DOCKETED	
Docket Number:	24-OPT-03
Project Title:	Soda Mountain Solar
TN #:	257943
Document Title:	Appendix V Supplemental Information
Description:	Facility Definitions, Permit Applications Submitted, Permits Required, Relevant Regulatory Framework, Prohibited Area Analysis and Environmental Leadership and Development Project Requirements.
Filer:	Hannah Gbeh
Organization:	Resolution Environmental
Submitter Role:	Applicant Consultant
Submission Date:	7/22/2024 5:19:38 PM
Docketed Date:	7/23/2024

Soda Mountain Solar Project
Supplemental Application Information

1.0 Facility Definitions

In accordance with California Code of Regulations Title 20 § 1877 (b), the following provides an explanation of how the Soda Mountain Solar Project (Project) meets one or more of the definitions of "facility" in California Public Resources Code § 25545(b). (Cal. Code Regs., tit. 20, § 1877(b); Pub. Resources Code, § 25545(b))

Per California Public Resources Code § 25545(b), "facility" means any of the following:

> (1) A solar photovoltaic or terrestrial wind electrical generating powerplant with generating capacity of 50MW or more and any facilities appurtenant thereto. (Pub. Resources Code, § 25545(b)(1))
>
> (2) An energy storage system as defined in Section 2835 of the Pub. Util. Code that can store 200 MWh or more of electrical energy. (Pub. Resources Code, § 25545(b)(2))
>
> (3) A stationary electrical generating powerplant using any source of thermal energy, with a generating capacity of 50 MW or more, excluding any powerplant that burns, uses, or relies on fossil or nuclear fuels. (Pub. Resources Code, § 25545(b)(3))
>
> (4) A discretionary project that applicant has certified that a capital investment of at least $250,000,000 will be made over a period of 5 years. Provide what the facility would manufacture, produce, or assemble, and how the facility's products or services would be used in the manufacture, production, or assembly of the following:
>
> a. Energy storage systems or component manufacturing,
> b. Wind systems or component manufacturing,
> c. Solar photovoltaic energy systems or component manufacturing, or
> d. Specialized products, components, or systems that are integral to renewable energy or energy storage technologies.
> (Pub. Resources Code, § 25545(b)(4); Cal. Code Regs., tit. 20, § 1877(b))

The Soda Mountain Solar Project involves the construction and operation of a solar photovoltaic facility that would generate up to 300 megawatts (MW) of renewable energy and include up to 300 MW of battery storage. Therefore, the Project meets the definition of a "facility" per California Public Resources Code § 25545(b), paragraph (1).

Facilities included as part of the Soda Mountain Solar Project include:

1. The solar plant site (i.e., all facilities that create a footprint in and around the field of solar panels, including the solar field consisting of solar power arrays identified as the East Array and South Arrays 1, 2, and 3), operation and maintenance buildings and structures, stormwater infrastructure, and related infrastructure and improvements;
2. A substation and switchyard for interconnection to the existing transmission system; and
3. Approximately 300 MW of battery energy storage system (BESS) across 18 acres.

The power produced by the project would be conveyed to the regional electrical grid through an interconnection with the existing Marketplace-Adelanto 500-kilovolt (kV) transmission line operated by the Los Angeles Department of Water and Power (LADWP).

2.0 Permit Applications Submitted

Table 1 below identifies the agencies with jurisdiction over the project and identifies the required permits for the Soda Mountain Solar Project, including a schedule for obtaining required permits and any discussions that have occurred with these regulatory agencies. Table 2 identifies the location within the CEC application where relevant laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project are discussed, including the applicability of, and conformance with each.

2.1 Permitting History

On December 14, 2007, the project applicant, Soda Mountain Solar, LLC, filed a right-of-way (ROW) grant application with the BLM to construct, operate, maintain, and decommission the project (Case File Number CACA-049584). A ROW grant requires compliance with applicable state environmental laws, including the need to obtain an Incidental Take Permit (ITP) and Lake and Streambed Alteration Agreement (LSAA) from the California Department of Fish and Wildlife (CDFW), waste discharge requirements (WDRs) from the Regional Water Quality Control Board (RWQCB), and associated approvals of any required mitigation measures. This original project application covered 4,179 acres of BLM-administered land and included a 358-MW solar facility on a proposed development footprint of approximately 2,222 acres. All of the land within the project application area was within the California Desert Conservation Area (CDCA) Plan, a Congress-designated, 25-million-acre expanse of resource-rich desert lands in southern California through the Federal Land Policy and Management Act. The proposed project required an amendment to the CDCA Plan to allow use of the project site for solar development. The ROW grant application and proposed project's need for a CDCA Plan Amendment (PA) triggered the need for environmental analysis of potential impacts under the National Environmental Policy Act (NEPA).

