, REGULATIONS, AND STANDARDS

Hazardous Material Management Table 1 outlines the federal, state, and local laws and policies that apply to the protection of public health and hazardous materials management for the SEGS III-VII Decommissioning. CEC staff's analysis examines the project's compliance with these requirements.

Hazardous Material Management Table 1
LORS Applicable to Hazardous Materials Management

Applicable LORS	Description	Consistency
Federal		
The Superfund Amendments and Reauthorization Act of 1986 (42 USC §9601 et seq.)	Contains the Emergency Planning and Community Right to Know Act (also known as SARA Title III).	Consistent: Decommissioning and demolition activities would comply with these requirements.
The Clean Air Act (CAA) of 1990 (42 USC 7401 et seq. as amended)	Established a nationwide emergency planning and response program and imposed reporting requirements for businesses that store, handle, or produce significant quantities of extremely hazardous materials.	Consistent: Decommissioning and demolition activities would comply with these requirements.
The CAA section on risk management plans (42 USC §112(r))	Requires states to implement a comprehensive system informing local agencies and the public when a significant quantity of such materials is stored or handled at a facility. The requirements of both SARA Title III and the CAA are reflected in the California Health and Safety Code, section 25531, et seq.	
49 CFR 172.800	The U.S. Department of Transportation (DOT) requirement that suppliers of hazardous materials prepare and implement security plans.	Consistent: Decommissioning and demolition activities would comply with these requirements.

Applicable LORS	Description	Consistency
49 CFR Part 1572, Subparts A and B	Requires suppliers of hazardous materials to ensure that all their hazardous materials drivers are in compliance with personnel background security checks.	Consistent: Decommissioning and demolition activities would comply with these requirements.
The Clean Water Act (CWA) (40 CFR 112)	Aims to prevent the discharge or threat of discharge of oil into navigable waters or adjoining shorelines. Requires a written spill prevention, control, and countermeasures (SPCC) plan to be prepared for facilities that store oil that could leak into navigable waters.	Consistent: Decommissioning and demolition activities would comply with these requirements.
State		
Title 8, California Code of Regulations, section 5189	Requires facility owners to develop and implement effective safety management plans that ensure that large quantities of hazardous materials are handled safely. While such requirements primarily provide for the protection of workers, they also indirectly improve public safety and are coordinated with the Risk Management Plan (RMP) process.	Consistent: Decommissioning and demolition activities would comply with these requirements.
California Health and Safety Code, section 25531 to 25543.4	The California Accidental Release Program (CalARP) requires the preparation of a Risk Management Plan (RMP) and off-site consequence analysis (OCA) and submittal to the local Certified Unified Program Agency for approval.	Consistent: Decommissioning and demolition activities would comply with these requirements.
California Health and Safety Code, section 41700	Requires that "No person shall discharge from any source whatsoever such quantities of air contaminants or other material which causes injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause injury or damage to business or property."	Consistent: Decommissioning and demolition activities would comply with these requirements.
Title 19, California Code of Regulations, Division 2, Chapter 4.5, Articles 1-11	Sets forth the list of regulated substances and thresholds, the requirements for owners and operators of stationary sources concerning the prevention of accidental releases, the accidental release prevention programs approved under Section 112 of the federal Clean Air Act (CAA) Amendments of 1990 and mandated under the CalARP Program, and how the CalARP Program relates to the state's Unified Program.	Consistent: Decommissioning and demolition activities would comply with these requirements.
Local (or locally enforced)		

Applicable LORS	Description	Consistency
San Bernardino County Fire Department's Hazardous Materials Division	The Certified Unified Program Authority (CUPA) with responsibility to review Risk Management Plans and Hazardous Materials Business Plans is the San Bernardino County Fire Department. The CUPA requires a Consolidated Hazardous Materials Permit. The County has compliance codes that correspond with California Health and Safety Code Sections 25185, 25508 and 25280 that require CUPAs to inspect facilities that handle hazardous materials and/or generate hazardous wastes.	Consistent: Decommissioning and demolition activities would comply with these requirements.

APPLICABLE CONDITIONS OF CERTIFICATION

CEC staff has reviewed the current conditions of certification for the project and there are none that would apply during decommissioning and demolition.

ADDITIONAL PROPOSED MEASURES

CEC staff has reviewed the SEGS III-VII Facility Decommissioning Plan. The project owner has proposed one additional measure to be implemented during decommissioning and demolition. CEC staff's proposed changes to the existing COCs are shown in **bold/underline** and ~~strikethrough~~ text. Any portion of the condition of certification that are not applicable have not been included. They retain original numbering.

D-HAZ-1: The project owner shall update their Hazardous Materials Business Plan (HMBP) for decommissioning, as applicable, to reflect hazardous materials not previously used at the site.

ANALYSIS

CEC staff reviewed the decommissioning plan identifying all decommissioning activities which include handling, recycling and disposal of hazardous materials that were not previously removed during cold layup. During the cold layup activities previously conducted for SEGS III-VII, plant operations coordinated the removal of hazardous materials, except those there were required for routine activities associated with the cold layup process. The remaining hazardous materials to be handled during decommissioning include heat transfer fluid (HTF), lead acid batteries, diesel fuel, hydraulic oil, lubricating oil, and mineral oil. SEGS III-VII decommissioning plan proposed one measure, **D-HAZ-1**, which would have the project owner update the Hazardous Materials Business Plan (HMBP) as needed to reflect new hazardous materials used during decommissioning.

During decommissioning, the Spill Prevention Countermeasure Control plan would be updated to cover spill prevention and countermeasures for handling of these materials.

Prior to removing the equipment, all hazardous materials will be drained or transferred. The transfer of diesel fuel, HTF, hydraulic fluids and oils would be directly from the tanks or storage containers to a tanker truck. After removal, all tanks and storage containers would be rinsed and the remaining water containing low concentrations of contaminants would be transferred into a tanker truck for disposal offsite. The planned use, handling, disposal, and transportation of the hazardous materials from the facility would continue to be in compliance with applicable LORS.

During the demolition of the SEGS III-VII project, there are several hazardous materials that would be used in the decommissioning, including gasoline, diesel fuel, oil, lubricants, welding gases and small quantities of solvents. No extremely hazardous or regulated hazardous materials would be used on site specifically for demolition. None of these materials pose a significant potential for offsite impacts as a result of the quantities on site, their relative low toxicity, their physical state, and/or their environmental mobility. Any impact of spills or other releases of these materials would be limited to the site because of the small quantities involved, and/or the temporary containment berms used by contractors. Petroleum hydrocarbon-based motor fuels, mineral oil, lube oil, and diesel fuels represent limited off-site hazards even in larger quantities.

CONCLUSIONS AND RECOMMENDATIONS

CEC staff recommends adoption of the decommissioning and demolition plan and concludes that with the implementation of measure **D-HAZ-1**, the hazardous material impacts to the environment would be less than significant and the project would comply with applicable LORS.

REFERENCES

NextEra 2021d – Tetra Tech, Inc. / Jennifer Merrick, Applicant Consultant for project owner, Luz Solar Partners III-VII, (tn 237500). SEGS III-VII Facility Decommissioning Plan, dated, 04/20/2021. Submitted to CEC/Dockets on 04/20/2021.Available online at:https://efiling.energy.ca.gov/GetDocument.aspx?tn=236752&DocumentContentId=69784

SEGS 2018 – Solar Energy Generating Systems III-VII. (TN 225713). Cold Layup Plan - SEGS III-VII Kramer Junction (87-AFC-01C), dated September 2018. Available at:https://efiling.energy.ca.gov/GetDocument.aspx?tn=225713&DocumentContentId=56390

CEC 1988 – California Energy Commission – SEGS III-VII Kramer Junction Final Decision March 1988

LAND USE

Jeanine Hinde

INTRODUCTION

In this section, CEC staff discusses the SEGS Units III–VII Facility Decommissioning Plan (NextEra 2021d) relating to the topic of **Land Use**. The purpose of this analysis is to determine whether decommissioning, demolition, and facility removal activities would avoid significant impacts on land use and comply with applicable LORS.

EXISTING SETTING

The SEGS III–VII facilities cover approximately 1,019 acres within a sparsely populated area of the Mojave Desert. The developed site is situated on generally level desert terrain in the Kramer Basin.

LAWS, ORDINANCES, REGULATIONS, AND STANDARDS

The County of San Bernardino (County) adopted its Countywide Plan in October 2020, which replaces the County's 2007 General Plan. The Countywide Plan shows that the site has the land use category designation of RLM, Resource/Land Management. The RLM category has the following description of typical uses:

- Natural resource conservation, such as watersheds, habitat areas and corridors, wilderness study areas, areas of critical environmental concern, and national conservation lands.
- Mineral resource extraction and processing, commercial agriculture and grazing.
- Military facilities, operations, and training areas.
- Recreation areas.
- Renewable energy facilities consistent with the Renewable Energy and Conservation Element.
- Single family homes on very large parcels.
- Limited and low-density commercial development.
- Lands under the control of the state or federal government or tribal entities.

The Renewable Energy and Conservation Element includes a new policy: "RE Policy 4.10: Prohibit utility-oriented [renewable energy] RE project development on sites that would create adverse impacts on the quality of life or economic development opportunities in existing unincorporated communities." RE 4.10.1 prohibits "development of utility-oriented RE projects in the Rural Living land use districts throughout the County" (County of San Bernardino 2020). The site is not in the Rural Living land use district. SEGS III-VII

is an existing solar energy facility, and no conflicts with the RLM land use category or RE Policy 4.10 would occur.

The project owner will be required to obtain a demolition permit from the County Building and Safety Division to ensure compliance with County regulatory requirements for the partial or complete removal of a permitted building or structure. (See the subsection below, "Additional Proposed Measures.")The repowering of SEGS III–VII as a solar photovoltaic (PV) project will be accomplished under the local jurisdiction of the County and will be permitted through the County's Conditional Use Permit (CUP) process. Decommissioning, demolition, and facility removal activities would not conflict with land use plans or policies or other land use LORS.

APPLICABLE CONDITIONS OF CERTIFICATION

No adopted COCs pertaining to land use apply to the decommissioning, demolition, and facility removal activities at the SEGS III–VII site.

ADDITIONAL PROPOSED MEASURES

The project owner has applied to obtain a Conditional Use Permit from the County that will include decommissioning and demolition of the existing SEGS III–VII solar thermal facilities and redevelopment of the site for a solar PV system. The County's conditions of approval will include a requirement for a Demolition Permit for any buildings or structures to be demolished, and the project owner and its contractor(s) will be required to comply with all County demolition and recycling requirements and regulations.

The project owner proposed a measure to obtain a Demolition Permit according to County requirements. CEC staff recommends changes to the measure. ~~Strikethrough~~ is used to indicate deleted language. **Bold underline** indicates new language, including the addition of verification to the measure.

D-LU-1: The project owner ~~will apply for~~ **shall** obtain a Demolition Permit from the County of San Bernardino prior to the start of demolition activities.

Verification: The project owner shall submit a copy of the Demolition Permit ~~application~~ to the CEC CPM **within 2 business days of issuance from the County of San Bernardino** and prior to the start of demolition activities.

ANALYSIS

The project owner will be required to obtain a Demolition Permit from the County's Land Use Services Department, Building and Safety Division. With implementation of the project owner's proposed measure and CEC staff's recommended changes to **D-LU-1**, the project would comply with applicable land use LORS.

Decommissioning and demolition of SEGS III–VII would include dismantling and removing power block equipment, cooling towers, parabolic mirrors and associated apparatus, and some of the support and miscellaneous buildings. Various hazardous materials would be removed from the site. Implementation of adopted COCs and other measures recommended by CEC staff and the project owner would ensure that environmental impacts relating in part to land use would be avoided or reduced to less than significant. (The other sections of this document discuss all environmental issues, including potential air quality impacts from mechanized equipment; hazardous materials handling and transport; management, removal, and disposal of waste materials; impacts on transportation routes; and noise and vibration effects.)

CONCLUSIONS AND RECOMMENDATIONS

No adopted COCs pertaining to land use apply to the decommissioning and demolition activities at the SEGS III–VII site. With implementation of the project owner's proposed measure and CEC staff's recommended changes to **D-LU-1**, the project would comply with applicable land use LORS. Adopted COCs and other measures recommended by CEC staff and the project owner would ensure that decommissioning and demolition activities would not physically divide an established community or cause a significant environmental impact due to a conflict with LORS adopted for the purpose of avoiding or mitigating an environmental effect. The activities would not result in the conversion of Farmland or forest land.

REFERENCES

County of San Bernardino 2020 – County of San Bernardino Countywide Plan. County Policy Plan: Built Environment Section/Land Use Element, Table LU-1 Land Use Categories; Renewable Energy and Conservation Element, p. 41 (adopted 2017 and amended February 2019).LU-1 Land Use Map. Adopted October 27, 2020; Resolution No. 2020-197. Available online at: http://countywideplan.com/countywide-plan-adopted/

NextEra 2021d – Tetra Tech, Inc. / Jennifer Merrick, Applicant Consultant for project owner, Luz Solar Partners III-VII, (TN 237500). SEGS III-VII Facility Decommissioning Plan, dated, April 20, 2021. Submitted to CEC/Dockets on April 20, 2021. SEGS III-VII 1988 – Final Decision (87-AFC-01C), dated May 1988. Available at: https://ww2.energy.ca.gov/sitingcases/pre1999_page/index.php?xkm=ajdkha2385duhkasd166dsasjd5598fhajkhs

NOISE

Kenneth Salyphone

INTRODUCTION

In this section, CEC staff discusses the SEGS III - VII Decommissioning and Demolition Plan (TN#237500) in relation to the technical area of **NOISE**. The purpose of this analysis is to determine whether decommissioning and demolition of the facility would be undertaken in a manner that avoids significant impacts on **NOISE** and would be in compliance with applicable LORS.

EXISTING SETTING

The SEGS III - VII operated as a concentrated solar thermal power facility generating 150 megawatts of electricity. It would undergo decommissioning and demolition activities. Demolition activities would include the dismantling and removal of above-ground structures – parabolic mirrors and their supports, cooling towers, the power block (steam turbine generators, storage tanks, heat exchangers, pumps, and other ancillary equipment) and support and miscellaneous buildings.

The nearest sensitive noise receptor is approximately 0.88 mile of the project area.

LAWS, ORDINANCES, REGULATIONS, AND STANDARDS

Noise Table 1 below identifies the noise LORS related to SEGS III-VII.

Noise Table 1
Laws, Ordinances, Regulations, and Standards

Applicable LORS	Description	Consistency
Federal		
Occupational Safety & Health Act (OSHA), Title 29, Code of Federal Regulations, § 1910.95. Title 29, USC §651 et seq.	Regulated the worker noise exposure to 90 decibels (dBA) over an 8-hour work shift. Areas above 85 dBA need to be posted as high noise level area and hearing protection will be required.	Consistent: Decommissioning and demolition activities would comply with these requirements.
State		

Applicable LORS	Description	Consistency
Federal		
California Occupational Safety & Health Act (Cal-OSHA): Title 8, California Code of Regulations, § 5095 et seq.	Establishes Cal-OSHA employee noise exposure limits. These standards are equivalent to the Federal OSHA standards. Worker noise exposure is limited to 90 dBA over an 8-hour work shift. Areas where worker noise exposure exceeds 85 dBA must be posted as a noise hazard zone and a hearing conservation program is required.	Consistent: Decommissioning and demolition activities would comply with these requirements.
Local		
County of San Bernardino (SB) County General Plan (2007) Noise Element; SB County Development Code (Amended 2019).	Defines the land noise levels that are normally acceptable in residential areas as between 45 and 55 dBA.	Consistent: Decommissioning and demolition activities would comply with these requirements.

FEDERAL

Under the Occupational Safety and Health Act of 1970, the Department of Labor, Occupational Safety and Health Administration (OSHA) adopted regulations Title29 § 1910.95, designed to protect workers against the effects of occupational noise exposure.

These regulations list permissible noise exposure levels as a function of the amount of time during which workers are exposed to those noise levels. The regulations further specify a hearing protection program that involves monitoring the noise to which workers are exposed, assuring that workers are made aware of overexposure to noise, and periodically testing the workers' hearing to detect any hearing degradation.

STATE

The California Occupational Safety and Health Administration (Cal-OSHA) has adopted occupational noise exposure regulations (California Code of Regulations Title 8 § 5095) that set employee noise exposure limits. These standards are equivalent to federal OSHA standards (see **Noise Table 1**).

LOCAL

County of San Bernardino

Facility decommissioning and demolition noise within the county of San Bernardino would be regulated by the San Bernardino County General Plan and the County Development Code.

APPLICABLE CONDITIONS OF CERTIFICATION

The following are applicable Conditions of Certifications that would be implemented during the decommissioning and demolition activities to ensure compliance with applicable LORS.

NOISE-1 The project will comply with occupancy noise safety requirements and provide hearing protection to workers during demolition activities.

NOISE-2 All construction equipment used for decommissioning and demolition shall be muffled in accordance with manufacturers' specifications.

NOISE-3 Decommissioning activities will be limited to the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday, in accordance with the County of San Bernardino Development Code standards.

ADDITIONAL PROPOSED MEASURES

None are proposed.

ANALYSIS

The decommissioning and demolition activities would temporarily elevate the ambient noise levels in the surrounding areas. Decommissioning and demolition activities would be limited to the hours of 7 a.m. to 7 p.m., Monday through Saturday, in accordance with the County of San Bernardino Development Code. The project would also comply with occupational noise safety requirements and provide hearing protection to workers during demolition activities.

Decommissioning and demolition equipment would be muffled in accordance with manufacturers' specifications and given that the nearest sensitive receptor is over 0.75 miles from the facility site, the demolition activities would not exceed the acceptable noise levels for residential areas.

CONCLUSIONS AND RECOMMENDATIONS

The project decommissioning and demolition activities would comply with the applicable LORS and create a less-than-significant impact in regards to **NOISE**.

REFERENCES

NextEra 2021d – Tetra Tech, Inc. / Jennifer Merrick, Applicant Consultant for project owner, Luz Solar Partners III-VII, (tn 237500). SEGS III-VII Facility

Decommissioning Plan, dated, 04/20/2021. Submitted to CEC/Dockets on 04/20/2021

PUBLIC HEALTH

Tao Jiang

INTRODUCTION

In this section, CEC staff discusses the SEGS III-VII facility decommissioning plan, as described in the Facility Plan (NextEra 2021d) in relation to the technical area of **Public Health**. The purpose of this analysis is to determine whether decommissioning of the facility would avoid significant public health impacts and would be in compliance with applicable LORS.

EXISTING SETTING

SEGS III-VII is considered nonattainment for state and federal ambient air quality standards of ozone and particulate matter less than ten microns (PM10). The project site is very arid, characterized with low annual rainfall, hot summers, and moderate winters. The surrounding area has a low population density. However, maps indicate there are structures near the site that could be residences or worksites.