As part of the original project proposal, Soda Mountain Solar, LLC, applied for groundwater well permits with the County of San Bernardino on August 2, 2012. The groundwater well permit applications triggered the need for environmental analysis under the California Environmental Quality Act (CEQA). The BLM and the County jointly prepared a proposed PA to the CDCA Plan and Environmental Impact Statement (EIS)/Environmental Impact Report (EIR) under NEPA and CEQA. The BLM and the County published the final CDCA PA and EIS/EIR document on June 12, 2015. The BLM issued a Record of Decision (ROD) to approve a revised configuration of the application and associated amendment to the CDCA Plan in March 2016 (BLM 2016). Compared with the original project analyzed in the PA and EIS/EIR, the revised project configuration in the ROD removed 571 acres from the proposed development (the North Solar Array), reduced impacts to visual resources, and included future efforts to restore connectivity for desert bighorn sheep (Ovis canadensis nelsoni).

Soda Mountain Solar, LLC, also filed revised groundwater well permit applications with the County on May 12, 2016. The County held a hearing on adoption of the EIR and approval of the groundwater permits on August 23, 2016. Despite the project receiving a ROD from the BLM and recommendation from the County Planning Staff to approve the project, the County Board of Supervisors declined to certify the EIR. As the County did not certify the EIR, no decision was made regarding the groundwater permits. The revised project configuration approved in the BLM ROD is the same as the proposed project being analyzed under this CEC Opt-In Application, with the additional removal of any groundwater wells.

On June 6, 2022, the Applicant submitted an Incidental Take Permit application to CDFW to incidentally take Agassiz's desert tortoise (Gopherus agassizii). In accordance with the California Code of Regulations, Title 14, Section 783.5, CDFW cannot finalize the Incidental Take Permit until CDFW has received a certified CEQA document. Prior to submitting an AB 205 Opt-In Application with the California Energy Commission (CEC), it was determined that CDFW would serve as the CEQA lead agency for the project.

CDFW issued a Notice of Preparation (NOP) for an Environmental Impact Report (EIR) on January 18, 2023. Table 3 identifies the organizations that commented on the 2023 NOP.

In accordance with the provisions of Title 20, California Code of Regulations, Section 1704, Appendix B, Soda Mountain, LLC and VC Renewables (Applicant) submitted an Opt-In Application in July 2024, seeking authority to construct and operate the Soda Mountain Solar Project (Project) to the California Energy Commission (CEC). The Applicant has withdrawn its Incidental Take Permit Application from CDFW, allowing the CEC to serve as Lead Agency for the Project.

Table 2-1. Permits Required for Soda Mountain Solar Project

Regulatory Agency	Permit Required	Agency Contact	Schedule
Federal Permits			
Bureau of Land Management*	Grant of Right-of-Way National Environmental Policy Act Compliance	**Name**: Portia Samples **Title**: Realty Specialist **Address**: 2601 Barstow Road, Barstow, CA 92311 **Phone**: 760 252-6000 **Email**: psamples@blm.gov **Name**: Isabeau Cordes **Title**: Realty Specialist **Address**: 2601 Barstow Road Barstow, CA 92311 **Phone**: 760 252-6000 **Email**: icordes@blm.gov **Name**: Julie Donnell **Title**: Assistant Field Manager **Address**: 2601 Barstow Road Barstow, CA 92311 **Phone**: 760 252-6000 **Email**: jdonnell@blm.gov **Name**: Brandon Anderson **Title**: Assistant District Manager **Address**: 1201 Bird Center Drive Palm Springs, CA 92262 **Phone**: 760 833-7100 **Email**: bganderson@blm.gov	Concurrent with CEC Opt-In Application
U.S. Fish and Wildlife Service*	Section 7 Consultation of the federal Endangered Species Act	**Name**: Peter Sanzenbacher **Title**: Supervisor, Desert Division **Address**: 777 E. Tahquitz Canyon Way, Suite 208, Palm Springs, CA 92262 **Phone**: 760-322-2070 **Email**: peter_sanzenbacher@fws.gov	Concurrent with CEC Opt-In Application
State Permits			