LAWS, ORDINANCES, REGULATIONS, AND STANDARDS

CEC staff reviewed the SEGS III-VII Facility Decommissioning Plan to determine compliance with the listed LORS and practices in **Public Health Table 1**. CEC staff notes additional LORS related to public health are included in the **Air Quality**, **Hazardous Materials Management**, **Worker Safety and Fire Protection**, and **Waste Management** sections of this CEC staff analysis.

Public Health Table 1
Laws, Ordinances, Regulations, and Standards

Applicable LORS	Description	Consistency
Federal		
Title 29 U.S. Code (USC) section 651 et seq (Occupational Safety and Health Act of 1970)	This act mandates safety requirements in the workplace.	Consistent: The project owner would be required to comply with **Worker Safety and Fire Protection** conditions of certification. These conditions are consistent with OSHA requirements.
Title 40, Code of Federal Regulations, part 61 (National Emission Standards for Hazardous Air Pollutants)	Part 61 establishes national emission standards for hazardous air pollutants. Subpart M establishes requirements for demolition and renovation activities.	Consistent: MDAQMD Rule 1000 incorporates Subpart M by reference. Proposed condition of certification **D-PH-1** would require the project owner to comply with the MDAQMD asbestos program. The MDAQMD asbestos program is

Applicable LORS	Description	Consistency
		consistent with Subpart M requirements.
State		
Health & Safety Code, sections 41700-41701 (General Limitations)	Establishes nuisance and visible emission requirements. Prohibits discharge of such quantities of air contaminants that cause injury, detriment, nuisance, or annoyance.	Consistent: The **Public Health** and **Air Quality** conditions of certification would require measures that would reduce the potential for nuisance or visible emissions from decommissioning and demolition activities.
Title 13, California Code of Regulations, section 2449 (General Requirements for In-Use Off-Road Diesel Fueled Fleets)	Imposes idling limits of five minutes, requires a plan for emission reductions for medium to large fleets, requires all vehicle with engines greater than 25 horsepower to be reported to the California Air Resources Board (CARB) and labeled, and restricts adding older vehicles into fleets.	Consistent: The **Public Health** and **Air Quality** conditions of certification would require strategies to reduce emissions from decommissioning and demolition activities. With the adherence to these emission control strategies, the decommissioning activities are not expected to significantly impact the MDAB CAAQS attainment status.
Local		
County of San Bernardino Development Code	Implements the goals and policies of the General Plan by regulating land uses within the unincorporated areas of the County. Includes provisions for the reduction of diesel emissions and fugitive dust control.	Consistent: The project owner would be required to comply with the proposed conditions of certification. The proposed conditions of certification are consistent with the County of San Bernardino Development Code requirements.
Mojave Desert Air Quality Management District Regulation IV – Prohibitions Rule 403 (Fugitive Dust)	Establishes requirements to minimize fugitive dust. Requires every reasonable precaution to minimize fugitive dust emissions from activities and prohibits visible dust beyond the emission source's property line.	Consistent: The **Public Health** and **Air Quality** conditions of certification would require the project owner to follow strategies to minimize fugitive dust consistent with the MDAQMD requirements.
Mojave Desert Air Quality Management District Regulation IV – Prohibitions Rule 403.2 (Fugitive Dust Control for the Mojave Desert Planning Area)	Establishes requirements for demolition activity to implement specific control measures to ensure the national ambient air quality standards for PM10 will not be exceeded.	Consistent: The **Public Health** and **Air Quality** conditions of certification would require the project owner to follow strategies to minimize fugitive dust consistent with the MDAQMD requirements.
Mojave Desert Air Quality Management District Regulation X– Emission Standards for Additional Specific Air Contaminants	Incorporates by reference all the applicable provisions regarding National Emission Standards for Hazardous Air Pollutants in Title	Consistent: MDAQMD Rule 1000 incorporates Subpart M by reference. Proposed condition of certification **D-PH-1** would require the project owner to

Applicable LORS	Description	Consistency
Rule 1000 (National Emission Standards for Hazardous Air Pollutants)	40, Code of Federal Regulations, part 61.	comply with the MDAQMD asbestos program. The MDAQMD asbestos program is consistent with Subpart M requirements.

APPLICABLE CONDITIONS OF CERTIFICATION

Decommissioning activities would take place within the existing facility footprint. The existing **Public Health** Conditions of Certification **2-4** would be applicable to the decommissioning activities. CEC staff proposes minor revisions shown in ~~strikethrough~~ and **bold/underline**.

2-4 ~~Luz~~**The project owner** shall ensure that all hazardous materials on-site are handled as specified in ~~Luz's~~ **the** Safety Plan for ~~all~~ SEGS **III-VII** units with regard to:

- Worker protection
- Respiratory protection
- Disposal of HTF-contaminated materials
- Worker hazard training and communication
- Health status monitoring
- Accidental spill identification and reporting
- Hazardous waste management (for chemicals other than HTF)

Verification: 30 days before the start of **decommissioning**, **the project owner** shall provide to the CEC compliance project manager (CPM) verification that it intends to adhere to all the requirements detailed in **the** Safety Plan with regard to the areas listed above.

ADDITIONAL PROPOSED MEASURES

The project owner also proposes new COCs specific to public health, **D-PH-1**and **D-PH-2**, shown below. CEC staff proposes minor revisions shown in and **bold/underline**.

D-PH-1: The project owner shall ensure all required asbestos related notification and removal testing is performed prior to decommissioning. The project owner shall comply with all Mojave Desert Air Quality Management District (MDAQMD) Rule 1000 asbestos related activities in the monthly compliance report. ~~The Project Owner shall submit the monthly compliance report to the CPM within 30 days of the end of each month.~~

Verification: The project owner shall submit a monthly compliance report (MCR) to the CPM within 30 days of the end of each month to demonstrate compliance with condition D-PH-1.

D-PH-2: The project owner shall comply with the County of San Bernardino Development Code control measures for diesel exhaust emissions. The project owner shall include a statement of compliance in the monthly compliance report.

Verification: The project owner shall submit a MCR to the CPM within 30 days of the end of each month to demonstrate compliance with condition D-PH-2.

ANALYSIS

The project owner is proposing to decommission SEGS III-VII to make way for a new photovoltaic (PV) solar facility (not under the jurisdiction of the CEC). Decommissioning activities are divided into four main phases, including mobilization, HTF removal and De-energize, mirror farm removal and power generation facility demolition.

In addition to the analysis in this **Public Health** section that focuses on potential effects on the public from emissions of toxic air contaminants (TACs), Energy Commission CEC staff addresses the potential impacts of regulated, or criteria, air pollutants in the **Air Quality** section and assesses the health impacts on public and workers from accidental releases of hazardous materials in the **Hazardous Materials Management and Worker Safety** & **Fire Protection** sections. The health and nuisance effects from electric and magnetic fields are discussed in the **Transmission Line Safety and Nuisance** section. Pollutants released from the project's wastewater streams are discussed in the **Soil and Water Resources** section. Releases in the form of hazardous and nonhazardous wastes are described in the **Waste Management** section.

Asbestos

Asbestos containing material can become a health hazard when disturbed. Asbestos is classified as a known carcinogen and may also increase the risk of other lung diseases. Health risks from asbestos exposure increases with heavier exposure and longer exposure periods. However, asbestos related diseases have also occurred with brief exposures.

Asbestos containing structures and material are also not currently known to be present on the site. However, there are several LORS pertaining to the handling and disposal of asbestos containing materials since it can become an airborne hazard. The project owner stated in the testing would be performed prior to the start of decommissioning.

The federal Asbestos National Emission Standard for Hazardous Air Pollutants (NESHAP), as specified under 40 CFR 61, Subpart M, applies to asbestos removal and demolitions and is enforced locally by the Mojave Desert Air Quality Management District (MDAQMD).

MDAQMD Rule 1000 adopts the federal asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP) requirements by reference. The project owner is responsible for submitting a notification of demolition/renovation or an asbestos checklist indicating a demolition/renovation form is not required to the MDAQMD. CEC staff recommends new Public Health Condition of Certification **D-PH-1** to incorporate the requirements of the MDAQMD asbestos program.

In addition, San Bernardino County owned and operated sanitary landfills, and transfer stations are not permitted to accept asbestos contaminated wastes. Therefore, any debris generated by the demolition of structures are subject to asbestos clearance prior to disposal at any San Bernardino County disposal sites. Applicants are required to have a Certified Asbestos Consultant perform testing of all materials to be disposed. Upon receipt of the Consultant's report, indicating that the debris is not contaminated, Solid Waste Management Operations Section provides the applicant with disposal authorization. The project owner is required to perform asbestos testing of demolition debris prior to disposal.

Fugitive Dust

Decommissioning activities would result in short-term localized air quality impacts from fugitive dust. Fugitive dust can be generated by mobilization and demolition at the site, vehicle travel over paved and unpaved surfaces, storage piles, and dust from concrete loading, crushing, and unloading operations. Potential risks to public health during decommissioning from fugitive dust would be associated with increased exposure to particulate matter, potential exposure to crystalline silica from concrete operations, and toxins disturbed in the soil.

Concrete crushing at construction sites can generate respirable crystalline silica dust. Silica dust has been classified as a lung carcinogen. The inhalation of silica dust can cause the formation of scar tissue which reduces the lungs ability to take in oxygen, lung disease, chronic obstructive pulmonary disease, and kidney disease.

The Occupational Safety and Health Administration (OSHA) has developed standards to limit worker exposure to respirable crystalline silica. Worker exposure to crystalline silica can occur from the use of jackhammers, chipping tools, grinders, and crushing machines. OSHA requires a written exposure control plan identifying tasks that involve exposure and methods used to protect workers. OSHA requirements are addressed in the **Worker Safety and Fire** Protection section of this CEC staff analysis.

MDAQMD Fugitive Dust Rule 403 requires a person to take every reasonable precaution to minimize fugitive dust emissions from wrecking, excavation, grading clearing of land, and solid waste disposal. MDAQMD Rule 403 also requires visible dust to stay within a property line and every reasonable precaution to prevent visible particulate matter from being deposited on public roadways.

MDAQMD Fugitive Dust Control for the Mojave Desert Planning Area Rule 403.2 includes control measures in the Mojave Desert Planning Area Federal PM10 Attainment Plan. This rule requires construction/demolition of a source disturbing 100 or more acres to prepare and submit a dust control plan. This rule is intended to ensure the National Ambient Air Quality Standards for PM10 are not exceeded due to anthropogenic fugitive dust.

MDAQMD Rule 403.2 outlines specific elements to be included in the plan depending on the size of the construction/demolition activity. A dust control plan should be accessible on site and maintained for at least two years after the date of entry. In addition, MDAQMD Dust Control Plan Approval Requirements includes written guidance regarding the approval of such plans. The guidance states the dust control plan should include reasonably foreseeable or planned, as well as existing, activities on the site.

The **Air Quality** analysis recommends the addition of a new condition of certification, **D-AQ-1**, requiring the project owner to develop a Dust Control Plan (DCP) to be submitted to the MDAQMD. CEC staff is recommending Public Health Condition of Certification **D-PH-2**, requiring the dust control plan to include all reasonably foreseeable activities on the site occurring during decommissioning.

Valley Fever

Valley fever is an illness caused by a fungus found in the soil and dirt of regions including the southwestern United States. Symptoms include fever, chest pain, and coughing, among other signs. In California, the fungus is found in many areas of the San Joaquin Valley. The fungi's spores can be released into the air by anything that disrupts the soil, such as farming, construction, and wind. The fungi can then be breathed into the lungs and cause valley fever, also known as acute coccidioidomycosis. Historically, San Bernardino County has not been considered a highly endemic region for valley fever. However, annual recorded cases of coccidioidomycosis in San Bernardino County have been increasing. According to the California Department of Public Health (CDPH 2020), 101 cases have been recorded in 2020 as of May 31st. In comparison, the 2019 May report included 87 cases and the 2018 May report included 33 cases. Incorporating every reasonable precaution to control fugitive dust would lower the likelihood of potential exposure to the fungus causing valley fever. Concerns with Valley Fever would be adequately addressed through dust control requirements and measures addressed in the **Worker Safety and Fire Protection** section of this CEC staff analysis.

Diesel Particulate Matter (DPM)

The demolition activities would include the operations of diesel-fueled construction equipment. Diesel engines are a major source of fine-particle pollution. California classifies diesel exhaust or diesel particulate matter (DPM) as a toxic air contaminant based on its potential to cause cancer. Risks are associated with the level and duration of exposure.

Prolonged exposure to DPM can increase risks of cardiovascular, cardiopulmonary and respiratory disease, and lung cancer. Short term exposures to high concentrations of DPM can result in headache, dizziness, and irritation of the eye, nose, and throat. The elderly and people with emphysema, asthma, and chronic heart and lung disease are especially sensitive to fine-particle pollution. Children are also more susceptible than healthy adults to fine particles since their lungs and respiratory systems are still developing. Exposure to fine particles is associated with increased frequency of childhood illnesses and can also reduce lung function in children.

Any diesel equipment used at the site would be required to meet State of California diesel requirements. As applicable, the diesel equipment used would need to be registered through the Statewide Portable Equipment Registration Program or Diesel Off-road On-line Reporting System and associated equipment permits would need to be retained onsite. In addition, the California Air Resources Board (CARB) developed an airborne toxic control measure to limit diesel fueled commercial motor vehicle idling.

The County of San Bernardino Development Code establishes general performance standards to mitigate environmental impacts from new and existing land uses. The County of San Bernardino Development Code includes measures for controlling diesel exhaust emissions. Measures include idling requirements for off-road diesel vehicle/equipment operations, the fuel requirements, engine and equipment maintenance requirements, signs requiring vehicles to turn off engines when parked, MDAQMD requirements, temporary traffic control, onsite electrical connections where feasible to reduce the use of diesel-powered tools and generators, and substituting electric and gasoline powered equipment for diesel equipment where feasible. In addition, the developer is responsible for certifying the construction equipment is properly serviced and maintained in good operating condition.

CEC staff is recommending Public Health Condition of Certification **D-PH-2**, requiring compliance with County of San Bernardino Development Code for controlling diesel exhaust emissions.

CONCLUSIONS AND RECOMMENDATIONS

Potential risks to public health during decommissioning would be associated with contact or exposure to hazardous waste, exposure to toxic substances in contaminated soil, as well as diesel exhaust from off-road equipment operation during demolition activities. CEC staff concludes that implementation of the revised COC **2-4,** the proposed new COCs **D-PH-1** and **D-PH-2**, in addition to proposed conditions in the **Air Quality**, **Hazardous Materials**, **Worker Safety and Fire Protection**, and **Waste Management** sections of this CEC staff analysis, would ensure that the decommissioning activities outlined in the SEGS III-VII Decommissioning Plan, would comply with applicable LORS and would not result in significant impacts to public health.

REFERENCE

NextEra 2021d – Tetra Tech, Inc. / Jennifer Merrick, Applicant Consultant for project owner, Luz Solar Partners III-VII, (tn 237500). SEGS III-VII Facility Decommissioning Plan, dated, 04/20/2021. Submitted to CEC/Dockets on 04/20/2021

SOCIOECONOMICS

Ellen LeFevre

INTRODUCTION

In this section, CEC staff discusses the SEGS III-VII Facility Decommissioning Plan (NextEra 2021d) in relation to the technical area of **Socioeconomics**. The purpose of this analysis is to determine whether decommissioning of SEGS III-VII would avoid significant impacts on socioeconomics and comply with LORS.

EXISTING SETTING

SEGS III-VII is the setting for the labor supply for decommissioning and demolition activities would be the Riverside-San Bernardino-Ontario Metropolitan Statistical Area (MSA), which covers Riverside and San Bernardino counties.

LAWS, ORDINANCES, REGULATIONS, AND STANDARDS

There are no socioeconomic LORS applicable to the decommissioning and demolition activities.

APPLICABLE CONDITIONS OF CERTIFICATION

No adopted COCs pertaining to socioeconomics apply to the decommissioning and demolition activities at the SEGS VIII site.

ADDITIONAL PROPOSED MEASURES

None.

ANALYSIS

The decommissioning activities associated with SEGS III-VII would take approximately 7 to 8 months to complete and require a peak workforce of approximately 125 workers. The large workforce in the Riverside-San Bernardino-Ontario MSA is sufficient for the activities associated with decommissioning of SEGS III-VII. If some workers were to temporarily relocate closer to the facility site, there is sufficient housing in the nearby City of Barstow. The decommissioning of SEGS III-VII would have less than significant socioeconomic impacts.

CONCLUSIONS AND RECOMMENDATIONS

From a socioeconomic standpoint, the activities associated with the Facility Decommissioning Plan would have less than significant workforce-related impacts on population, housing, and public services including fire and police protection, schools, parks, recreation, and other public facilities.

REFERENCES

CA DOF 2020 – California Department of Finance (CA DOF). E-5 Population and Housing Estimates for Cities, Counties and the State – January 1 2011-2020, with 2010 Benchmark, May 2020. Available online at: https://dof.ca.gov/Forecasting/Demographics/Estimates/E-5/

EDD 2021 – Employment Development Department, State of California (CA EDD). Labor Market Information Division, 2018-2028 Occupational Employment Projections, Riverside-San Bernardino-Ontario Metropolitan Statistical Area, (Riverside and San Bernardino Counties), data last update March 5, 2021. Available online at: https://data.edd.ca.gov/Employment-Projections/Long-Term-Occupational-Employment-Projections/4yzm-uyfq

NextEra 2021d – Tetra Tech, Inc. / Jennifer Merrick, Applicant Consultant for project owner, Luz Solar Partners III-VII, (TN 237500). SEGS III-VII Facility Decommissioning Plan, dated, April 20, 2021. Submitted to CEC/Dockets on April 20, 2021. Available online at: https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=87-AFC-01C

SOIL AND WATER RESOURCES

Mike Conway

INTRODUCTION

In this section, CEC staff discusses the Solar Energy Generating System Units III through VII (SEGS III-VII) (87-AFC-01C) decommissioning and demolition, as described in the decommissioning plan (Tetra Tech 2021d) in relation to the technical area of **Soil and Water Resources**. The purpose of this analysis is to determine whether decommissioning and demolition of the facility would avoid significant impacts on soil and water resources and comply with applicable LORS.

EXISTING SETTING

SEGS VIII is an existing solar thermal electric generation facility located on flat alluvial fans of the Mojave Desert along the western edge of the dry lakebed of Harper Lake. Prior to construction of the project the land was used for agricultural production and later retired because of the high cost of pumping groundwater for irrigation (CEC 1989).

LAWS, ORDINANCES, REGULATIONS, AND, STANDARDS

CEC staff has reviewed the LORS identified in the Decision for the SEGS III-VII project and determined that they are still applicable.

Soil and Water Resources Table 1
Applicable Laws, Ordinances, Regulations, and Standards

Applicable LORS	Description	Consistency Determination
Federal		
Clean Water Act (33 USC Section 1257 et seq.)	The Clean Water Act (CWA) (33 USC § 1257 et seq.) requires states to set standards to protect water quality, which includes regulation of storm water and wastewater discharges during construction and operation of a facility. California established its regulations to comply with the CWA under the Porter-Cologne Water Quality Control Act of 1967. The CWA also establishes protection of navigable waters. Activities that result in the dredging or filling of jurisdictional waters of the United States require authorization under a Section 404 permit issued by the Army Corps of Engineers (USACE). The USACE may grant authorization under either an individual permit or a nationwide permit to address operations that may affect the ephemeral washes. Section 404 permits are also subject to CWA Section 401 water quality certification through the Regional Water Quality Control Board (RWQCB). Section 401 certification through the RWQCB is required if there are potential impacts to surface waters of the State and/or Waters of the United States, such as perennial and ephemeral drainages, streams, washes, ponds, pools, and wetlands. The RWQCB can require impacts to these waters to be quantified and mitigated.	Consistent: Consistency ensured by compliance with Measures **D-S&W-1** and **D-S&W-2**
State		
The Porter-Cologne Water Quality Control Act of 1967, Water Code Sec 13000 et seq	Requires the State Water Resources Control Board (SWRCB) and the nine RWQCBs to adopt water quality criteria to protect state waters. Those regulations require that the RWQCBs issue Waste Discharge Requirements specifying conditions for protection of water quality as applicable. Section 13000 also states that the State must be prepared to exercise its full power and jurisdiction to protect the quality of the waters of the State from degradation.	Consistent: Consistency ensured by compliance with Measures **D-S&W-1** and **D-S&W-2**
State Water Resources Control Board General Permit CAS000002.	The SWRCB regulates storm water discharges associated with construction projects affecting areas greater than or equal to 1 acre to	Consistent: Consistency ensured by compliance

Applicable LORS	Description	Consistency Determination
	protect state waters. Under General Permit CAS000002, the SWRCB has issued a National Pollutant Discharge Elimination System (NPDES) General Permit for storm water discharges associated with construction activity. Projects can qualify under this permit if specific criteria are met and an acceptable Storm Water Pollution Prevention Plan (SWPPP) is prepared and implemented after notifying the SWRCB with a Notice of Intent.	with Measures **D-S&W-1** and **D-S&W-2**
California Water Code Section 13240, 13241, 13242, 13243, & Water Quality Control Plan for the Lahontan Region (Basin Plan)	The Basin Plan establishes water quality objectives that protect the beneficial uses of surface water and groundwater in the Region. The Basin Plan describes implementation plans and other control measures designed to ensure compliance with statewide plans and policies and provides comprehensive water quality planning. The following chapters are applicable to determining appropriate control measures and cleanup levels to protect beneficial uses and to meet the water quality objectives: Chapter 2, Present and Potential Beneficial Uses; Chapter 3, Water Quality Objectives, and the sections of Chapter 4, Implementation, entitled "Requirements for Site Investigation and Remediation," "Cleanup Levels," "Risk Assessment," "Stormwater Problems and Control Measures," Erosion and Sedimentation," "Solid and Liquid Waste Disposal to Land," and "Groundwater Protection and Management."	Consistent: Consistency ensured by compliance with Measure **D-S&W-1** and **D-S&W-2**
Local		
County of San Bernardino General Plan and Development Code	Grading in San Bernardino County is subject to terms and conditions of San Bernardino County's General Plan, Development Code and California Building Code, based upon the 2006 International Building Code. If a county grading permit is required, the grading plan would need to be completed in compliance with San Bernardino County's General Plan and Development Code.	Consistent: Consistency ensured by compliance with Measure **D-S&W-1**
San Bernardino County Development Code Section 82.13.080, Soil Erosion and Sediment Control Plans/Permits	Section 82.13.080 establishes regulations and procedures to control human existing and potential induced accelerated erosion. Elements of this ordinance include project planning, preparation of Soil Erosion and Sediment Control Plans, runoff control, land clearing, and winter operations.	Consistent: Consistency ensured by compliance with Measures **D-S&W-1**

APPLICABLE CONDITIONS OF CERTIFICATION

Decommissioning activities would take place within the existing facility footprint. The existing COCs in the Commission Decision and subsequent amendments are still applicable to minimize unmitigated significant impacts to soil and water resources. The proposed decommissioning of the project would not result in any necessary changes to the existing COCs for **Soil and Water Resources** (formerly titled Water Resources).

ADDITIONAL PROPOSED MEASURES

In addition to the existing COCs, the project owner is proposing the following two additional decommissioning COCs, **D-S&W-1**and **D-S&W-2**, to ensure that impacts of the decommissioning activities on soil and water resources would be less than significant, and to focus their compliance effort. CEC staff recommends changes to the measures. ~~Strikethrough~~ is used to indicate deleted language. **Bold underline** indicates new language, including the addition of verifications to the measures.

D-S&W-1: The project owner shall develop and implement a Stormwater Pollution Prevention Plan (SWPPP) for the decommissioning and demolition of the facility. The SWPPP shall identify erosion control measures to be implemented and maintained during decommissioning and demolition activities.

Verification: The SWPPP shall be submitted to San Bernardino County and the compliance project manager (CPM) for review and comment prior to the start of decommissioning activities.

D-S&W-2: Any underground utility lines and piping that will be abandoned in place shall be cut, grouted, and capped at or below the ground surface. A map of all buried utility lines and piping that are proposed to be abandoned in place shall be prepared and submitted before decommissioning and closure are finalized.

Verification: Before decommissioning and closure are finalized, the project owner shall prepare a map showing any and all buried utility lines and piping and submit it to the CPM for approval.

The conditions proposed by the project owner, **D-S&W-1**and**D-S&W-2**, are adequate to ensure that there would be no unmitigated significant impacts on soil and water resources. The decommissioning and closure activities would not violate, or require action related to, the COCs contained in the original Water Resources section of the decision for this project.

ANALYSIS

Soil Erosion and Sedimentation

Based on the facility decommissioning plan provided by the project owner disturbance of soil at the site would be limited to areas immediately surrounding elements of the facility that will be removed, such as support structures and connections to buried utilities.

Since the facility is located within a topographically closed drainage basin and does not drain to waters of the United States, the project owner would not need to apply for coverage under the State Water Resources Control Board's General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2012-0006-DWQ). Instead, the project owner proposes to develop a SWPPP for review by the San Bernardino County. This would be adequate to ensure that soil and water resources are not threatened by storm water erosion or runoff.

The facility was also built on low-risk soils, with respect to erosion, and discharges to a waterbody classified as non-sensitive for sedimentation, Harper Lake. The proposed activity is therefore a low threat to local surface water quality.

To ensure that impacts from soil erosion and sedimentation are minimized, the owner proposes **D-S&W-1**. CEC staff agrees that this condition will provide adequate protection for water resources.

Water Use

The facility does not have a COC that limits water usage. Decommissioning and closure activities would require substantially less water than the project has been using for operation. The water, pumped from groundwater wells onsite, would be used primarily for dust control. The water usage for decommissioning and closure activities would not be expected to create an adverse impact.

Water Quality

In order to avoid negative impacts to the quality of groundwater and soil at the site, it would be necessary to ensure that no pathways for preferential movement of contaminants are created because of the decommissioning of this facility. Therefore, it is necessary to ensure that any wells, septic systems, and buried utility lines, be decommissioned in such a fashion as to preclude the possibility that surface, or subsurface, contamination would be able to migrate along high permeability pathways, such as an abandoned well casing or buried conduit. To ensure this does not occur, the owner proposes **D-S&W-2**, for approval by the CEC. CEC staff finds this condition to be adequate for the protection of water resources.

The SEGS III-VII facilities have been using an onsite water treatment system consisting of three evaporation ponds for treatment and disposal of operational wastewater generated by the facility. Water is supplied to the facility by the Antelope Valley East Kern Water Agency project. Supply water is treated with demineralizers prior to use as makeup water in the condensate systems and prior to being used as wash water for solar field reflective panels. The majority of the wastewater discharged from the facility is blowdown from the cooling towers, which contains concentrated salts. Other wastewater is from the demineralizers, condensate systems, plant drains, and containment structures. The waste streams are routed through a neutralization tank in each SEGS facility, where the pH is balanced prior to discharge to the evaporation ponds.

The wastewater discharged to the ponds contains total dissolved solids (TDS) at a concentration of about 4,500 mg/L. The wastewater within the ponds is expected to contain TDS at concentrations in the range of 20,000 to 250,000 mg/L. The ponds are also expected to contain biocides, corrosion inhibitors, scale inhibitors, and sodium hypochlorite that is used in the cooling tower to prevent biological growth and corrosion. These products remain as acids and salts in the wastewater and the ponds. Scale buildup in the condenser is minimized by adjusting the pH of the cooling tower basin water with sulfuric acid. Salts in the wastewater are the result of sulfuric acid and sodium hypochlorite addition. The groundwater monitoring parameters for the ponds are sodium, sulfate, and TDS. Other constituents of concern are chloride sodium sulfate, biphenyl diphenyl oxide potassium phosphate (Tetra Tech 2021d).

The ponds are no longer in use. Two of the ponds are dry, but the third one still contains some wastewater. The project owner proposes to continue its existing groundwater monitoring program until the ponds can be completely decommissioned in accordance with Lahontan Regional Water Quality Control Board (RWQCB) regulations. The project owner assumes that all solid waste (e.g., salts, sands, HDPE liners, leak detection drains, geotextile) from two of the ponds would be moved to the third pond. The two ponds that have been emptied would then be "clean" closed. The third pond would be sealed/capped as a landfill (Tetra Tech 2021d).

The SEGS III-VII evaporation ponds are permitted to operate according to Waste Discharge Requirements (WDR) (Order #6-97-58). These requirements specify how the ponds are operated and monitored by the owner to ensure adequate protection of water quality. The requirements for monitoring of the ponds are expected to be transitioned into new WDRs for the newly created landfill. The landfill is also expected to contain the residual solid wastes recovered during site decommissioning, and any waste products from the site's Land Treatment Unit and Bioremediation Unit (WDR Order #6-95-102).

The Lahontan RWQCB process for adopting new WDRs is expected to take at least six months. The process timeline would begin when the Lahontan RWQCB receives a complete Report of Waste Discharge (ROWD) application and would end when the new WDRs have been adopted by the Board. At this time, the Lahontan RWQCB has not

received a new ROWD from the SEGS III-VII project owner for the expected landfill (CEC 2021); however, the project owner expects to have new WDRs issued by the fourth quarter of 2021 (Tetra Tech 2021).

If the project owner complies with the proposed COCs, impacts to soil and water resources would be less than significant. The proposed decommissioning of the project would not result in any necessary changes or deletions to the existing COCs related to soil and water resources.

CONCLUSIONS AND RECOMMENDATIONS

After considering all the activities involved in the decommissioning and closure plan, the decommissioning of the facility would not result in any additional environmental impacts to soil and water resources relative to what was considered in the original CEC staff analysis and Decision for the facility (NextEra 2021d). The project would also continue to comply with applicable LORS.

With the CEC's approval of the Facility Decommissioning Plan and the adoption of the two COCs of decommissioning proposed by the project owner, **D-S&W-**1 and **D-S&W-2**, CEC staff concludes that the proposed decommissioning of the facility would not result in significant environmental impacts to soil and water resources.

REFERENCES

CEC 2021 – Record of conversation between John Steude, Lahontan Regional Water Quality Control Board and CEC staff. TN: 237657. April 20, 2021. Available at: https://efiling.energy.ca.gov/GetDocument.aspx?tn=237657&DocumentContentId=70887. Accessed on: May 12, 2021

NextEra 2021a – Tetra Tech, Inc. / Jennifer Merrick, Applicant Consultant (tn 236752). SEGS III-VII Draft Decommissioning Plan, dated, 02/12/2021. Submitted to CEC/Dockets on 02/12/2021

NextEra 2021d – Tetra Tech, Inc. / Jennifer Merrick, Applicant Consultant for project owner, Luz Solar Partners III-VII, (TN# 237500). SEGS III-VII Facility Decommissioning Plan, dated, 04/20/2021. Submitted to CEC/Dockets on 04/20/2021

TRANSPORTATION

Ashley Gutierrez

INTRODUCTION

In this section, CEC staff discusses the Solar Energy Generating System Units III-VII (SEGS III-VII) Facility Decommissioning Plan (NextEra 2021d) in relation to the technical area of **Transportation**. The purpose of this analysis is to determine whether decommissioning and demolition of the facility would avoid significant impacts on transportation and comply with applicable LORS.

EXISTING SETTING

SEGS III-VII is located at 41100 U.S. Highway 395 (US 395) in the City of Boron, one mile north of the town of Kramer Junction in San Bernardino County. Primary access to the site would be from US 395 and Pipeline Road. A military airport, Edward Air Force Base, is located approximately 17.5 miles southwest of the project site. The Barstow Daggett County Airport is located approximately 44 miles south east of the site. Railroad tracks run east-west, approximately one mile south of the site.

LAWS, ORDINANCES, REGULATIONS, AND STANDARDS

The following are transportation related LORS that are applicable to the proposed decommissioning and demolition activities.

Transportation Table 1
Laws, Ordinances, Regulations, and Standards

Applicable LORS	Description	Consistency
Federal		
Title 49, Subtitle B, Sections 171-177 and 350-399: Requires proper handling and storage of hazardous materials during transportation.	Requires proper handling and storage of hazardous materials during transportation Consistent.	Consistent: Consistency ensured with implementation of COC **D- TRAFFIC-1** which requires licensed haulers and approved vehicles for the transport of hazardous, toxic, and flammable materials.
State		
California Vehicle Code Division 2, 6, 12, 13, 14, 15: Includes regulations pertaining to licensing, size, weight, and load of vehicles operated on highways, safe operation of vehicles, and the transportation of hazardous materials.	Includes regulations pertaining to licensing, size, weight, and load of vehicles operated on highways, safe operation of vehicles, and the transportation of hazardous materials.	Consistent: Consistency ensured with implementation COC **24-1** and **D- TRAFFIC-1**, which require the project owner to comply with oversize and overweight vehicle regulations, and obtain necessary transportation permits. Hazardous, toxic, and flammable materials shall be

Applicable LORS	Description	Consistency
		transported in compliance with Department of Transportation, state agency, and local agency requirements.
Local		
San Bernardino County Congestion Management Program	Industrial and warehouse truck uses must show the estimated number and distribution of truck trips (in Passenger Car Equivalents) for both peak hours and hours b eing studied.	Consistent: Consistency ensured with implementation of **D- TRAFFIC-2** which requires the project owner to provide a decommission management plan.
San Bernardino County General Plan, Threshold Standards Policy	The County's Threshold Standards Policy requires that LOS D or better be maintained on intersections under the County's jurisdiction.	Consistent: Consistency ensured with implementation of **D-TRAFFIC-2**, which requires the project owner to provide a decommission management plan. It is not anticipated that level of service at any intersections under the County's jurisdiction would fall below LOS D as a result of the decommissioning activity.

APPLICABLE CONDITIONS OF CERTIFICATION

The following SEGS III-VII Transportation COC in the Decision would apply during decommissioning and demolition because large ancillary equipment (e.g., steam turbine generator, cooling tower) would be shipped off-site for disposal or recycling.

24-1 Luz shall comply with the Kern County, San Bernardino County, and Caltrans restrictions on oversize or over weight limit vehicles. Luz shall obtain necessary transportation permits from the counties and Caltrans.

Verification: In its annual compliance report, Luz shall notify the CEC CPM of any transportation permits obtained during the reporting period.

ADDITIONAL PROPOSED MEASURES

The following additional measures are proposed by the project owner to be implemented during decommissioning and demolition to further ensure that activities conform with applicable LORS. CEC staff recommends changes to the measures. ~~Strikethrough~~ is used to indicate deleted language. **Bold underline** indicates new language, including the addition of verifications to the measures.

D-TRAFFIC-1 The project owner shall utilize only licensed haulers, using approved vehicles marked in an appropriate manner, for the transportation of all hazardous, toxic, and flammable materials. All such materials shall be transported in compliance with all applicable requirements of the U.S. Department of Transportation, the California Highway Patrol, and the California Department of Transportation.

Verification: In its monthly status report, the project owner shall notify the CEC CPM of any transportation permits obtained during the reporting period.

D-TRAFFIC-2 The project owner shall provide a decommission management plan to the County of San Bernardino Department of Public Works, Transportation Operations Division to determine if a maintenance agreement with the County will be required. The decommission management plan shall show the number of trucks, type of trucks (size), the total number of Equivalent Single Axle Loads (ESALs), and the truck routes to the site for decommissioning activities. If it is determined that a maintenance agreement is required, the project owner shall enter into a maintenance agreement with the County Department of Public Works to ensure all County maintained roads utilized by decommission traffic shall remain in acceptable condition during closure activities. ~~and the project owner shall provide notification of transmittal and a copy of the maintenance agreement, if required, to the CPM. Following completion of any repairs, the project owner shall provide the CPM with letters signed by the County stating their satisfaction with the repairs~~.

Verification: Prior to the start of decommissioning activities, the project owner shall provide to the CPM documentation from the County stating whether preparation of a maintenance agreement is or is not required.

If the County determines a maintenance agreement is required, prior to the start of decommissioning activities, the project owner shall provide notification of transmittal and a copy of the maintenance agreement to the CPM. Following completion of any repairs, the project owner shall provide the CPM with letters signed by the County stating their satisfaction with the repairs.

ANALYSIS

The proposed activities would require a maximum of approximately 125 construction workers and 37 daily truck haul trips during the 7 to 8-month decommissioning and demolition period. Decommissioning-related vehicle ingress/egress would be scheduled to minimize traffic obstructions and not interfere with peak-hour traffic. Also, a flag person would be retained to maintain efficient traffic flow and safety adjacent to existing roadways. The Transportation COC **24-1** in the Final Decision is applicable to decommissioning and demolition. COCs **24-2** and **24-3** were applicable to initial project construction but are not applicable to decommissioning and demolition. The project owner has proposed **D-TRAFFIC-1** and **D-TRAFFIC-2** to be implemented during decommissioning and demolition. **D-TRAFFIC-1** would require the use of licensed haulers and approved vehicles to ensure compliance with all applicable regulations for the transport of hazardous, toxic, and flammable materials. **D-TRAFFIC-2** would require preparation of a decommission management plan to ensure compliance with the San Bernardino County Congestion Management Program's objectives and policies.

With implementation of the above COC and the project owner's additional measures, as supplemented by CEC staff, the decommissioning and demolition of SEGS III-VII would comply with applicable transportation LORS and have less than significant transportation impacts.