California Energy Commission*	AB 205 Opt-In Certification and Environmental Impact Report Certification	**Name:** Eric Knight **Title:** Manager, Siting & Environmental Branch Siting, Transmission & Environmental Protection Division **Address:** 715 P Street, Sacramento, CA 95814 **Email:** eric.knight@energy.ca.gov **Phone:** (916) 591-9931	July 2024-Present
Lahontan Regional Water Quality Control Board*	Construction General Permit Waste Discharge Requirements Clean Water Act Section 401 Permit	**Name**: Tiffany Steinert **Title**: Engineering Geologist **Address**: 15095 Amargosa Road, Building 2, Suite 210, Victorville, CA 92394 **Phone**: 760-241-7305 **Email**: tiffany.steinert@waterboards.ca.gov **Name**: Lisa Horowitz McCann **Title**: Environmental Program Manager **Address**: 1515 Clay Street, Suite 1400, Oakland, CA 94612 **Phone**: 916-323-0884 **Email**: lisa.mccann@waterboards.ca.gov	Concurrent with CEC Opt-In Application
California Department of Fish and Wildlife*	Incidental Take Permit Lake and Streambed Alteration Agreement	**Name:** Magdalena Rodriguez **Title**: Renewable Energy Project Manager **Address**: 3602 Inland Empire Blvd, Suite C-220, Ontario, CA 91764 **Phone:** (909) 844-2520 **Email**: Magdalena.Rodriguez@wildlife.ca.gov **Name**: Alisa Ellsworth **Title**: Environmental Program Manager **Address**: 3602 Inland Empire Blvd, Suite C-220, Ontario, CA 91764 **Phone**: 760-900-4448 **Email**: Alisa.Ellsworth@wildlife.ca.gov **Name:** Dr. Shankar Sharma **Title**: Staff Environmental Scientist of Renewable Energy **Address**: 3602 Inland Empire Blvd, Suite C-220, Ontario, CA 91764 **Phone:** 909-228-3692 **Email:** Shankar.Sharma@wildlife.ca.gov **Name:** Alexander Branch **Title**: Attorney	Concurrent with CEC Opt-In Application

		Address: 715 P Street, 17th Floor, Sacramento, CA 95814 **Phone**: 916-809-3908 **Email**: alexander.branch@wildlife.ca.gov	
California Department of Transportation*	Encroachment Permit Oversize/Heavy Load Permit	**Name**: James Camarillo **Title**: Associate Transportation Planner, District 8 – Planning Division, Office of Local Development Review San Bernardino Coordinator **Address**: 464 W. 4th Street MS-726, San Bernardino, CA 92401 **Phone**: 909-383-4555 / 909-963-8604 **Email**: james.camarillo@dot.ca.gov	After project approval and prior to construction.
Department of Toxic Substances Control	Hazardous Materials Business Plan (HMBP)	**Name**: Wayne Lorentzen **Title**: Division Chief **Address**: 1001 "I" Street, P.O. Box 806, Sacramento, CA 95812 **Phone**: 916-255-3883 **Email**: Wayne.Lorentzen@dtsc.ca.gov	After project approval and prior to construction. Updated/new HMBP submittal for operational phase.
California Department of Environmental Protection	Hazardous Materials Business Plan (HMBP)	**Name**: Elizabeth Brega **Title**: Senior Environmental Scientist **Address**: 1001 "I" St., Sacramento, CA 95814 **Phone**: 916-318-8156 **Email**: elizabeth.brega@calepa.ca.gov	After project approval and prior to construction. Updated/new HMBP submittal for operational phase.
Local			
Mojave Desert Air Quality Management District	Authority to Construct	Name: Brad Poiriez Title: Executive Director Address: 14306 Park Avenue, Victorville, CA 92392 Phone: 760-245-1661 Email: bradp@mdaqmd.ca.gov	After project approval and prior to construction.
County of San Bernadino	Onsite Wastewater Treatment System (OWTS) Permit Construction Waste Management Plan Hazardous Materials Business Plan (HMBP)	**Name:** Nancy Sansonetti **Title:** Supervising Planner, Environmental Management Division **Address:** 825 East Third Street, San Bernardino, CA 92414 **Phone:** 909-387-7910 **Email:** Nancy.Sansonetti@dpw.sbcounty.gov **Name:** Manikhone Cruz	After project approval and prior to construction. Updated/new HMBP submittal for operational phase.

		Title: Planner, Department of Public Works **Address:** 825 East Third Street, San Bernardino, CA 92415 **Phone:** 909-387-1869 **Email:** Manikhone.Cruz@dpw.sbcounty.gov	
* Indicates agency has been involved or is currently involved in discussions related to the project.			