CONCLUSIONS AND RECOMMENDATIONS

The SEGS III-VII decommissioning and demolition activities would generate a negligible amount of temporary vehicle trips, which would not conflict with CEQA Guidelines section 15064.3, subdivision (b), with regards to vehicle miles traveled. Additionally, with the implementation of COC **24-1** in the Final Decision and the adoption of **D-TRAFFIC-1** and **D-TRAFFIC-2**, as supplemented by CEC staff above, the proposed activities would not conflict with LORS addressing the circulation system, substantially increase hazards, or result in inadequate emergency access. Therefore, the decommissioning and demolition of SEGS III-VII would result in less than significant impacts to transportation.

REFERENCES

SANBAG 2016 – San Bernardino Associated Governments (SANBAG). San Bernardino County Congestion Management Program, 2016 Update, dated June 2016. Available at: https://www.gosbcta.com/wp-content/uploads/2019/10/2016-Congestion-Management-Plan-.pdf

NextEra 2021d – Tetra Tech, Inc. / Jennifer Merrick, Applicant Consultant for project owner, Luz Solar Partners III-VII, (TN 237500). SEGS III-VII Facility Decommissioning Plan, dated, April 20, 2021. Submitted to CEC/Dockets on April 20, 2021.Available online at: https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=87-AFC-01C

TRANSMISSION LINE SAFETY AND NUISANCE

Tao Jiang

INTRODUCTION

In this section, CEC staff discusses the SEGS III-VII decommissioning in relation to the technical area of Transmission Line Safety and Nuisance. The purpose of this analysis is to determine whether decommissioning of the facility, as laid out in the Plan (NextEra 2021d), would avoid significant transmission line safety and nuisance impacts and would be in compliance with applicable LORS.

EXISTING SETTING

SEGS III-VII is located 1 mile north of Kramer Junction in San Bernardino County. The existing 1.4-mile 115 kilovolt generator tie-line that connects SEGS III-VII to Southern California Edison's Kramer Junction Substation will remain in place and be utilized for the future solar PV Project. On-site transmission poles and conductors will remain in place.

LAWS, ORDINANCES, REGULATIONS, AND STANDARDS

The LORS and practices listed in **Transmission Line Safety and Nuisance Table 1** apply to aviation safety, interference with radio frequency communication, audible noise, fire hazards, hazardous and nuisance shocks, and electric and magnetic fields. CEC staff reviewed the SEGS III-VII decommissioning plan to determine compliance with the listed LORS. The LORS conformance determination is included in the Analysis Section.

Transmission Line Safety and Nuisance Table 1
Laws, Ordinances, Regulations, and Standards

Applicable LORS	Description	Consistency
Aviation Safety		
Federal		
Title 14 Code of Federal Regulations Part 77 (Safe, Efficient Use and Preservation of the Navigable Airspace)	Describes the criteria used to determine the need for a Federal Aviation Administration (FAA) "Notice of Proposed Construction or Alteration" in cases of potential obstruction hazards.	Consistent: CEC staff does not expect decommissioning and demolition activities to create an obstruction hazard.
FAA Advisory Circular 70/7460-1L (Obstruction Marking and Lighting)	Describes the FAA standards for marking and lighting objects deemed an air navigation hazard	Consistent: CEC staff does not expect decommissioning and demolition activities to pose an air navigation hazard.
Communication Interference		
Federal		
Title 47 Code of Federal Regulations, part 15 (Radio Frequency Devices)	Regulates operation of devices that can interfere with communications.	Consistent: CEC staff does not expect decommissioning and

Applicable LORS	Description	Consistency
		demolition activities to interfere with communications.
Federal Communications Commission (FCC) Communications Act of 1934 as amended by the Telecom Act of 1996	Creates the Federal Communication Commission tasked with regulating communications by radio, television, wire and satellite. The FCC regulations prohibit operations of radio frequency devices to cause interference with licensed services.	Consistent: CEC staff does not expect decommissioning and demolition activities to interfere with communications.
State		
California Public Utilities Commission (CPUC) General Order 52 (GO-52)	Governs the construction and operation of power and communications lines to prevent or mitigate interference.	Consistent: CEC staff does not expect decommissioning and demolition activities to interfere with communications.
Audible Noise		
State		
Governor's Office of Planning and Research State General Plan Guidelines	Includes recommendations for noise level standards to prevent the creation of incompatible land uses due to noise.	Consistent: Significant audible noise is not expected from the decommissioning and demolition activities associated with the transmission line.
Local		
County of San Bernardino Noise Ordinance	Establishes standards for both noise-sensitive land use and noise-generating land uses.	Consistent: Significant audible noise is not expected from the decommissioning and demolition activities associated with the transmission line.
Fire Hazards		
State		
Title 14, California Code of Regulations, sections 1250-1258 (Fire Prevention Standards for Electric Utilities)	Provides specific exemptions from electric pole and tower firebreak-clearance standards, electric conductor clearance standards, and specifies when and where standards apply. Incorporates provisions of Public Resources Code sections 4292-4296.	Consistent: The decommissioning and demolition activities are not expected to create a fire hazard. The project owner would still need to adhere to applicable clearance standards for project lines/equipment remaining active.
CPUC GO-95 (Rules for Overhead Electric Line Construction)	Includes regulations to protect the public from potential fire hazards associated with power line facilities. Compliance is expected.	Consistent: The decommissioning and demolition activities are not expected to create a fire hazard. The project owner would still need to adhere to applicable standards for project lines/equipment remaining active.
CPUC GO-165 (Inspection requirements for Electric Distribution and Transmission Facilities)	Establishes inspection cycles for electric distribution and transmission facilities (excluding facilities contained in a substation). Establishes inspection systems for	Consistent: The decommissioning and demolition activities are not expected to create a fire hazard. The project owner would still need to adhere to applicable

Applicable LORS	Description	Consistency
	transformers, switching/protective devices, regulators/capacitors and other specified equipment.	inspection and maintenance standards for project lines/equipment remaining active.
CPUC GO-166 (Standards for Operation, Reliability and safety During Emergencies and Disasters)	Establishes standards for electric utilities to ensure the utilities are prepared for emergencies and disasters. The measures include a Fire Prevention Plan (FPP) for facilities located in areas designated in the highest two tiers on the CPUC fire-threat map.	Consistent: The SEGS VIII facility is not located in an area currently designated in the specified tiers requiring an FPP.
Hazardous and Nuisance Shocks		
State		
CPUC GO-95 (Rules for Overhead Electric Line Construction)	Governs clearance requirements to prevent hazardous shocks, grounding techniques to minimize nuisance shocks, and maintenance and inspection requirements.	Consistent: The decommissioning and demolition activities are not expected to create hazardous or nuisance shocks. The project owner would still need to adhere to applicable safety standards for project lines/equipment remaining active.
Title 8, California Code of Regulations, section 2700 and the following (High Voltage Safety Orders)	Specifies requirements and minimum standards for safely installing, operating, working around, and maintaining electrical installations and equipment.	Consistent: The decommissioning and demolition activities are not expected to create hazardous or nuisance shocks. The project owner would still need to adhere to applicable safety standards for project lines/equipment remaining active.
National Electrical Safety Code (NESC)	Specifies grounding procedures to limit nuisance shocks and specifies minimum conductor ground clearances.	Consistent: The decommissioning and demolition activities are not expected to create hazardous or nuisance shocks. The project owner would still need to adhere to applicable safety standards for project lines/equipment remaining active.
Industry Standards		
Institute of Electrical and Electronics Engineers (IEEE) 1119 (IEEE Guide for Fence Safety Clearances in Electric-Supply Stations)	Specifies guidelines for grounding-related practices within the right-of-way and substations.	Consistent: The decommissioning and demolition activities are not expected to create hazardous or nuisance shocks. The project owner would still need to adhere to applicable safety standards for project lines/equipment remaining active.
Electric and Magnetic Fields (EMF)		
State		
CPUC GO-131D	Specifies application and noticing requirements for new line	Consistent: There are no new transmission lines proposed as

Applicable LORS	Description	Consistency
(Rules Relating to the Planning and Construction of Electric Generation, Transmission/Power/Distribution Line Facilities and Substations Located in California)	construction including EMF reduction.	part of the decommissioning and demolition activities.
CPUC Decision 93-11-013	Specifies CPUC requirements for reducing power frequency electric and magnetic fields.	Consistent: Decommissioning and demolition activities are not expected to produce EMF.
CPUC Decision 06-01-042	Re-affirms CPUC EMF Policy in 93-11-013. CEC staff does not expect significant EMF exposure from the continued operation of the generator tie-line.	Consistent: Decommissioning and demolition activities are not expected to produce EMF.
Industry Standards		
Institute of Electrical and Electronics Engineers (IEEE) 644-1944 Standard Procedures for Measurement of Power Frequency Electric and Magnetic Fields from AC Power Lines	Specifies standard procedures for measuring electric and magnetic fields from an operating electric line. CEC staff does not expect significant EMF exposure from the continued operation of the generator tie-line.	Consistent: Decommissioning and demolition activities are not expected to produce EMF.

APPLICABLE CONDITIONS OF CERTIFICATION

None of the Transmission Line Safety and Nuisance Conditions of Certification in the Decision (or subsequent amendments) would apply directly to the demolition and decommissioning activities to mitigate safety and nuisance effects or ensure LORS compliance.

ADDITIONAL PROPOSED MEASURES

The project owner and CEC staff are not proposing any additional conditions for Transmission Line Safety and Nuisance.

ANALYSIS

The project owner is proposing to decommission SEGS III-VII to make way for a photovoltaic (PV) solar facility (not under CEC jurisdiction). The existing generator tie-line would remain in place and be used for the continued operation of future solar PV project. The transmission poles and conductors would remain in place.

CONCLUSIONS AND RECOMMENDATIONS

CEC staff concludes the decommissioning activities outlined in the SEGS III-VII Facility Decommissioning Plan would not result in significant transmission line safety and nuisance impacts. Any onsite worker safety considerations associated with the transmission line decommissioning activity would be addressed through **Worker Safety and Fire Protection** requirements.

REFERENCES

NextEra 2021d – Tetra Tech, Inc. / Jennifer Merrick, Applicant Consultant for project owner, Luz Solar Partners III-VII, (tn 237500). SEGS III-VII Facility Decommissioning Plan, dated, 04/20/2021. Submitted to CEC/Dockets on 04/20/2021

TRANSMISSION SYSTEM ENGINEERING

Laiping Ng and Mark Hesters

The decommissioning and demolition activities would not involve the generator tie-line. The existing 1.4-mile 115 kilovolt generator tie-line that connects SEGS III-VII to Southern California Edison's Kramer Junction Substation will remain in place and be utilized for the future solar PV project. On-site transmission poles and conductors will remain in place. Therefore, decommissioning would not affect the technical area of **Transmission System Engineering**.

VISUAL RESOURCES

Mark Hamblin

INTRODUCTION

In this section, CEC staff discusses the SEGS III-VII Facility Decommissioning Plan pertaining to **Visual Resources**. The purpose of this analysis is to determine whether decommissioning and demolition of the facility would avoid significant effects on visual resources and comply with applicable LORS.

EXISTING SETTING

The SEGS III-VII site is relatively flat land in a rural largely undeveloped area in the Mojave Desert, north of the unincorporated community of Kramer Junction, San Bernardino County, California.

The proposed decommissioning and demolition would occur on the site of an existing solar thermal facility. The project owner intends to remove solar thermal equipment and replace it with solar PV panels and supporting equipment. Development of the PV facility would be within the purview of San Bernardino County. Refer to the project description for details regarding the project.

The project owner intends to decommission and remove SEGS III-VII and replace it with a new photovoltaic solar facility. Refer to the project description for details regarding the project.

LAWS, ORDINANCES, REGULATIONS, AND STANDARDS

CEC staff reviewed the County of San Bernardino 2007 General Plan, and San Bernardino County 2007 Development Code, Chapter 82.04 Residential Land Use Zoning District for some references to scenic quality specific to decommissioning and demolition activities as analyzed below.

APPLICABLE CONDITIONS OF CERTIFICATION

No adopted COCs pertaining to visual resources apply to the decommissioning and demolition activities at the SEGS III-VII site.

ADDITIONAL PROPOSED MEASURES

None.

ANALYSIS

The General Plan does not identify a distinct scenic vista or a specific related policy in the vicinity of the SEGS III-VII site. In addition, this analysis used as the definition for a scenic vista "a distant view of high pictorial quality perceived through and along a corridor or opening." The CEC in its decisions for a number of thermal power plant projects used this definition.[1] Review of aerial and street view imagery (Google Maps), and site photographs, show the site is on a relatively unenclosed plain in the western Mojave Desert and not within a scenic vista as defined.

Review of aerial and street view imagery and the General Plan found no scenic resource on the site or in the vicinity.

The following major publicly visible components on the SEGS III-VII site are expected to be removed:

- Cooling towers. This includes the evaporative cooling tower system.
- Power block. This includes storage tanks, a steam turbine generator, auxiliary transformers, heat exchangers, pumps, and other ancillary equipment.
- Parabolic troughs, aboveground supports, aboveground heat transfer fluid (HTF) piping, and related equipment.
- Several support and miscellaneous buildings (e.g., sheds, mechanical shop, etc.).

The demolition would remove parabolic troughs and their reflectivity in the area, a power block and its cooling tower that emits publicly visible water vapor plumes to the atmosphere.

Demolition activities would occur during daylight hours (NextEra 2021d). Existing facility lighting and temporary lighting would be used to maintain site security at night. Outdoor lighting would be directed away from surrounding properties and the public right of way. Light fixtures would be hooded/shielded.

The removal of the existing solar thermal equipment and supporting equipment would not substantially degrade the existing visual character or quality of public views of the site and its surroundings.

[1] California Energy Commission Final Decision for GWF Tracy Combined Cycle Power Plant Project Docket Number 08-AFC-7, Visual Resources, pg. 321; California Energy Commission Decision for Mariposa Energy Project Docket Number 09-AFC-3, Visual Resources, pg. 5; California Energy Commission Decision for Blythe Solar Power Project Docket Number 09-AFC-6, Visual Resources, pg. 514; California Energy Commission Decision for Genesis Solar Energy Project Docket Number 09-AFC-8, Visual Resources, pg. 7-8; California Energy Commission Decision for Pio Pico Energy Center Docket Number 11-AFC-01, Visual Resources, pg. 8.5-4.

CEC staff concludes decommissioning and demolition activities would not conflict with LORS and would have a less than significant effect on the environment.

CONCLUSIONS AND RECOMMENDATIONS

Decommissioning and demolition of the SEGS III-VII facility would comply with LORS and would not have a substantial adverse effect on a scenic vista, scenic resource, or the existing visual character or quality of public views of the site and its surroundings.

REFERENCES

County of San Bernardino 2007a – *County of San Bernardino 2007 General Plan*. Section II – Land Use. Pages II-8 and II-9. Prepared by URS Corporation. Santa Ana, CA. Adopted March 13, 2007; Effective April 12, 2007; Amended April 24, 2014.Available online at: http://cms.sbcounty.gov/lus/Planning/GeneralPlan.aspx

County of San Bernardino2007b – 2007 Development Code, Chapter 82.04 Residential Land Use Zoning District. Available online at: https://cms.sbcounty.gov/lus/Planning/DevelopmentCode.aspx

NextEra 2021d – Tetra Tech, Inc. / Jennifer Merrick, Applicant Consultant for project owner, Luz Solar Partners III-VII, (tn 237500). SEGS III-VII Facility Decommissioning Plan, dated, 04/20/2021. Submitted to CEC/Dockets on 04/20/2021

WASTE MANAGEMENT

Mike Conway

INTRODUCTION

In this section, CEC staff discusses the SEGS III-VII decommissioning and demolition, as described in the facility decommissioning plan in relation to the technical area of **Waste Management**. The purpose of this analysis is to determine whether decommissioning and demolition of the facility would avoid significant waste management impacts and comply with applicable laws, ordinances, regulations, and standards (LORS).

EXISTING SETTING

SEGS III-VII is an existing solar thermal electric facility located on typically flat alluvial fans of the Mojave Desert along the western edge of the dry lakebed of Harper Lake. Prior to construction of the project the land was used for agricultural uses until it was taken out of production because of the high cost of pumping groundwater for irrigation.