Table 2-2. Relevant Regulatory Framework for Soda Mountain Solar Project

Environmental Issues Area	**Regulatory Compliance Discussion**
3-1 Aesthetics	Section 3.1.1 Regulatory Setting, pp. 3.1-1 – 3.1-10
3-2 Agriculture and Forestry Resources	Section 3.2.1 Regulatory Setting, pp. 3.2-1 – 3.2-6
3-3 Air Quality	Section 3.3.1 Regulatory Setting, pp. 3.3-1 – 3.3-13
3-4 Biological Resources	Section 3.4.1 Regulatory Setting, pp. 3.4-1 – 3.4-9
3-5 Cultural Resources	Section 3.5.1 Regulatory Setting, pp. 3.5-1 – 3.5-7
3-6 Energy	Section 3.6.1 Regulatory Setting, pp. 3.6-1 – 3.6-4
3-7 Geology and Soils	Section 3.7.1 Regulatory Setting, pp. 3.7-1 – 3.7-6
3-8 GHG Emissions	Section 3.8.1 Regulatory Setting, pp. 3.8-1 – 3.8-6
3-9 Hazards and Hazardous Materials	Section 3.9.1 Regulatory Setting, pp. 3.9-1 – 3.9-11
3-10 Hydrology and Water Quality	Section 3.10.1 Regulatory Setting, pp. 3.10-1 – 3.10-9
3-11 Land Use	Section 3.11.1 Regulatory Setting, pp. 3.11-1 – 3.11-8
3-12 Mineral Resources	Section 3.12.1 Regulatory Setting, pp. 3.12-1 – 3.12-4
3-13 Noise	Section 3.13.1 Regulatory Setting, pp. 3.13-1 – 3.13-8
3-14 Population and Housing	Section 3.14.1 Regulatory Setting, p. 3.14-1
3-15 Public Services	Section 3.15.1 Regulatory Setting, pp. 3.15-1 – 3.15-4
3-16 Recreation	Section 3.16.1 Regulatory Setting, pp. 3.16-1 – 3.16-4
3-17 Transportation	Section 3.17.1 Regulatory Setting, pp. 3.17-1 – 3.17-10
3-18 Tribal Cultural Resources	Section 3.18.1 Regulatory Setting, pp. 3.18-1 – 3.18-3
3-19 Utilities and Service Systems	Section 3.19.1 Regulatory Setting, pp. 3.19-1 – 3.19-9
A. Engineering Generation Facility Description, Design and Operation	N/A
B. Visual Resources Technical Report	Section 3 Regulatory Setting, pp. 8-15
C. Air Quality and Greenhouse Gas Technical Report	Section 4 Regulatory Setting, pp. 22-34
D1. Biological Resources Technical Report	Section 2 Regulatory Overview, pp. 6-14
D2. Desert Bighorn Sheep Study	N/A
E1. Aquatic Resources Delineation	Section 1.5 Regulatory Background, pp. 22-24
E2. Aquatic Resources Impact Assessment	N/A
F. Archeological Resources Assessment	
G. Historical Resources Assessment	Regulatory Framework, pp. 5-10
H. Paleontological Resources Technical Report	Regulatory Setting, pp. 13-17

I. Phase I Environmental Site Assessment	N/A
J. Water Supply Assessment	Section 3 Groundwater Management, pp. 6-10
K. Stormwater Drainage Report	N/A
L. Noise and Ground Vibration Technical Report	Section 4 Regulatory Setting, pp. 15-21
M. Transportation Analysis	Regulatory Standards, p. 11
N. Public Noticing Package	N/A
O. System Impact Restudy	N/A
P. Socioeconomic Impacts	N/A
Q. Worker Safety Plan	Section 1.3 Laws, Ordinances, Regulations and Standards, Table E, pp. 18-32
R. Waste Management Plan	Section 1.5 Laws, Ordinances, Regulations and Standards, Table E, pp. 21-29
S. Community Benefit Agreement Strategy	N/A
T. Labor Certifications	N/A
U. Closure and Decommissioning Plan	N/A
V. Supplemental Information	N/A

3.0 Prohibited Area Analysis

The following analysis identifies whether the Soda Mountain Solar Project is located at a prohibited area in accordance with California Code of Regulations Title 20 § 1877 (e) or Pub. Resources Code, § 25527.