LAWS, ORDINANCES, REGULATIONS, AND STANDARDS

Applicable LORS	Description	Consistency Determination
Federal		
Title 42, United States Code (U.S.C.), §6901, et seq. Solid Waste Disposal Act of 1965 (as amended and revised by the Resource Conservation and Recovery Act of 1976, et al.)	The Solid Waste Disposal Act, as amended and revised by the Resource Conservation and Recovery Act (RCRA) et al., establishes requirements for the management of solid wastes (including hazardous wastes), landfills, underground storage tanks, and certain medical wastes. The statute also addresses program administration, implementation and delegation to states, enforcement provisions, and responsibilities, as well as research, training, and grant funding provisions.	Consistent: Consistency ensured by measures, **D-WM-2, D-WM-3,** and **D-WM-4.**
Title 42, U.S.C., §9601, et seq. Comprehensive Environmental Response, Compensation and Liability Act	The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), also known as *Superfund*, establishes authority and funding mechanisms for cleanup of uncontrolled or abandoned hazardous waste sites, as well as cleanup of accidents, spills, or emergency releases of pollutants	Consistent: Consistency ensured by measures, **D-WM-2, D-WM-3,** and **D-WM-4.**

Applicable LORS	Description	Consistency Determination
	and contaminants into the environment.	
Federal Clean Water Act, 33 U.S.C. §1251 et seq.	The Clean Water Act controls discharge of wastewater to the surface waters of the U.S.	Consistent: Consistency ensured by measures, **D-WM-2, D-WM-3,** and **D-WM-4.**
State		
California Health and Safety Code (Health and Safety Code), Chapter 6.5, §25100, et seq. Hazardous Waste Control Act of 1972, as amended	This California law creates the framework under which hazardous wastes must be managed in California. The law provides for the development of a state hazardous waste program that administers and implements the provisions of the federal RCRA program. It also provides for the designation of California-only hazardous wastes and development of standards (regulations) that are equal to or, in some cases, more stringent than federal requirements.	Consistent: Consistency ensured by measure **D-WM-2.**
Title 14, California Code of Regulations (CCR), Division 7, 17200, et seq.	These regulations further implement the provisions of the California Integrated Waste Management Act and set forth minimum standards for solid waste handling and disposal. The regulations include standards for solid waste management, as well as enforcement and program administration provisions.	Consistent: Consistency ensured by measures, **D-WM-2, D-WM-3,** and **D-WM-4.**
Title 22, (CCR), Division 4.5. Environmental Health Standards for the Management of Hazardous Waste	These regulations establish requirements for the management and disposal of hazardous waste in accordance with the provisions of the California Hazardous Waste Control Act and federal RCRA. The Title 22 regulations are established and enforced at the state level by DTSC. Some generator and waste treatment standards are also	Consistent: Consistency ensured by measure **D-WM-2.**

Applicable LORS	Description	Consistency Determination
	enforced at the local level by Certified Unified Program Agencies (CUPAs).	
Title 22, CCR, Section §66260.20(f), Chapter 10, Article 3, Classification of a Waste as Hazardous or Nonhazardous.	If a person wishes to classify and manage as nonhazardous a waste which would otherwise be a non-RCRA hazardous waste because it has mitigating physical or chemical characteristics which render it insignificant as a hazard to human health and safety, livestock and wildlife, that person shall apply to the Department of Toxic Substances Control (DTSC) for its approval to classify and manage the waste as nonhazardous.	Consistent: Consistency ensured by measures, **D-WM-2, D-WM-3,** and **D-WM-4.**
California Health and Safety Code (HSC) § 25100 *et seq.* (Hazardous Waste Control Act of 1972, as amended)	Creates the framework under which hazardous wastes must be managed in California. It mandates the DTSC under the California Environmental Protection Agency (CalEPA), to develop and publish a list of hazardous and extremely hazardous wastes and to develop and adopt criteria and guidelines for the identification of such wastes. It also requires hazardous waste generators to file notification statements with Cal EPA and create a manifest system to be used when transporting such wastes.	Consistent: Consistency ensured by measure **D-WM-2.**
California Health and Safety Code (HSC) § 25270-25270.13	25270. This chapter shall be known and may be cited as the Aboveground Petroleum Storage Act. 25270.2. For purposes of this chapter, the following definitions apply: (a) "Aboveground storage tank" or "storage tank" means a tank that has the capacity to store 55 gallons or more of petroleum and that is substantially or totally above the surface of the ground.	Consistent. Consistency ensured by measures, **D-WM-2, D-WM-3,** and **D-WM-4.**
Title 27, CCR, §15100 et seq. (Unified Hazardous Waste and Hazardous Materials Management Regulatory Program)	Consolidates, coordinates, and makes consistent portions of the following six existing programs: • Hazardous Waste Generators and Hazardous Waste Onsite Treatment; • Underground Storage Tanks;	Consistent. Consistency ensured by measure **D-WM-2.**

Applicable LORS	Description	Consistency Determination
	• Hazardous Material Release Response Plans and Inventories; • California Accidental Release Prevention Program; • Aboveground Storage Tanks (spill control and countermeasure plan only); • Uniform Fire Code Hazardous Material Management Plans and Inventories; The statute requires all counties to apply to the CalEPA Secretary for the certification of a local unified program agency.	
Local		
San Bernardino County Ordinance, Title 3 Health and Safety:	These regulations govern the use, generation, storage, and disposal of hazardous materials and wastes with San Bernardino County Fire Department serves as the local CUPA authorized to implement the provisions of the California Unified Program elements. San Bernardino County Public Works Department, Solid Waste Division, has developed a solid waste program to oversee the handling, processing, and disposal of non-hazardous solid waste to safeguard public health.	Consistent: Consistency ensured by measures, **D-WM-1, D-WM-2, D-WM-3,** and **D-WM-4.**

APPLICABLE CONDITIONS OF CERTIFICATION

Decommissioning activities would take place within the existing project footprint. The existing COCs in the Commission Decision and subsequent amendments are still applicable to minimize unmitigated significant impacts to waste management, or unmitigated impacts to public health and safety due to waste management. The proposed decommissioning of the project would not result in any necessary changes to the existing COCs for **Waste Management**.

ADDITIONAL PROPOSED MEASURES

The owner proposes the following additional COCs for decommissioning and demolition, which help focus their compliance effort. CEC staff agrees that the proposed measures would help minimize impacts to the environment and ensure LORS consistency. CEC staff's proposed changes to the existing COCs are shown in **bold/underline** and

~~strikethrough~~ text. Any portion of the condition of certification that are not applicable have not been included. They retain original numbering.

D-WM-1 The project owner will comply with the County of San Bernardino's (County) requirement to perform asbestos testing of debris prior to disposal at a County owned and operated sanitary landfill and/or transfer station. Debris generated by decommissioning of SEGS III-VII structures is subject to asbestos clearance prior to disposal at any County disposal site. The project owner or its contractor shall obtain disposal authorization from the County Solid Waste Management Operations Section prior to disposal of debris at a County owned waste disposal facility.

D-WM-2 Hazardous decommissioning waste from SEGS III-VII shall be disposed of by the project owner or its contractors at a Class I or Class II disposal facility or to a permitted treatment, storage, and disposal facility authorized to treat specified waste streams.

D-WM-3 Non-hazardous decommissioning wastes from SEGS III-VII shall be disposed of by the project owner or its contractors at the Barstow Landfill or at facilities approved by the County of San Bernardino, or other appropriate agencies in counties where alternate disposal facilities maybe located. The project owner shall obtain, or use contractors who have obtained, all applicable County permits for refuse collection and hauling.

D-WM-4 The project owner, or its contractor, shall update (if necessary) and utilize the solid waste management plan, which addresses the disposition of solid non-hazardous wastes from the SEGS III-VII facilities. The plan identifies all approved landfill sites in the region which the decommissioning activities may use for solid waste disposal and describes the amount of waste to be sent to each facility. The plan also identifies non-hazardous waste materials to be diverted from disposal by salvage, sale, recycling, or other form of disposal diversion.

ANALYSIS

Based on facility decommissioning plan provided by the project owner, after cessation of operations, all remaining nonhazardous wastes would be collected and disposed of in appropriate recycling centers, landfills, or waste collection facilities according to all applicable LORS. Hazardous wastes would be disposed of according to all applicable LORS. The site would be secured 24-hours per day during the decommissioning activities (NextEra 2021d).

Decommissioning would entail breakdown and removal of structures and facilities. Materials from these activities such as concrete, glass, and metal would be transported via heavy haul dump truck to the appropriate landfills identified. Debris would be placed in temporary on-site storage area(s) pending transportation to the recycling/disposal facilities. Other wastes, including heat transfer fluid (HTF), lubricating oils, fuels, water treatment chemicals, universal waste, and possible lead- and asbestos-containing materials would be managed for proper containerization, profiling, and shipment off site for disposal or recycling (NextEra 2021d).

The bioremediation unit and the land treatment unit will be closed pursuant to the Waste Discharge Requirements (WDRs) Order #6-95-102 issued by the Lahontan Regional Water Quality Control Board (LRWQCB). As required by Section II, Requirements and Prohibitions, part A.11. of the Order, "At closure the Facility shall be closed in accordance with a final Closure and Post-Closure Maintenance Plan approved by the Regional Board (NextEra 2021d)." The owner is expected to complete the closure process with the LRWQCB prior to final termination of the CEC's project license.

The closure of the bioremediation unit and the land treatment unit would occur prior to the final closure of the three onsite evaporation ponds. The decommissioning of the evaporation ponds is governed by LRWQCB WDR Order #6-97-58 and is described in the **Soil & Water Resources** section of this CEC staff analysis, consistent with the original project CEC staff analysis.

Adherence to the applicable waste management COCs and proposed demolition conditions during decommissioning activities and up until an order terminating CEC jurisdiction over the project is obtained by the project owner, along with compliance with LORS applicable to waste management identified in this analysis, would ensure that impacts would be less than significant.

CONCLUSIONS AND RECOMMENDATIONS

Based on the information provided by the project owner, CEC staff concludes the proposed decommissioning of the facility would not result in significant waste management impacts. The proposed decommissioning would not require any changes to the COCs related to waste management adopted by the Energy Commission in its Final Decision or subsequent amendments. However, the applicant proposed demolition measures would provide additional insurance that environmental impacts from demolition would be minimized.

REFERENCES

NextEra 2021d – Tetra Tech, Inc. / Jennifer Merrick, Applicant Consultant for project owner, Luz Solar Partners III-VII, (tn 237500). SEGS III-VII Facility

Decommissioning Plan, dated, 04/20/2021. Submitted to CEC/Dockets on 04/20/2021

WORKER SAFETY AND FIRE PROTECTION

Ryan Casebeer and Brett Fooks

INTRODUCTION

In this section, CEC staff discusses the SEGS III-VII decommissioning and demolition, as described in the facility decommissioning plan in relation to the technical area of **Worker Safety and Fire Protection**. The purpose of this analysis is to determine whether decommissioning and demolition of the facility would be undertaken in a manner that would avoid significant worker safety and fire protection impacts and would be in compliance with applicable LORS.

LAWS, ORDINANCES, REGULATIONS, AND STANDARDS

Worker Safety and Fire Protection Table 1 outlines the federal, state, and local laws and policies apply to the protection of worker safety and fire protection for the SEGS III-VII Decommissioning. CEC staff's analysis examines the project's compliance with these requirements.

Worker Safety and Fire Protection Table 1
LORS Applicable to Worker Safety and Fire Protection

Applicable LORS	Description	Consistency
Federal		
Title 29 U.S. Code (USC) section 651 et seq (Occupational Safety and Health Act of 1970)	This act mandates safety requirements in the workplace with the purpose of "[assuring] so far as possible every working man and woman in the nation safe and healthful working conditions and to preserve our human resources" (29 USC § 651).	Consistent: Decommissioning and demolition activities would comply with these requirements.
Title 29 Code of Federal Regulation (CFR) sections 1910.1 to 1910.1500 (Occupational Safety and Health Administration Safety and Health Regulations)	These sections define the procedures for promulgating regulations and conducting inspections to implement and enforce safety and health procedures to protect workers, particularly in the industrial sector.	Consistent: Decommissioning and demolition activities would comply with these requirements.
State		
Title 8, California Code of Regulations (Cal Code Regs.) all applicable sections (Cal/OSHA regulations)	These sections require that all employers follow these regulations as they pertain to the work involved. This includes regulations pertaining to safety matters during construction, commissioning, and operations of power plants, as well as safety around electrical components, fire safety, and hazardous materials use, storage, and handling.	Consistent: Decommissioning and demolition activities would comply with these requirements.

Applicable LORS	Description	Consistency
Title 24 California Building Code, section 3(California Code of Regulations)	Consists of 11 parts containing the building design and construction requirements relating to fire and life safety and structural safety. The Building Standards Code includes the electrical, mechanical, energy, and fire codes applicable to the Project. Local planning/building and safety departments enforce the California Building Code.	Consistent: Decommissioning and demolition activities would comply with these requirements.
California Fire Code, Part 9 of Title 24of the California Code of Regulations	The Fire Code contains general provisions for fire safety.	Consistent: Decommissioning and demolition activities would comply with these requirements.
Title 8, California Code of Regulations (Cal Code Regs.) all applicable sections (Cal/OSHA regulations)	These sections require that all employers follow these regulations as they pertain to the work involved. This includes regulations pertaining to safety matters during construction, commissioning, and operations of power plants, as well as safety around electrical components, fire safety, and hazardous materials use, storage, and handling.	Consistent: Decommissioning and demolition activities would comply with these requirements.

APPLICABLE CONDITIONS OF CERTIFICATION

CEC staff has reviewed the current COCs for the project and there are none that would apply during decommissioning and demolition.

ADDITIONAL PROPOSED MEASURES

CEC staff has reviewed the SEGS III-VII Facility Decommissioning Plan. The project owner has proposed two additional measures to be implemented during decommissioning and demolition. CEC staff's proposed changes to the existing COCs are shown in **bold/underline** and ~~strikethrough~~ text. Any portion of the condition of certification that are not applicable have not been included. They retain original numbering.

D-WS-1: The project owner, or its demolition contractor, shall prepare or update the existing Health and Safety Plan elements (including the fire protection element) to reflect the activities expected during decommissioning. At least thirty (30) days prior to the start of decommissioning, the project owner shall submit to the CPM for review and approval a copy of the Project Demolition Health and Safety Program, the Demolition Emergency Action Plan, the Demolition Fire Prevention Plan to the San Bernardino County Fire Department (SBCFD) for review and comment. The project owner shall provide a letter with the SBCFD comments on the Demolition

Health and Safety Program, Demolition Emergency Action Plan, and the Demolition Fire Prevention Plan to the CPM.

Verification: At least thirty (30) days prior to the start of demolition, the project owner shall submit to the CPM for review and approval a copy of the project Demolition Health and Safety Program, the Demolition Emergency Action Plan, and the Demolition Fire Prevention Plan to the SBCFD for review and comment. The project owner shall provide a letter with the SBCFD's comments on the Demolition Health and Safety Program, the Demolition Emergency Action Plan, the Demolition Fire Prevention Plan, and the Demolition Explosives Plan to the CPM.

D-WS-2: The project owner shall provide a site Construction Safety Supervisor (CSS) who, by way of training and/or experience, is knowledgeable of power plant decommissioning activities and relevant worker safety-related LORS; is capable of identifying workplace hazards relating to the decommissioning activities; and has authority to take appropriate action to assure compliance and mitigate hazards. The CSS shall:

- **Have overall authority for coordination and implementation of all occupational safety and health practices, policies, and programs;**
- **Ensure that the safety program for the facility complies with California Division of Occupational Safety and Health (Cal/OSHA) and federal regulations related to power plant projects;**
- **Ensure that all decommissioning workers and supervisors receive adequate safety training;**
- **Conduct accident and safety-related incident investigations and provide emergency response reports for injuries, and inform the CPM of safety-related incidents; and**
- **Ensure that all of the plans identified in D-WS-1 are implemented.**

Verification: At least thirty (30) days prior to the start of site mobilization, the project owner shall submit to the CPM the name and contact information for the CSS. The contact information of any replacement CSS shall be submitted to the CPM within one business day. The CSS shall submit in the Monthly Compliance Report a monthly safety inspection report to include:

- **A record of all employees trained for that month (all records shall be kept on-site for the duration of the decommissioning activities);**
- **Summary report of safety management actions and safety-related incidents that occurred during the month;**
- **Report of any continuing or unresolved situations and incidents that may pose danger to life or health;**

- **Report of any visits from Cal/OSHA and/or any complaints from workers to Cal/OSHA; and**
- **Report of accidents, injuries, and near misses that occurred during the month.**

ANALYSIS

WORKER SAFETY

Industrial environments are potentially dangerous during the demolition of facilities. Workers involved in the proposed demolition of SEGS III-VII would be exposed to loud noises, moving equipment, trenches, and confined space ingress and egress problems. The workers may experience falls, trips, burns, lacerations, and numerous other injuries. They have the potential to be exposed to falling equipment, materials or structures, chemical spills, hazardous waste, fires, explosions, and electrical sparks and electrocution.

Demolition Safety and Health Program

Construction workers at SEGS III-VII would be exposed to hazards typical of demolition of a power plant. During demolition one set of worker safety policies and procedures would be followed.

Construction Safety Orders (applicable to demolition) are published in Title 8 California Code of Regulations sections 1502, et seq. These requirements are promulgated by Cal/OSHA and would be applicable to the demolition phase of the project. The Demolition Safety and Health Program would include the following:

- Demolition Injury and Illness Prevention Program (8 Cal Code Regs. §1509)
- Demolition Fire Prevention Plan (8 Cal Code Regs. §1920)
- Demolition General Requirements (8 Cal Code Regs. §1920)
- Personal Protective Equipment Program (8 Cal Code Regs. §§1514-1522)
- Demolition and Emergency Action Program and Plan
- Demolition Fire Prevention Plan (8 Cal Code Regs 3221)

Additional programs under General Industry Safety Orders (8 Cal Code Regs. §§3200 to 6184), and Electrical Safety Orders (8 Cal Code Regs. §§2299 to 2974) would be established and implemented and would address many important worker safety and health issues. It is not CEC staff's intent to list them all but some of the newer and revised Cal-OSHA regulations address such matters as excavation and trenching, employee exposure monitoring, hearing conservation, ergonomics, heat and cold stress monitoring and control, confined space entry, COVID-19 safety protocols, and Lock Out/Tag Out of dangerous operations and electrical circuits.

The project owner proposed measure, **D-WS-1**, would require the project owner to prepare or update the existing Health and Safety Plan elements to reflect the activities expected during decommissioning and demolition. The proposed measure specifies that the health and safety plan would be submitted to the CPM for review and approval to ensure the plans comply with applicable LORS. Therefore, CEC staff has added a verification step to the project owner's proposed condition which would ensure that the health and safety plan are compliant with applicable LORS.

In addition, the project owner proposed measure, **D-WS-2**, would require the project owner to designate and provide a site Construction Safety Supervisor (CSS) who is responsible for identifying workplace hazards relating to the decommissioning activities; and has authority to take appropriate action to assure compliance and mitigate hazards. The proposed measure specifies that the CSS shall submit in a monthly compliance report a monthly safety inspection report to the CPM for review and approval. CEC staff agrees that typical hazards associated with demolition activities would be reduced and/or eliminated by hiring a CSS to ensure a safe environment for all personnel. With the implementation of the proposed measures **D-WS-1** and **D-WS-2** the demolition of the facility would not have a significant impact on worker health and safety and would comply with applicable LORS.

FIRE PROTECTION

In 2019, SEGS III-VII facilities ceased operation and were placed in cold layup. The process included removal of the heat transfer fluid (HTF) used for power generation from the plant solar fields and power blocks. The natural gas service was isolated, process chemicals removed, and the power block facilities, administration building and warehouse building were now unoccupied. The process also included the de-energization of certain equipment and systems, including the facilities fire protection systems. Prior to de-energizing the fire protection systems at SEGS III-VII facilities, NextEra contacted San Bernardino County Fire Department (SBCFD) for approval (CEC 2021b). On April 14, 2020 Joe Zuccaro, Fire Prevention Supervisor, of SBCFD approved the disconnection of the fire protection systems for the facilities that have been de-energized, provided that all combustible materials were removed (SBCFD 2020). NextEra informed CEC staff that all fire protection systems for the facilities have been de-energized and are no longer in service. CEC staff confirmed with Glen King, Senior Environmental Specialist, for SEGS III-VII facilities that all combustible materials have been removed per SBCFD's direction (CEC 2021c).

During the decommissioning and demolition of the SEGS III-VII facilities, there could be the potential for both small fires and major structural fires. In the event of a small fire, due to electrical sparks, explosions, and over-heated equipment, the project would rely on fire extinguishers and other portable firefighting equipment made available onsite. These fire extinguishers would be maintained for the full decommissioning duration, in accordance with Cal/OSHA requirements pertinent to the shutdown of an industrial

facility. In the event of a major fire, the SBCFD would be relied upon for a sustained response.

Prior to any decommissioning-related demolition occurring on site, **D-WS-1** would require the project owner to contact SBCFD for verification of current fire protection requirements. In addition, the fire project element of the Health and Safety Plan would be updated, if necessary, to conform with current California Fire Code requirements and would be submitted to the SBCFD for review and comment and to the CPM for review and approval per applicant proposed measure **D-WS-1.**

CONCLUSIONS AND RECOMMENDATIONS

CEC staff recommends adoption of the decommissioning and demolition plan and concludes that with the implementation of measures **D-WS-1** and**D-WS-2**, the impacts on worker safety and fire protection would be less than significant and the project would comply with applicable LORS.