> *Per Cal. Code Regs., tit. 2, § 1877(e), identify whether the project is, on a prohibited site as identified in Public Resources Code section 25527 or on a site designated by the California Coastal Commission under Public Resources Code section 30413(b) or on a site designated by the San Francisco Bay Conservation and Development Commission under Government Code section 66645(b). Include documentation of the approval of the public agency having ownership or control of the land.*

The Soda Mountain Solar Project is not located on a prohibited site as identified in Public Resources Code section 25527 or on a site designated by the California Coastal Commission under Public Resources Code section 30413(b) or on a site designated by the San Francisco Bay Conservation and Development Commission under Government Code section 66645(b). The project is located entirely on federally owned land managed by the Bureau of Land Management (BLM). The 2,670-acre project site is located approximately 7 miles southwest of the community of Baker in unincorporated San Bernadino County, California, approximately 50 miles northeast of Barstow. The project site is located in portions of Sections 1 and 11–14, Township 12 North, Range 7 East; Sections 25 and 36, Township 13 North, Range 7 East; Sections 6, 7, 8, and 18, Township 13 North, Range 8 East, San Bernardino Meridian, California. The project site occurs on the following San Bernardino County Assessor's Parcel Numbers (APN): 0543-24-117-0000, 0543-24-119-0000, 0543-20-107-0000, 0543-25-101-0000, 0543-20-110-0000, 0543-20-109-0000, 0543-25-112-0000, and 0543-21-118-0000.

> *Per Pub. Resources Code, § 25527, The following areas of the state shall not be approved as a site for a facility, unless the commission finds that such use is not inconsistent with the primary uses of*

such lands and that there will be no substantial adverse environmental effects and the approval of any public agency having ownership or control of such lands is obtained:

1. *State, regional, county and city parks; wilderness, scenic or natural reserves; areas for wildlife protection, recreation, historic preservation; or natural preservation areas in existence on the effective date of this division.*
2. *Estuaries in an essentially natural and undeveloped state.*

In considering applications for certification, the commission shall give the greatest consideration to the need for protecting areas of critical environmental concern, including, but not limited to, unique and irreplaceable scientific, scenic, and educational wildlife habitats; unique historical, archaeological, and cultural sites; lands of hazardous concern; and areas under consideration by the state or the United States for wilderness, or wildlife and game reserves.

1. Section 3.11, Land Use and Planning, Section 3.11.3, Impact Analysis, pages 3-11-9 through 3.11-11 contains a detailed discussion of the state, regional and county land uses relevant to the project site, including the Project's anticipated effects. As stated in this analysis, the project would not conflict with any applicable land use plan, policy or regulation.

2. The Soda Mountain Solar Project site does not contain any estuaries in an essentially natural and undeveloped state. Therefore, the Project site is not located on a prohibited site per *Pub. Resources Code, § 25527(2).*

4.0 Environmental Leadership Development Project Requirements

In compliance with Cal. Code Regs., tit. 20, § 1877(h), the Project Applicant, Soda Mountain Solar, LLC, submits the following discussion as to how the Project meets the requirements of Public Resources Code sections 21183 and 21183.6.

4.1 The Project exceeds the minimum investment requirement of Public Resources Code Section 21183(a)(1).

Public Resources Code Section 21183(a)(1): *The project will result in a minimum investment of one hundred million dollars ($100,000,000) in California upon completion of construction.*

The Applicant certifies that it will invest in excess of one hundred million dollars ($100,000,000) in California during development, construction and operation of the Project. A "Socioeconomic Impacts on San Bernardino County of the Proposed Soda Mountain Solar Project" was completed by Michael Baker International in July 2024 and included with the CEC AB 205 Opt-In Application Submittal for the Project as Appendix P (Confidential). This report verifies the Project meets this requirement.

4.2 The Project will satisfy the requirements of Public Resources Code Sections 21183(b) and 21183.5(c) by creating high-wage, highly skilled jobs that pay prevailing wages and living wages; providing construction jobs and permanent jobs for Californians; helping reduce unemployment; and promoting apprenticeship training.