REFERENCES

CEC 1988 – California Energy Commission – SEGS III-VII Kramer Junction Final Decision March 1988

CEC 2021 – Fire Protection at SEGS III-VII (TN237207) – Email from Glen King – removingcombustible materials at https://efiling.energy.ca.gov/GetDocument.aspx?tn=237207&DocumentContentId=70389

CEC 2021c – Nextera Energy, Inc./Glen T. King, Environmental Specialist, LUZ Solar Partners III-VII Ltd. Letter to Joe Zuccaro/Fire Prevention Supervisor, San Bernardino County Fire Department, to, regarding current fire protection systems, (tn 237137-2). Submitted to CEC/Dockets on 03/11/2021

CEC 2021b – Correspondence from Joe Zuccaro/Fire Prevention Supervisor, San Bernardino County Fire Department, to Next Era Energy Fire Systems at SEGS III-VIII, regarding current fire protection systems, (tn 237137-1). Submitted to CEC/Dockets on 03/11/2021

SEGS 2018 – Solar Energy Generating Systems III-VII. (TN 225713). Cold Layup Plan - SEGS III-VII Kramer Junction (87-AFC-01C), dated September 2018. Available onlineat: https://efiling.energy.ca.gov/GetDocument.aspx?tn=225713&DocumentContentId=56390

NextEra 2021d – Tetra Tech, Inc. / Jennifer Merrick, Applicant Consultant for project owner, Luz Solar Partners III-VII, (tn 237500). SEGS III-VII Facility Decommissioning Plan, dated, 04/20/2021. Submitted to CEC/Dockets on 04/20/2021

ENVIRONMENTAL JUSTICE

Ellen LeFevre

INTRODUCTION

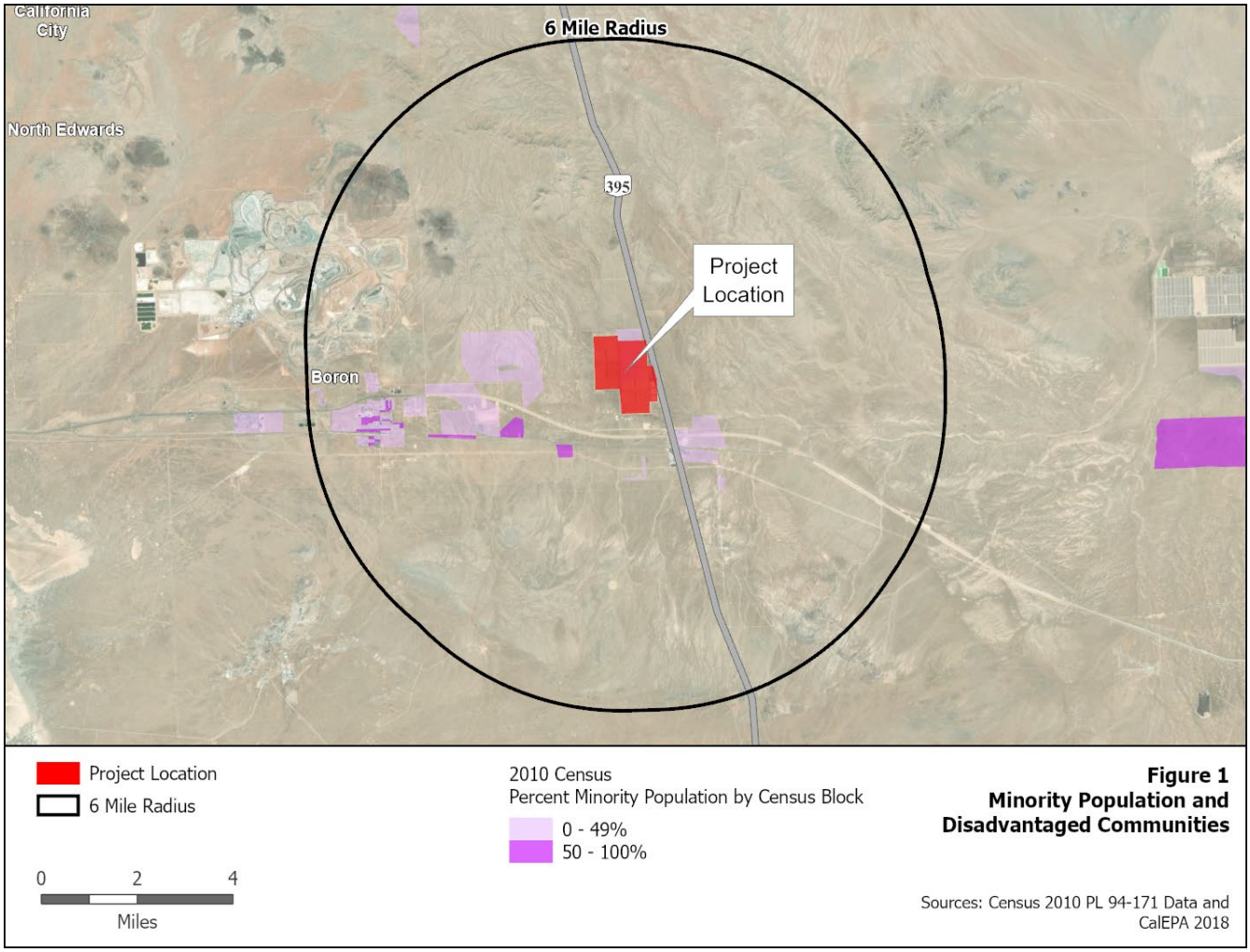
In this section, CEC staff discusses the SEGS VIII Facility Decommissioning Plan relating to the topic of **Environmental Justice**. The purpose of this analysis is to evaluate the impacts of decommissioning and demolition activities on the environmental justice (EJ) population living within a six-mile radius of the facility.

EXISTING SETTING

CEC staff uses a six-mile radius around the facility, conservatively based on the parameters for dispersion modeling used in CEC staff's air quality analysis, to obtain data to gain a better understanding of the demographic makeup of the communities potentially impacted. Air quality impacts are generally the type of project impacts that extend the furthest from a facility. Beyond a six-mile radius, air emissions have either settled out of the air column or mixed with surrounding air to the extent the potential impacts are less than significant.

Environmental Justice Figure 1 shows 2010 census blocks in the six-mile radius of SEGS III-VII with a minority population greater than or equal to 50 percent. The population in these census blocks represents an EJ population based on race and ethnicity as defined in the United States Environmental Protection Agency's *Guidance on Considering Environmental Justice During the Development of Regulatory Actions.*

Based on California Department of Education data shown in **Environmental Justice Table 1**, CEC staff concludes that the percentage of those living in the Muroc Joint Unified School District (in a six-mile radius of the SEGS III-VII site) and enrolled in the free or reduced price meal program is not comparatively larger than those in the reference geography, and thus is not considered an EJ population based on low income as defined in *Guidance on Considering Environmental Justice During the Development of Regulatory Actions.* **Environmental Justice Figure 2** shows where the boundaries of the school district are in relation to the six-mile radius around the SEGS III-VII site.


California City
North Edwards
Boron
6 Mile Radius
395
Project Location
Project Location
6 Mile Radius
0
2
4
Miles
2010 Census
Percent Minority Population by Census Block
0 - 49%
50 - 100%
Figure 1
Minority Population and Disadvantaged Communities
Sources: Census 2010 PL 94-171 Data and CalEPA 2018

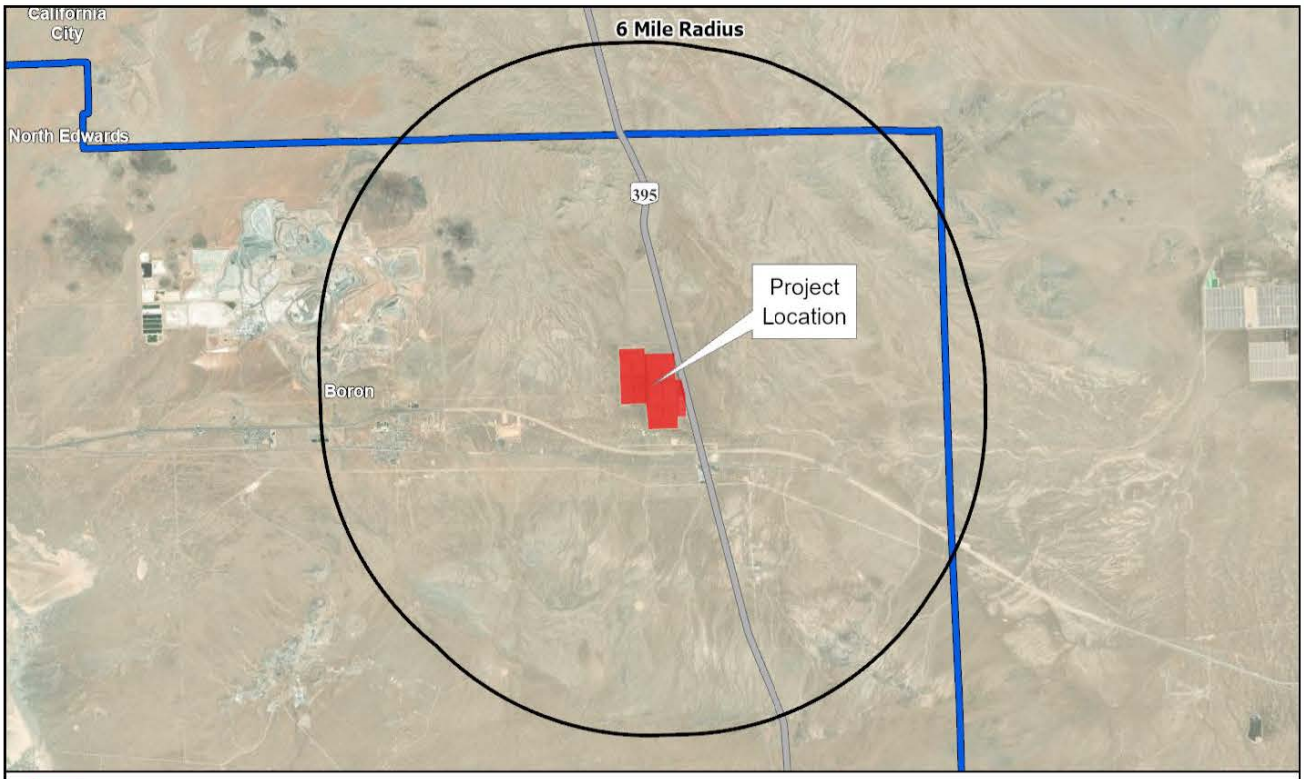


Figure 2
Low Income Population

Note: Shaded areas have an EJ population based on low income
Sources: TIGER Data, CDE 2020

Environmental Justice – Table 1
Low Income Data within the Project Area

SCHOOL DISTRICTS IN SIX-MILE RADIUS	Enrollment Used for Meals	Free or Reduced Price Meals	
Muroc Joint Unified	1,780	353	19.8%
REFERENCE GEOGRAPHY			
Kern County	198,910	144,468	72.6%
Source: CDE 2020. California Department of Education, DataQuest, Free or Reduced Price Meals, District level data for the year 2019-2020, <http://dq.cde.ca.gov/dataquest/>.			

The following technical areas consider impacts to EJ populations: Air Quality, Cultural Resources (indigenous people), Hazardous Materials Management, Land Use, Noise, Public Health, Socioeconomics, Soil and Water Resources, Traffic and Transportation, Transmission Line Safety and Nuisance, Visual Resources, Waste Management, and Worker Safety and Fire Protection.

For Cultural Resources (indigenous people), CEC staff reviewed the ethnographic and historic literature to determine whether any EJ populations use or reside in the project area. No known hunting and gathering areas would be impacted by decommissioning, therefore Native Americans are not considered members of the EJ population in the project area.

CONCLUSIONS

As summarized in **Facility Decommissioning Table 1,** CEC staff concludes that implementation of the SEGS III-VII Facility Decommissioning Plan would not result in significant adverse environmental impacts, and would comply with all applicable and current LORS, with implementation of existing conditions of certification in the Decision and the additional proposed COCs, and thus impacts would be less than significant on the EJ population represented in **Environmental Justice Figure 1**.

REFERENCES

CDE 2020 – California Department of Education (CDE). DataQuest, Free or Reduced Price Meals, District level data for the year 2019-2020. Available online at: http://dq.cde.ca.gov/dataquest/

NextEra 2021d – Tetra Tech, Inc. / Jennifer Merrick, Applicant Consultant for project owner, Luz Solar Partners III-VII, (TN 237500). SEGS III-VII Facility Decommissioning Plan, dated, April 20, 2021. Submitted to CEC/Dockets on April

20, 2021.Available online at: https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=87-AFC-01C

U.S. EPA 2015 – United States Environmental Protection Agency (U.S. EPA). *Guidance on Considering Environmental Justice During the Development of Regulatory Actions*, dated May 2015. Available online at: https://www.epa.gov/environmentaljustice/guidance-considering-environmental-justice-during-development-action

APPENDIX A

CONDITIONS OF CERTIFICATION

AIR QUALITY AND GREENHOUSE GASES

ADDITIONAL PROPOSED MEASURES

The project owner proposed the following COCs during decommissioning to ensure that activities conform with applicable LORS. CEC staff's proposed changes to the existing COCs are shown in **bold/underline** and ~~strikethrough~~ text. Any portion of the condition of certification that are not applicable have not been included. They retain original numbering.

D-AQ-1 Prior to the issuance of decommissioning permits or approvals, the project owner shall develop a Dust Control Plan (DCP) per the requirements of Mojave Desert Air Quality Management District (MDAQMD) Rule 403.2. The DCP shall comply with MDAQMD Rules 403 and 403.2 to control fugitive dust, including particulate matter less than 10 microns in size (PM10), by addressing objectives, key contacts, roles and responsibilities, dust sources, and control measures. ~~The project owner shall submit the DCP and any modifications to the Compliance Project Manager (CPM) within five working days of its submittal to MDAQMD.~~

Verification: The project owner shall submit the DCP and any modifications to the Compliance Project Manager (CPM) within five working days of its submittal to MDAQMD.

D-AQ-2 On-road trucks shall comply with United States Environmental Protection Agency (USEPA) 2010 on-road emission standards or better, unless the contractor can reasonably demonstrate that such equipment is unavailable to the satisfaction of the MDAQMD. ~~The project owner shall submit to the CPM a Monthly Compliance Report (MCR) to demonstrate compliance.~~

Verification: The project owner shall submit to the CPM a Monthly Compliance Report (MCR) within 30 days of the end of each month to demonstrate compliance with condition D-AQ-2.

D-AQ-3 The project owner shall ensure that all applicable portable equipment used by the demolition contractor shall be registered through the California Air Resources Board (CARB) Portable Equipment Registration Program (PERP).~~The project owner shall submit to the CPM an MCR to demonstrates compliance.~~

Verification: The project owner shall submit to the CPM a MCR within 30 days of the end of each month to demonstrate compliance with condition D-AQ-3.

D-AQ-4 The project owner shall ensure that equipment used during decommissioning complies with MDAQMD Rule 401 to ensure visible emissions from applicable equipment would avoid visible emissions darker than Ringelmann #1 for periods greater than 3 minutes in any hour. ~~The project owner shall submit an MCR to the CPM to demonstrate compliance.~~

Verification: The project owner shall submit to the CPM a MCR within 30 days of the end of each month to demonstrate compliance with condition D-AQ-4.

D-AQ-5 Off-road construction equipment shall comply with the United States Environmental Protection Agency's final Tier 4 exhaust emission standards.

Verification: The project owner shall submit to the CPM a MCR within 30 days of the end of each month to demonstrate compliance with condition D-AQ-5.

D-AQ-6 The project owner shall ensure that the Air Quality Supervisor (AQS) performs oversight of compliance with the decommissioning measures and applicable laws, ordinances, regulations, and standards (LORS) during decommissioning activities. ~~At least 60 days prior to the start of decommissioning, the project owner shall submit to the CPM, for approval, the name and contact information for the AQS and/or AQS delegates. The project owner shall also submit an MCR to the CPM to demonstrate compliance.~~

Verification: At least 60 days prior to the start of decommissioning, the project owner shall submit to the CPM, for approval, the name and contact information for the AQS and/or AQS delegates. The project owner shall submit to the CPM a MCR within 30 days of the end of each month to demonstrate compliance with condition D-AQ-6.

BIOLOGICAL RESOURCES

CEC staff's proposed changes to the existing COCs are shown in **bold/underline** and ~~strikethrough~~ text. Any portion of the condition of certification that are not applicable have not been included. They retain original numbering.

BIO 5-4 ~~[Luz Solar III-VII]~~ Project owner shall designate a qualified biologist to advise on the implementation of these conditions of certification pertaining to on-site mitigation and to supervise or conduct mitigation, monitoring, and other compliance efforts.

Minimum qualifications include:

(1) a bachelor's degree in biological science, zoology, botany, ecology, or a closely related field and

(2) current certification of a nationally recognized biological society, such as the Ecological Society of America or Wildlife society or a minimum of three years' experience in field biology.

~~[Luz Solar III-VII]~~ Project owner must demonstrate to the satisfaction of CEC staff that the designated biologist has appropriate education and experience for the biological tasks described in the biological resources mitigation implementation plan (BRMIP) developed for this project. CEC CPM approval of the designated biologist shall not be unreasonably withheld. The supervising construction or operation engineer shall act on the advice of the biologist to ensure conformance with the BRMIP and the terms and conditions of the CEC certification.

Verification: Before starting **decommissioning activities for** ~~site preparation~~ of SEGS **III**-VII, ~~Luz~~**~~Solar III-~~**~~VII~~ project owner, will provide to the CEC CPM for review and approval, the name, qualifications, **email** address, and telephone number of the designated biologist. If there is a change in biologist, project owner will notify the CEC CPM and provide the name, qualifications, **email** address, and telephone number of the proposed replacement **at least 10 working days prior to the termination or release of the preceding designated** biologist ~~in the next construction progress report~~**.**

BIO 5-5 ~~[Luz Solar III-VII]~~ Project owner shall submit a detailed BRMIP to the CEC CPM before the initiation of any clearing, earth moving, or other construction activities on SEGS VII. The BRMIP shall include details for designing and implementing the following measures:

(1) For SEGS VII, if there is an indication of tortoises having been on the site, a final preconstruction site clearance shall be conducted, with emphasis on finding and relocating any desert tortoises that may have reinhabited the site;

(2) For SEGS VII, a final preconstruction walk-through to verify that no foxes are inhabiting a den system on site and to collapse any dens found in order to preclude the potential for direct impacts on foxes during site clearing;

(3) An employee education program to provide construction and operation employees with information to help them avoid impacts on the key species and resources addressed in this document. The program shall be designed to inform personnel about these Mojave Desert animals and plants and to cover both potential direct, on-the-job impacts, as well as the potential indirect impacts associated with the dwelling places and leisure activities of employees and their families. The latter are to be included because of the in-migration associated with the project and the possibility of significant impacts that may be inadvertently caused by the in-migrant employees, their families, or pets. The

program should cover laws pertaining to desert wildlife and plants, the use of firearms, off-road recreational vehicle use, and other applicable regulations.