Public Resources Code Section 21183(b): *The project creates high-wage, highly skilled jobs that pay prevailing wages and living wages, provides construction jobs and permanent jobs for Californians, helps reduce unemployment, and promotes apprenticeship training. For purposes of this subdivision, a project is deemed to create jobs that pay prevailing wages, create highly skilled jobs, and promote apprenticeship training if the applicant demonstrates to the satisfaction of the Governor that the project will comply with Section 21183.5.*

The Applicant certifies that all applicable requirements set forth in Public Resources Code Sections 21183(b) and 21183.5(c) will be satisfied. The Project will create high-wage, highly skilled jobs for construction professionals, including carpenters, electricians, and heavy equipment operators; provide permanent jobs for Californians; and help reduce unemployment. The Applicant will ensure that all construction workers, contractors, subcontractors, and apprentices employed will be paid in accordance with Public Resources Code Section 21183.5(c)(1), and that a skilled and trained workforce will be used to perform all construction work in accordance with Public Resources Code Section 21183.5(c)(2). Included with the CEC AB 205 Opt-In Application Submittal for the Project is a copy of a signed commitment furnished by the Applicant demonstrating that the Applicant will satisfy all applicable requirements.

The Project's construction activities are expected to support employment for an average of 200 full-time equivalent ("FTE") job years over the construction period (direct impact consisting of laborers, electricians, ironmen, craftsmen, supervisory personnel, support personnel, construction management and other skilled labor). During the operating period, the number of personnel required to operate the Project is estimated at 32 FTEs or 960 FTE-years for the full estimated 30-year operations period. Activities would include panel washing, tightening of mechanical fasteners, replacement of damaged or exposed wiring, tracker drive maintenance or fluid replenishment, and PCS maintenance such as filter replacement, equipment testing, maintenance, equipment operation, security, and minor equipment repair. Occasionally there will be a need to replace a PV panel and battery cells.

A "Socioeconomic Impacts on San Bernardino County of the Proposed Soda Mountain Solar Project" was completed by Michael Baker International in July 2024 and included with the CEC AB 205 Opt-In Application Submittal for the Project as Appendix P (Confidential). This report contains labor wage estimates during project construction and operation.

4.3 The Project will not result in any net additional greenhouse gas (GHG) emissions pursuant to Public Resources Code Sections 21183(c)(1) and 21183.6.

> Public Resources Code Section 21183(c): *For a project described in paragraph (1), (2), or (3) of subdivision (b) of Section 21180, the project does not result in any net additional emission of greenhouse gases, including greenhouse gas emissions from employee transportation. For purposes of this paragraph, a project is deemed to meet the requirements of this paragraph if the applicant demonstrates to the satisfaction of the Governor that the project will comply with Section 21183.6.*

Project Emissions. An Air Quality and Greenhouse Gas Study was prepared for the Project by SWCA environmental consultants ("SWCA") in June 2024 and included with the CEC AB 205 Opt-In Application Submittal for the Project as Appendix C. The report quantifies the expected construction and operational greenhouse gas ("GHG") emissions for the Project. GHG emissions include carbon dioxide (CO_2), methane (CH_4), and nitrous dioxide (NO_2). Construction was assumed to occur over an 18-month period (March 2025 to August 2026), while annual operational emissions were estimated for 2027, the Project's first full year of operations, and projected to remain the same for the Project's approximately 30-year lifespan.

Construction of the Project is anticipated to result in approximately 8,304 metric tons of carbon dioxide equivalent (CO_2e) emissions. Construction-related emissions are expected to peak in 2025 with approximately 5,068 metric tons of CO_2e emissions, and then decrease to 3,236 metric tons of CO_2e emissions in 2026. In total, construction will result in 8,304 metric tons of CO_2e emissions, which equates to 277 metric tons of CO_2e emissions per year amortized over the life of the project. Total and annual

construction-related emissions will be well below the Mojave Desert Air Quality Management District's (MDAQMD) annual GHG threshold of significance of 90,718 metric tons (100,000 short tons).

Operation of the Project is anticipated to result in approximately 1,310 metric tons of CO_2e emissions every year, for a total of approximately 39,577 metric tons of CO_2e emissions during the Project's 30-year operating life. Total and annual construction-related emissions are well below MDAQMD's annual GHG threshold of significance of 90,718 metric tons (100,000 short tons).

In summary, the project's emissions are as follows:

- Total GHG emissions: Emissions from construction total 8,304 metric tons of CO_2e per year and operation will total approximately 1,310 metric tons of CO_2e per year.
- Amortized annual GHG emissions: Annual project emissions from operation (1,310 metric tons of CO_2e) and construction (277 metric tons of CO_2e) will total approximately 1,587 metric tons of CO_2e during the project 30-year operating life.
- Peak annual GHG emissions: GHG emissions are expected to peak in 2025 at approximately 5,068 metric tons of CO_2e

In addition, the Project would comply with all rules, regulations, emission control strategies and air quality plans set forth by the MDAQMD and would not result in significant elevated health risks at sensitive receptors due to proximity to nearby pollution sources. The Project would be consistent with the California Global Warming Solutions Act of 2006 ("AB 32") scoping plan strategies, the California Air Resources Board ("CARB") emission reduction strategy presented in the Scoping Plans, and the San Bernardino County Policy Plan and GHG Plan. The Project would also help California meet its ambitious Renewables Portfolio Standard ("RPS") requirements and GHG reduction goals.

Displaced GHG Emissions – EPA's AVERT Model. The Project is expected to result in an overall net reduction of GHG emissions because the Project will displace other energy sources with higher GHG emissions (e.g., natural gas). The Air Quality and Greenhouse Gas Study relies on the Greenhouse Gas Equivalencies Calculator and Avoided Emissions and Generation Tool ("AVERT"), both developed by the U.S. Environmental Protection Agency ("EPA"), to calculate the GHG emissions avoided as a result of the Project. For a 300-MW solar facility in California such as the Project, these models calculate that 305,730 metric tons (337,010 tons) of CO_2e emissions would be avoided every year.

In total, the Project's amortized GHG emissions will be approximately 1,587 metric tons of CO_2e emissions per year during the 30-year operating life of the Project. However, the Project will displace approximately 305,730 metric tons of CO_2e emissions annually. The Project will offset 200-times more GHG emissions than it generates. The Project is therefore expected to result in a net reduction of approximately 305,730 metric tons of CO_2e emissions annually.

Displaced GHG Emissions – California Grid Analysis. Grid operators constantly balance electricity generation with electricity demand in a region. Demand is lowest overnight, when most consumers are sleeping and when many businesses are closed. Demand begins to ramp up in the morning as people wake up and businesses start opening. Demand stays elevated throughout the day, rises slightly in the evening as people come home from work and residential electricity consumption increases, and then drops off again in the late evening.

Renewable and zero-carbon sources of energy do not operate on-demand like traditional fossil fuel power plants. As a result, as more solar capacity has come online in California, grid operators at the California Independent System Operator (CAISO) have observed a drop in net load (or the demand remaining after subtracting variable renewable generation) in the middle of the day when solar generation tends to be highest. When graphed for a typical day, the pattern created by the midday dip in the net load curve,

followed by a steep rise in the evenings when solar generation drops off, looks like the outline of a duck, so this pattern is often called a "duck curve." As solar capacity in California continues to grow, the midday dip in net load is getting lower, deepening the duck curve and presenting challenges for grid operators.

The growth of zero-carbon resources, especially solar resources, has shifted grid reliability concerns from the peak hour (hour with the highest energy demand) to net peak hours (hours when energy demand minus wind and solar generation is largest). The changing resource mix is driving a change in the characteristics of the electricity system and requires consideration of the net demand curve, particularly total electricity demand less the wind and solar generation. The "duck curve" is characterized by more drastic increases in net demand in the evening hours as solar decreases, and a net peak that occurs later in the evening when solar generation is substantially diminished or nonexistent (CEC 2022).

Storing some midday solar generation flattens the duck curve, and dispatching the stored solar generation in the evening shortens the duck's neck (NREL 2015). Presently, fossil-fuel power plants, particularly those operating on natural gas, provide about 75 percent of the flexible capacity for grid reliability. As more renewable power enters the system, other resources such as storage and demand-side management are essential to maintain reliability with high concentrations of renewables (CARB 2022). Energy storage systems like the Project's BESS therefore present an opportunity to improve California's ability to efficiently integrate renewable resources and avoid GHG emissions associated with fossil fuel resources.

The Project's solar and BESS components are anticipated to operate together, with the BESS beginning operations on day one of Project operation. The Project is expected to produce approximately 953,171 MWh every year. Approximately forty-seven percent (47%) percent of that electricity, or approximately 445,840 MWh per year, will be stored in the BESS for dispatch to the grid during evening hours.

The most common form of generation currently used to meet evening demand peak is conventional combined cycle natural gas. In 2019, the CEC calculated that natural gas facilities generated approximately 0.373 metric tons of CO_2e emissions per MWh (CEC 2019a). Therefore, operation of the BESS as planned (445,840 MWh/year dispatched during evening hours) would displace or avoid approximately 166,298 metric tons of CO_2e emissions every year.