The program shall be administered to each new employee as part of his or her orientation and all CEC staff members shall be required to review the information and be apprised of new information annually. Verification of the program's use can be accomplished by documenting its presentation date and content via statements signed by individual employees to whom the program has been presented.

Verification: At least 45 days prior to commencing ~~site preparation~~ decommissioning activities, ~~Luz~~ project owner will submit the draft BRMIP to the CEC CPM for review and approval, and to the CDFW CEC staff. The CEC Biological Resources CEC staff will review and comment on the draft BRMIP within 30 days of receipt. Decommissioning activities ~~Site preparation~~ will not begin until the final BRMIP is approved by the CEC CPM.

BIO 5-6: ~~[Luz Solar III VII]~~ Project owner shall allow access by CEC, or its designated representative, to inspect or monitor conditions of biological resources, impacts, mitigation measures, and study areas prior to and during preconstruction, construction and operation activities on the SEGS site and adjacent areas. The access shall be provided upon request and at all times necessary to conduct biological field observations.

Verification: Prior to commencing **decommissioning** ~~site preparation~~ activities, ~~Luz~~ **~~Solar III~~** ~~VII~~ project owner will provide a letter of authorization to conduct site visits as specified above.

BIO 5-7: ~~[Luz Solar III VII]~~Project owner shall implement the monitoring and mitigation measures contained in the approved BRMIP and CEC Decision.

Verification: The approved BRMIP will be submitted to the CEC CPM prior to ~~site preparation on SEGS~~ VII **decommissioning activities for SEGS III-VII**. Implementation of the measures shall be reported in the Monthly Compliance Reports by the Designated Biologist. ~~Luz~~ Project owner will notify the CEC CPM, in writing, within 15 days of successfully satisfying each condition in the BRMIP. If any conditions of the plan are not successfully satisfied, ~~Luz~~ project owner will submit proposed corrective actions within 30 days of the CEC CPM for comment and approval. The ~~Luz~~ project owner qualified biologist will submit to the CEC CPM ~~semiannual~~ statements **as part of the Monthly Compliance Report** verifying activities conducted in compliance with the approved BRMIP permit conditions listed here, and any additional portions of the CEC decision pertinent to biological resources. ~~These semiannual~~ These statements will be submitted ~~beginning six months after the start of site preparation and will continue~~ until all compliance activities have been completed.

~~Luz~~ **~~Solar III~~** ~~VII~~ The project owner will **immediately** report any adverse impacts, including deaths or injury, on rare, threatened, or endangered species by telephone or by email to the CEC CPM **as well as the USFWS and/or CDFW** ~~within two working~~

~~days~~ during the normal work week or by ~~the end of~~ **noon the next working day** following a weekend or holiday and will submit a follow-up written report within ~~10~~ **3** days after contact with the CEC CPM. **Injured animals shall be immediately reported to CDFW and/or USFWS and the CEC CPM and the project owner shall follow instructions that are provided by CDFW or USFWS. If CDFW or USFWS cannot be immediately reached, consideration should be given to taking the animal to a veterinary hospital.**

ADDITIONAL PROPOSED MEASURES

The project owner proposes the following design measures to ensure that decommissioning activities conform with applicable LORS and to reduce impacts to less than significant levels (NextEra 2021d). These are presented below and are considered appropriate to ensure that activities conform with applicable LORS and reduce potential impacts to less than significant levels. CEC staff's proposed changes to the existing COCs are shown in **bold/underline** and ~~strikethrough~~ text. Any portion of the condition of certification that are not applicable have not been included. They retain original numbering.

D-BIO-1 If ~~construction~~ **decommissioning and** demolition during the breeding bird season (typically January 1 through July for raptors and February 1 through August 31 for other avian species) cannot be avoided, a pre-construction nesting bird survey shall be performed on and adjacent to the decommissioning site. The Designated Biologist or Biological Monitor shall perform surveys in accordance with the following guidelines:

(1) Surveys shall cover all potential nesting habitat in the project site and within 500 feet of the boundaries of the plant site;

(2) Surveys shall be conducted within the 10-day period preceding initiation of any **decommissioning and** demolition activity. Additional follow-up surveys may be required if periods of **decommissioning and** demolition inactivity exceed three weeks in any given area, an interval during which birds may establish a nesting **territory**;

(3) If an active nest is found, an appropriate no-disturbance buffer shall be established around the nest by the Designated Biologist based on the bird species occupying the nest and the type of project activities that are occurring. The buffer shall be flagged in the field and a monitoring plan shall be developed. Nest locations shall be mapped using GPS technology and submitted, along with survey report stating the survey results, to the CEC CPM. Weekly updates shall be submitted via email to the CEC CPM that provides the status of all active and fledged nests;

(4) The Designated Biologist or Biological Monitor shall monitor the nest until he or she determines that nestlings have fledged and dispersed; activities that might, in the opinion of the Designated Biologist in consultation with the CPM,

disturb nesting activities (e.g., excessive noise above 60 dBA), shall be prohibited within the buffer zone until such a determination is made. The Designated Biologist shall determine if any work can occur within the buffer, on a case by case basis, in consultation with the CEC CPM; and,

(5) A final nesting bird survey and monitoring report containing photos, survey methodology, site conditions, a list of species observed, and description of any avoidance measures (such as buffers) implemented during each survey shall be provided to the CEC CPM at the conclusion of each nesting season

Verification: The project owner shall provide notification to the CPM, CDFW, and USFWS at least 2 weeks prior to initiating surveys; notification shall include the name and resume of the biologist(s) conducting the surveys and the timing of the surveys. Prior to the start of any site mobilization activities, the project owner shall provide the CPM, CDFW, and USFWS a letter-report describing the findings of the nest surveys. A final nesting bird survey and monitoring report shall be prepared and submitted to the CPM at the conclusion of each nesting season while work is being performed, and any special-status species (including raptor) nesting behavior shall be reported within three business days. All impact avoidance and minimization measures related to nesting birds shall be included in the Biological Resources Mitigation Implementation Plan (BRIMP) and implemented.

D-BIO-2 The project owner shall inspect the existing perimeter fencing and repair any gaps or holes to prevent desert tortoise or other wildlife from entering the site. Repairs will extend to existing grade and will not require ground disturbance of previously un-disturbed areas outside of the facility site. **Impact avoidance and minimization measures related to fence repairs shall be included in the BRMIP. If any special-status species, including desert tortoise, are detected, they shall not be handled and work shall stop until the animal leaves the area. The Designated Biologist shall contact the USFWS, CDFW and the CEC CPM for further guidance.**

After fence repairs are complete, and prior to the start of decommissioning activities, the Designated Biologist or Biological Monitor shall conduct a survey for special status species, including desert tortoise, burrowing owls, and desert kit fox, to confirm these species are not present on the facility site. If any special status species are found inside the fenceline the Designated Biologist shall contact the CPM, CDFW, and USFWS for further guidance.

Verification: All impact avoidance and minimization measures related to fence repairs shall be included in the BRMIP and implemented. Implementation of the measures will be reported in the Monthly Compliance Reports by the Designated Biologist.

D-BIO-3 The **Biological Resources Mitigation Implementation Plan (**BRMIP**)** will be revised ~~for~~ **to discuss biological resources avoidance and minimization measures for SEGS III-VII and will include measures to** address specific circumstances related to project decommissioning to ~~minimize or totally~~ avoid or reduce impacts to a less than significant level for ~~to~~ biological resources.

Verification: At least 45 days prior to commencing decommissioning activities, the project owner will submit the draft BRMIP to the CEC CPM for review and approval, and to the CDFW CEC staff. The CEC Biological Resources CEC staff will review and comment on the draft BRMIP within 30 days of receipt. Decommissioning activities will not begin until the final BRMIP is approved by the CEC CPM.

D-BIO-4 The employee education program, included as part of the BRMIP, will be revised and will include measures to address specific circumstances related to project decommissioning. The project owner shall ensure that all SEGS III-VII employees, contractors, and visitors that will be on site during decommissioning receive the employee education program (also known as worker environmental awareness program (WEAP)) training.

Verification: At least 45 days prior to commencing decommissioning activities, the project owner will submit the draft employee education program, as part of the BRMIP, to the CEC CPM for review and approval, and to the CDFW CEC staff. The CEC Biological Resources CEC staff will review and comment on the draft BRMIP within 30 days of receipt. Decommissioning activities will not begin until the final BRMIP is approved by the CEC CPM.

CULTURAL AND TRIBAL CULTURAL RESOURCES

APPLICABLE CONDITIONS OF CERTIFICATION

The CEC Decision included COCs 4-1 through 4-8 to mitigate potential impacts to paleontological and cultural resources. Conditions 4-1 through 4-3 are related to paleontological resources and are discussed in a subsequent section of this analysis. Conditions 4-5(b), 4-5(c), 4-6, 4-7, and 4-8 are not relevant for decommissioning. Conditions 4-4 and 4-5a and 4-5d–h are relevant to decommissioning:

CUL 4-4: ~~[Luz Solar III VII]~~The project owner shall submit the name and qualifications of its designated cultural resources specialist (CRS) (e.g., someone with a graduate degree in anthropology, history, or cultural resource management and field experience) to the CEC CPM(compliance project manager) for review and approval. The CEC CPM must review the qualifications of and approve of in writing the [~~Luz Solar III VII~~] project owner designated CRS before any ground disturbance may begin. After CEC approval, the designated CRS shall

be on call during site preparation and construction activities for the ~~[Luz Solar III-VII]~~ SEGS III- VII project.

CUL 4-5: The designated CRS shall prepare and submit to the CEC CPM for review and approval, a cultural resources monitoring and mitigation plan (CRMMP) to minimize potential impacts to cultural resources. The plan shall include the following:

a. A provision that the designated CRS conducts a records search at such places as the San Bernardino County Museum and the California Archaeological Inventory for identification of cultural resources which may be affected by decommissioning activities of [~~Luz Solar III-VII~~] SEGS III-VII.

b. A provision that the designated CRS cultural resources specialist be on call to inspect any potentially significant cultural resources found during ground clearance and excavation in areas of sensitivity identified in the monitoring and mitigation plan.

c. Specific measures proposed to mitigate impacts to particular types of cultural resources which may be discovered during earth moving activities.

d. A provision that if potentially significant cultural resources are encountered during construction activities, work in the immediate vicinity of the find shall be halted until the designated CRS can determine the significance and sensitivity of the find. [~~Luz Solar III-VII's~~] Project owner designated CRS shall act in accordance with the procedures set forth in the CRMMP which has been approved by the CEC CPM prior to the start of construction.

[~~Luz Solar III-VII~~] The project owner or its designated representative, shall inform the CEC CPM within one working day of the discovery of any potentially significant resources and discuss the specific measure(s) proposed to mitigate potential impacts to the resources.

The designated CRS, representatives of [~~Luz Solar III-VII~~] the project owner and the CEC CPM shall meet within seven working days of the notification of the CEC, if necessary, to discuss the disposition of any finds and any mitigation measures already implemented or to be implemented.

e. A provision that if human remains are encountered, work in the immediate vicinity shall stop and the county coroner and the CEC CPM shall be notified. Work in the vicinity of the find shall remain stopped until the coroner has determined if the remains are Native American in origin and any necessary mitigation measures have been implemented. If the remains are determined to be of Native American origin, the Native American Heritage Commission and appropriate Native American representatives shall be notified immediately. Any necessary mitigation measures shall be discussed and agreed upon by the interested parties and approved by the CEC CPM.

f. A provision that the CEC CPM shall have access to the ~~[Luz Solar III-VII]~~SEGS Unit III-VII site to observe cultural resources monitoring and data recovery activities.

ADDITIONAL PROPOSED MEASURES

The project owner proposes the following design measures to ensure that decommissioning activities conform with applicable LORS and to reduce impacts to less than significant levels (NextEra 2021d). CEC staff's proposed changes to the existing COCs are shown in **bold/underline** and ~~strikethrough~~ text. Any portion of the condition of certification that are not applicable have not been included. They retain original numbering.

D-CUL-1: **If the earth-disturbing activities associated with decommissioning extend into soils beyond what was previously disturbed on-site during facility construction or excavation occurs in an area not previously disturbed, a cultural monitor will be available to be on-site during the excavation, as outlined in the existing cultural resources COCs. The need for a cultural monitor will be determined in coordination with the Designated CRS, based on review of the planned areas of disturbance, and according to the CRMMP.**

Verification:

1. **The project owner shall provide the designated CRS with a description of the planned ground-disturbing activities, including the expected depth and horizontal extent of ground disturbance, on a weekly basis. The designated CRS will use this information and the updated CRMMP (see D-CUL-3) to determine whether one or more qualified cultural resources monitors need to observe ground disturbance.**
2. **During decommissioning, the designated CRS shall email the CEC CPM at the beginning of the week (Monday, or the first day after receiving information about ground disturbance), indicating whether cultural resource monitors will be monitoring ground disturbance and where within the facility site. The designated CRS's email shall also identify what the criteria are for curtailing cultural resources monitoring in the affected areas. The designated CRS shall email the CEC CPM when curtailing cultural resources monitoring in any given area.**

D-CUL-2: **The project owner shall update, if necessary, the cultural resources workers environmental awareness program (WEAP) training and present the WEAP training to all of its personnel and the personnel of its contractors and subcontractors who may be involved with ground clearance or earth moving, to develop an awareness of and sensitivity to potential project impacts on potentially significant cultural**

resources. This training shall include development of the ability to recognize potentially significant cultural resources. Verification:

1. **At least 30 days prior to the beginning of ground disturbance, the designated CRS shall provide the draft WEAP text and graphics and the informational brochure to the CEC CPM for review and approval.**
2. **At least 15 days prior to the beginning of ground disturbance, the CEC CPM will provide to the project owner a WEAP Training Acknowledgement form for each WEAP trained worker to sign.**
3. **Monthly, until ground disturbance is completed, the project owner shall provide in the Monthly Compliance Report (MCR) the WEAP Training Acknowledgement forms of workers who have completed the training in the prior month and a running total of all persons who have completed training to date.**

D-CUL-3: The project owner shall update the CRMMP to minimize potential impacts to cultural resources for decommissioning activities. The CRMMP shall include the following:

a. A provision that the designated CRS be on call to inspect any potentially significant cultural resources found during ground clearance and excavation in areas of sensitivity defined in the monitoring and mitigation plan.

b. Specific measures proposed to mitigate impacts to particular types of cultural resources which may be discovered during earth-moving activities.

c. A provision that if potentially significant cultural resources are encountered during decommissioning activities, work in the immediate vicinity of the find shall be halted until the designated CRS can determine the significance and sensitivity of the find. The designated CRS shall act in accordance with the procedures set forth in the CRMMP. The project owner, or its designated representative, shall inform the appropriate overseeing agency (CEC or County of San Bernardino (County)) within one working day of the discovery of any potentially significant resources and discuss the specific measure(s) proposed to mitigate potential impacts to the resources.

The designated CRS, representatives of the project owner, and the appropriate overseeing agency shall meet within seven working days of the notification of the CEC or County, if necessary, to discuss the disposition of any finds and any mitigation measures already implemented or to be implemented.

d. A provision that if human remains are encountered, work in the immediate vicinity shall stop and the County coroner and the jurisdictional agency (CEC or County) shall be notified. Work in the vicinity of the find shall remain stopped until the coroner has determined if the remains are Native American in origin and any necessary mitigation measures have been implemented. If the remains are determined to be of Native American origin, the Native American Heritage Commission and appropriate Native American representatives shall be notified immediately. Any necessary mitigation measures shall be discussed and agreed upon by the interested parties and approved by the jurisdictional agency.

Verification:

1. **No less than 30 days prior to the start of ground disturbance, the project owner shall submit the CRMMP to the CEC CPM for review and approval.**
2. **At least 20 days prior to the start of ground disturbance, in a letter to the CEC CPM, the project owner shall agree to pay curation fees for any materials generated or collected as a result of the archaeological investigations (survey, testing, data recovery).**
3. **At least 30 days prior to the initiation of ground disturbance, the project owner shall provide to the CEC CPM a copy of a letter from a curation facility that meets the standards stated in the California State Historical Resources Commission's Guidelines for the Curation of Archaeological Collections, stating the facility's willingness and ability to receive the materials generated by decommissioning-phase cultural resources activities and requiring curation. Any agreements concerning curation will be retained and available for audit for the life of the project.**

GEOLOGY AND PALEONTOLOGICAL RESOURCES

The applicable COCs are listed below. The name "Luz" has been replaced with "Project Owner" in these requirements.

Requirement 1 Project owner will comply with the palaeontologic resources mitigation requirements recommended by the CEC staff of the San Bernardino County Museum during construction at the SEGS Unit VI site, as stipulated during the CEC Pre-Hearing Conference Workshop on January 8, 1988.

These mitigation measures include monitoring and resource recovery, analysis and curation. Project owner will have a palaeontologic specialist monitor excavation and construction activities on the SEGS Unit VI site, on an as-needed basis. Project owner also will be responsible for the recovery, preparation for analysis, analysis, and curation of any

palaeontologic or cultural resource materials encountered during construction at the SEGS Unit VI site.

CEC staff requests that it receive information copies of communications related to any palaeontologic or cultural resources monitoring, and mitigation work being conducted at the SEGS Unit VI site. Such communications may include contracts with San Bernardino County, CEC staff of the San Bernardino County Museum, project owner contractors or subcontractors, and/or other parties interested in the monitoring and mitigation work.

Requirement 2 Project owner shall submit the name and qualifications of their designated palaeontologic specialist (e.g., someone with a graduate degree in geology or paleontology and field experience) to the CEC CPM for review and approval. The CEC CPM must review the qualifications of and approve in writing, project owners designated palaeontologic specialist prior to any ground clearance or disturbance at SEGS Unit VII. After CEC approval, the palaeontologic specialist shall be available to monitor, as needed, all site preparation and construction activities related to the SEGS Unit VII site.

Requirement 3 The designated palaeontologic specialist shall prepare a monitoring and mitigation plan to minimize potential impacts to palaeontologic resources. The plan shall be submitted to the CEC CPM for review and approval in writing. The plan shall include the following elements:

1. A provision that a records search be conducted at such places as the San Bernardino County Museum and the University of California Museum of Paleontology for identification of fossil resources which may be affected by construction and operation of SEGS Unit VII.
2. A provision that a palaeontologic resources survey be conducted for the SEGS VII site. All vertebrate and invertebrate fossil remains encountered during the survey will be mapped and locality records filed with appropriate entities.
3. A provision that the mitigation and monitoring plan will apply to those areas where significant fossil resources were encountered during the field survey (b, above), or where the designated palaeontologic specialist has determined there is a reasonable potential that fossil-bearing deposits would be encountered.
4. A provision that the designated palaeontologic specialist be on site during ground clearance and excavation in areas of sensitivity identified in the monitoring and mitigation plan, and that the

specialist be on call during earth moving activities in other project areas.

5. A provision that if, during monitoring of construction activities, the designated palaeontologic specialist determines the likelihood of encountering fossil resources is slight, monitoring can be halted in that locality.
6. A provision that if fossil resources are encountered during construction activities, work in the immediate vicinity of the find shall be halted until the designated palaeontologic specialist can determine the significance and sensitivity of the find. The designated palaeontologic specialist shall act in accordance with the procedures set forth in the monitoring and mitigation plan which has been approved by CEC CPM prior to the start of construction.

   Project owner, or its designated representative, shall inform the CEC CPM within one working day of the discovery of any potentially significant resources and discuss the specific measure(s) proposed to mitigate potential impacts to the resources. The designated palaeontologic specialist, representatives of Owner, and the CEC CPM shall meet within seven working days of the notification of the CEC CPM, if necessary, to discuss the disposition of any finds and any mitigation measures already implemented or to be implemented.
7. A provision that all vertebrate fossil remains will be collected and any invertebrate fossil remains will be sampled. All fossil materials found shall be mapped, prepared, identified, and removed for analysis and curation in the retrievable storage collection at the San Bernardino County Museum in Redlands, California.
8. A provision that the CEC CPM shall have access to the SEGS Unit VII site to observe palaeontologic resources monitoring and data recovery activities.

ADDITIONAL PROPOSED MEASURES

The project owner submitted three additional design measures for implementation during decommissioning to ensure that activities conform with applicable LORS. CEC staff's proposed changes to the existing COCs are shown in **bold/underline** and ~~strikethrough~~ text. Any portion of the condition of certification that are not applicable have not been included. They retain original numbering.

D-PAL-1 The project owner will have a paleontological specialist available on an as-needed basis, if the excavation depth for decommissioning activities extends

into soils beyond what was previously disturbed during construction of the original project as outlined in the existing COCs.

Verification: Prior to the start of decommissioning and demolition the project owner shall submit to the CEC CPM for review and written approval, the name, resume, telephone number, and indication of availability for its designated paleontologist resources specialist. When conditions warrant paleontology monitoring copies of the daily paleontology monitoring reports will be submitted with the monthly compliance report.

D-PAL-2 The project owner shall update, if necessary, the paleontological resources worker environmental awareness program (WEAP) training (as outlined in COC CUL-7) and present the WEAP training to all of its personnel and the personnel of its contractors and subcontractors who may be involved with ground clearance or earth moving, to develop an awareness of and sensitivity to potential project impacts on potentially significant paleontological resources. This training shall include development of the ability to recognize potentially significant paleontological resources.

Verification: In the Monthly Compliance Report (MCR), the project owner shall provide copies of the WEAP certification of completion forms with the names of those trained, trainer identification, and type of training (in-person and/or video) offered that month. The MCR shall also include a running total of all persons who have completed the training to date.

D-PAL-3 The project owner shall update the project monitoring and mitigation plan (as outlined in COC CUL-3) to minimize potential impacts to palaeontologic resources for decommissioning and demolition. The plan shall include the following elements:

1. A provision that if fossil resources are encountered during decommissioning activities, work in the immediate vicinity of the find shall be halted until the designated, on-call palaeontologic specialist can determine the significance and sensitivity of the find. The designated, on-call palaeontologic specialist shall act in accordance with the procedures set forth in the monitoring and mitigation plan which has been approved by the overseeing agency (CEC or County of San Bernardino [County]) prior to the start of construction.
2. The project owner, or its designated representative, shall inform the overseeing agency within one working day of the discovery of any potentially significant resources and discuss the specific measure(s) proposed to mitigate potential impacts to the resources.
3. The designated, on-call palaeontologic specialist, representatives of the project owner, and the overseeing agency shall meet within seven

working days of the notification, if necessary, to discuss the disposition of any finds and any mitigation measures already implemented or to be implemented.

4. A provision that all vertebrate fossil remains will be collected and any invertebrate fossil remains will be sampled. All fossil materials found shall be mapped, prepared, identified, and removed for analysis and duration in the retrievable storage collection at the San Bernardino County Museum, California.

Verification: The palaeontologic specialist shall submit a summary of monitoring and paleontological activities in the monthly compliance report. A copy of the draft final paleontological resources report shall be submitted to the CEC for review and approval within 90 days following completion of the data recovery and mitigation work by the designated paleontological specialist for the project. The project owner shall maintain in its compliance files, copies of all documentation related to paleontology monitoring and the final paleontological resources report with the information on paleontological repository(ies) used for this project.

HARARDOUS MATERIALS MANAGEMENT

ADDITIONAL PROPOSED MEASURES

CEC staff has reviewed the SEGS III-VII Final Decommissioning Plan. The project owner has proposed one additional measure to be implemented during decommissioning and demolition. CEC staff's proposed changes to the existing COCs are shown in **bold/underline** and ~~strikethrough~~ text. Any portion of the condition of certification that are not applicable have not been included. They retain original numbering.

D-HAZ-1: The Project Owner shall update their Hazardous Materials Business Plan (HMBP) for decommissioning, as applicable, to reflect hazardous materials not previously used at the site

LAND USE

ADDITIONAL PROPOSED MEASURES

The project owner has applied to obtain a Conditional Use Permit from the County that will include decommissioning and demolition of the existing SEGS III–VII solar thermal facilities and redevelopment of the site for a solar PV system. The County's conditions of approval will include a requirement for a Demolition Permit for any buildings or structures to be demolished, and the project owner and its contractor(s) will be required to comply with all County demolition and recycling requirements and regulations.

The project owner proposed a measure to obtain a Demolition Permit according to County requirements. CEC staff's proposed changes to the existing COCs are shown in

bold/underline and ~~strikethrough~~ text. Any portion of the condition of certification that are not applicable have not been included. They retain original numbering.

CEC staff recommends changes to the measure. ~~Strikethrough~~ is used to indicate deleted language. **Bold underline** indicates new language, including the addition of verification to the measure.

D-LU-1: The project owner ~~will apply for~~ **shall** obtain a Demolition Permit from the County of San Bernardino prior to the start of demolition activities.

Verification: The project owner shall submit a copy of the Demolition Permit ~~application~~ to the CEC CPM **within 2 business days of issuance from the County of San Bernardino** and prior to the start of demolition activities.

NOISE

APPLICABLE CONDITIONS OF CERTIFICATION

The following are applicable Conditions of Certifications that would be implemented during the decommissioning and demolition activities to ensure compliance with applicable LORS.

NOISE-1 The project will comply with occupancy noise safety requirements and provide hearing protection to workers during demolition activities.

NOISE-2 All construction equipment used for decommissioning and demolition shall be muffled in accordance with manufacturers' specifications.

NOISE-3 Decommissioning activities will be limited to the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday, in accordance with the County of San Bernardino Development Code standards.

PUBLIC HEALTH

APPLICABLE CONDITIONS OF CERTIFICATION

Decommissioning activities would take place within the existing facility footprint. The existing **Public Health** Conditions of Certification **2-4** would be applicable to the decommissioning activities. CEC staff's proposed changes to the existing COCs are shown in **bold/underline** and ~~strikethrough~~ text. Any portion of the condition of certification that are not applicable have not been included. They retain original numbering.

2-4 ~~Luz~~**The project owner** shall ensure that all hazardous materials on-site are handled as specified in ~~Luz's~~**the** Safety Plan for ~~all~~ SEGS **III-VII** units with regard to:

- Worker protection
- Respiratory protection
- Disposal of HTF-contaminated materials
- Worker hazard training and communication
- Health status monitoring
- Accidental spill identification and reporting
- Hazardous waste management (for chemicals other than HTF)

Verification: 30 days before the start of ~~commercial operation of each Unit SEGS VI and VII~~ **decommissioning**, ~~Luz~~**the project owner** shall provide to the CEC compliance project manager (CPM) verification that it intends to adhere to all the requirements detailed in ~~Luz's~~**the** Safety Plan with regard to the areas listed above.

ADDITIONAL PROPOSED MEASURES

The project owner also proposes new COCs specific to public health, **D-PH-1** and **D-PH-2**, shown below. CEC staff proposes minor revisions shown in ~~strikethrough~~ and **bold/underline**.

D-PH-1: The project owner shall ensure all required asbestos related notification and removal testing is performed prior to decommissioning. The project owner shall comply with all Mojave Desert Air Quality Management District (MDAQMD) Rule 1000 asbestos related activities in the monthly compliance report. ~~The Project Owner shall submit the monthly compliance report to the CPM within 30 days of the end of each month.~~

Verification: The project owner shall submit a monthly compliance report (MCR) to the CPM within 30 days of the end of each month to demonstrate compliance with condition D-PH-1.

D-PH-2: The project owner shall comply with the County of San Bernardino Development Code control measures for diesel exhaust emissions. The project owner shall include a statement of compliance in the monthly compliance report. ~~The project owner shall submit the monthly compliance report to the CPM within 30 days of the end of each month.~~

Verification: The project owner shall submit a MCR to the CPM within 30 days of the end of each month to demonstrate compliance with condition D-PH-2.

SOIL AND WATER RESOURCES

ADDITIONAL PROPOSED MEASURES

In addition to the existing COCs, the project owner is proposing the following two additional decommissioning COCs, **D-S&W-1** and **D-S&W-2**, to ensure that impacts of the decommissioning activities on soil and water resources would be less than significant, and to focus their compliance effort. CEC staff recommends changes to the measures. ~~Strikethrough~~ is used to indicate deleted language. **Bold underline** indicates new language, including the addition of verifications to the measures.

D-S&W-1: The project owner shall develop and implement a Stormwater Pollution Prevention Plan (SWPPP) for the decommissioning and demolition of the facility. The SWPPP shall identify erosion control measures to be implemented and maintained during decommissioning and demolition activities.

Verification: The SWPPP shall be submitted to San Bernardino County and the compliance project manager (CPM) for review and comment prior to the start of decommissioning activities.

D-S&W-2: Any underground utility lines and piping that will be abandoned in place shall be cut, grouted, and capped at or below the ground surface. A map of all buried utility lines and piping that are proposed to be abandoned in place shall be prepared and submitted before decommissioning and closure are finalized.

Verification: Before decommissioning and closure are finalized, the project owner shall prepare a map showing any and all buried utility lines and piping and submit it to the CPM for approval.

The conditions proposed by the project owner, **D-S&W-1** and **D-S&W-2**, are adequate to ensure that there would be no unmitigated significant impacts on soil and water resources. The decommissioning and closure activities would not violate, or require action related to, the COCs contained in the original Water Resources section of the decision for this project.

TRANSPORTATION

APPLICABLE CONDITIONS OF CERTIFICATION

The following SEGS III-VII Transportation COC in the Decision would apply during decommissioning and demolition because large ancillary equipment (e.g., steam turbine generator, cooling tower) would be shipped off-site for disposal or recycling.

24-1 Luz shall comply with the Kern County, San Bernardino County, and Caltrans restrictions on oversize or over weight limit vehicles. Luz shall obtain necessary transportation permits from the counties and Caltrans.

Verification: In its annual compliance report, Luz shall notify the CEC CPM of any transportation permits obtained during the reporting period.

ADDITIONAL PROPOSED MEASURES

The following additional measures are proposed by the project owner to be implemented during decommissioning and demolition to further ensure that activities conform with applicable LORS. CEC staff recommends changes to the measures. ~~Strikethrough~~ is used to indicate deleted language. **Bold underline** indicates new language, including the addition of verifications to the measures.

D-TRAFFIC-1 The project owner shall utilize only licensed haulers, using approved vehicles marked in an appropriate manner, for the transportation of all hazardous, toxic, and flammable materials. All such materials shall be transported in compliance with all applicable requirements of the U.S. Department of Transportation, the California Highway Patrol, and the California Department of Transportation.

Verification: In its monthly status report, the project owner shall notify the CEC CPM of any transportation permits obtained during the reporting period.

D-TRAFFIC-2 The project owner shall provide a decommission management plan to the County of San Bernardino Department of Public Works, Transportation Operations Division to determine if a maintenance agreement with the County will be required. The decommission management plan shall show the number of trucks, type of trucks (size), the total number of Equivalent Single Axle Loads (ESALs), and the truck routes to the site for decommissioning activities. If it is determined that a maintenance agreement is required, the project owner shall enter into a maintenance agreement with the County Department of Public Works to ensure all County maintained roads utilized by decommission traffic shall remain in acceptable condition during closure activities~~ and the project owner shall provide notification of transmittal and a copy of the maintenance agreement, if required, to the CPM. Following completion of any repairs, the project owner shall provide the CPM with letters signed by the County stating their satisfaction with the repairs~~.

Verification: Prior to the start of decommissioning activities, the project owner shall provide to the CPM documentation from the County stating whether preparation of a maintenance agreement is or is not required.

If the County determines a maintenance agreement is required, prior to the start of decommissioning activities, the project owner shall provide notification of transmittal and a copy of the maintenance agreement to the CPM. Following completion of any repairs, the project owner shall provide the CPM with letters signed by the County stating their satisfaction with the repairs.

WASTE MANAGEMENT

APPLICABLE CONDITIONS OF CERTIFICATION

Decommissioning activities would take place within the existing project footprint. The existing COCs in the Commission Decision and subsequent amendments are still applicable to minimize unmitigated significant impacts to waste management, or unmitigated impacts to public health and safety due to waste management. The proposed decommissioning of the project would not result in any necessary changes to the existing COCs for **Waste Management**.

ADDITIONAL PROPOSED MEASURES

The owner proposes the following additional COCs for decommissioning and demolition, which help focus their compliance effort. CEC staff agrees that the proposed measures would help minimize impacts to the environment and ensure LORS consistency. CEC staff's proposed changes to the existing COCs are shown in **bold/underline** and ~~strikethrough~~ text. Any portion of the condition of certification that are not applicable have not been included. They retain original numbering.

D-WM-1 The project owner will comply with the County of San Bernardino's (County) requirement to perform asbestos testing of debris prior to disposal at a County owned and operated sanitary landfill and/or transfer station. Debris generated by decommissioning of SEGS III-VII structures is subject to asbestos clearance prior to disposal at any County disposal site. The project owner or its contractor shall obtain disposal authorization from the County Solid Waste Management Operations Section prior to disposal of debris at a County owned waste disposal facility.

D-WM-2 Hazardous decommissioning waste from SEGS III-VII shall be disposed of by the project owner or its contractors at a Class I or Class II disposal facility or to a permitted treatment, storage, and disposal facility authorized to treat specified waste streams.

D-WM-3 Non-hazardous decommissioning wastes from SEGS III-VII shall be disposed of by the project owner or its contractors at the Barstow Landfill or at facilities approved by the County of San Bernardino, or other appropriate agencies in counties where alternate disposal facilities maybe located. The project owner shall obtain, or use contractors who have obtained, all applicable County permits for refuse collection and hauling.

D-WM-4 The project owner, or its contractor, shall update (if necessary) and utilize the solid waste management plan, which addresses the disposition of solid non-hazardous wastes from the SEGS III-VII facilities. The plan identifies all approved landfill sites in the region

which the decommissioning activities may use for solid waste disposal and describes the amount of waste to be sent to each facility. The plan also identifies non-hazardous waste materials to be diverted from disposal by salvage, sale, recycling, or other form of disposal diversion.

WORKER SAFETY AND FIRE PROTECTION

ADDITIONAL PROPOSED MEASURES

CEC staff has reviewed the SEGS III-VII Final Decommissioning Plan. The project owner has proposed two additional measures to be implemented during decommissioning and demolition. CEC staff's proposed changes to the existing COCs are shown in **bold/underline** and ~~strikethrough~~ text. Any portion of the condition of certification that are not applicable have not been included. They retain original numbering.

D-WS-1: The project owner, or its demolition contractor, shall prepare or update the existing Health and Safety Plan elements (including the fire protection element) to reflect the activities expected during decommissioning. At least thirty (30) days prior to the start of decommissioning, the project owner shall submit to the CPM for review and approval a copy of the Project Demolition Health and Safety Program, the Demolition Emergency Action Plan, the Demolition Fire Prevention Plan to the San Bernardino County Fire Department (SBCFD) for review and comment. The project owner shall provide a letter with the SBCFD comments on the Demolition Health and Safety Program, Demolition Emergency Action Plan, and the Demolition Fire Prevention Plan to the CPM.

Verification: At least thirty (30) days prior to the start of demolition, the project owner shall submit to the CPM for review and approval a copy of the project Demolition Health and Safety Program, the Demolition Emergency Action Plan, and the Demolition Fire Prevention Plan to the SBCFD for review and comment. The project owner shall provide a letter with the SBCFD's comments on the Demolition Health and Safety Program, the Demolition Emergency Action Plan, the Demolition Fire Prevention Plan, and the Demolition Explosives Plan to the CPM.

D-WS-2: The project owner shall provide a site Construction Safety Supervisor (CSS) who, by way of training and/or experience, is knowledgeable of power plant decommissioning activities and relevant worker safety-related LORS; is capable of identifying workplace hazards relating to the decommissioning activities; and has authority to take appropriate action to assure compliance and mitigate hazards. The CSS shall:

- **Have overall authority for coordination and implementation of all occupational safety and health practices, policies, and programs;**
- **Ensure that the safety program for the Project complies with California Division of Occupational Safety and Health (Cal/OSHA) and federal regulations related to power plant projects;**
- **Ensure that all decommissioning workers and supervisors receive adequate safety training;**
- **Conduct accident and safety-related incident investigations and provide emergency response reports for injuries, and inform the CPM of safety-related incidents; and**
- **Ensure that all of the plans identified in D-WS-1 are implemented.**

Verification: At least thirty (30) days prior to the start of site mobilization, the project owner shall submit to the CPM the name and contact information for the CSS. The contact information of any replacement CSS shall be submitted to the CPM within one business day. The CSS shall submit in the Monthly Compliance Report a monthly safety inspection report to include:

- **A record of all employees trained for that month (all records shall be kept on-site for the duration of the decommissioning activities);**
- **Summary report of safety management actions and safety-related incidents that occurred during the month;**
- **Report of any continuing or unresolved situations and incidents that may pose danger to life or health;**
- **Report of any visits from Cal/OSHA and/or any complaints from workers to Cal/OSHA; and**
- **Report of accidents, injuries, and near misses that occurred during the month.**