As noted above, the Project is expected to generate a total of 39,577 metric tons of CO_2e emissions during the life of the project, or approximately 1,587 metric tons of CO_2e emissions annually. Based on the above calculation, it would take less than three months of BESS operations to fully offset all emissions associated with construction and operation of the Project. Or stated differently, over the life of the project, discharge of electricity from the BESS during evening hours would displace 166,298 metric tons of CO_2e every year, or more than one hundred times (100x) the amount of CO_2e emissions expected to be generated annually from construction and operation of the Project (1,587 metric tons of CO_2e).

To further demonstrate the Project's ability to displace emissions associated with existing fossil fuel resources, we provide a comparison to two natural gas power plants in Southern California.

The Haynes Generating Station (Units 1 & 2) in Los Angeles County, which has a 460 MW installed capacity, generated a total of 414,456 MWh in 2020, 2021 and 2022. These units have a GHG intensity of 0.42 metric tons of CO2e emissions per MWh, resulting in approximately 174,071 metric tons of CO_2e emissions between 2020 and 2022 (CEC 2019b). In comparison, the Project's BESS is able to dispatch approximately 445,840 MWh in a single year during hours similar to when the Haynes units currently operate. The Project could therefore generate sufficient energy in a single year to displace all of the electricity generated from Haynes over three years. In that scenario, the Project would avoid or displace approximately 174,071 metric tons of CO_2e emissions in a single year.

As another example, the Valley Generation Station in Los Angeles County, which has a nameplate capacity of 264 MW, generated an average of 592,100 MWh per year between 2018 and 2022. This unit has a GHG intensity of 0.42 metric tons of CO_2e emissions per MWh, resulting in approximately 249,000 metric tons of CO_2e emissions every year between 2018 and 2022 (CEC 2019b). In comparison, the Project's BESS is able to generate 445,840 MWh per year during hours similar to when the Valley Generation Station operates. The Project could therefore displace nearly approximately seventy-five percent (75%) of the emissions associated with operation of the Valley Generation Station, or approximately 187,490 metric tons of CO_2e emissions every year.

This analysis demonstrates that the Project would not result in any net additional GHG emissions, and would in fact result in a substantial net reduction of GHG emissions throughout the life of the Project.

4.4 The Project will satisfy the requirements of Public Resources Code Section 21183(d) by complying with applicable requirements of Chapters 12.8 and 12.9 relating to recycling of commercial solid waste and organic waste.

> Public Resources Code Section 21183(d): *The applicant demonstrates compliance with the requirements of Chapter 12.8 (commencing with Section 42649) and Chapter 12.9 (commencing with Section 42649.8) of Part 3 of Division 30, as applicable*.

Chapters 12.8 and 12.9 set forth requirements to address diversion and recycling of solid and organic wastes. Chapter 12.8 generally requires businesses that generate four cubic yards or more of commercial solid waste per week to arrange for recycling services consistent with state or local laws or requirements, to the extent these services are offered and reasonably available from a local service provider. Chapter 12.9 generally requires business that generate two cubic yards or more of commercial solid waste to arrange for recycling services specifically for organic waste. Businesses can comply with this requirement in various ways, including but not limited to source separating organic waste from other waste and subscribing to a basic level of organic waste recycling service that includes collection and recycling of organic waste.

Construction of the Project is expected to require approximately 630,000 cubic yards of cut and 180,100 cubic yards of fill, for a net export of approximately 449,900 cubic yards. A majority of the waste that is expected to be generated during both construction activities and operational activities associated with the Project would be classified as nonhazardous waste; however, it is anticipated that some hazardous waste would be generated. A Waste Management Plan has been prepared for the proposed project (Appendix R) and the Applicant certifies that the Project will comply with all applicable requirements of Chapters 12.8 and 12.9 of Part 3 of Division 30 of the Public Resources Code during construction and operation of the Project.

4.5 The Applicant has executed a binding agreement establishing the requirements set forth in Public Resources Code Sections 21183, subdivisions (e), (f), and (g).

> Public Resources Code Section 21183(e): *The project applicant has entered into a binding and enforceable agreement that all mitigation measures required under this division to certify the project under this chapter shall be conditions of approval of the project, and those conditions will be fully enforceable by the lead agency, or another agency designated by the lead agency. In the case of environmental mitigation measures, the applicant agrees, as an ongoing obligation, that those measures will be monitored and enforced by the lead agency for the life of the obligation.*
>
> Public Resources Code Section 21183(f): *The applicant agrees to pay the costs of the trial court and the court of appeal in hearing and deciding any case challenging a lead agency's action on a certified project under this division, including payment of the costs for the appointment of a special master if*

deemed appropriate by the court, in a form and manner specified by the Judicial Council, as provided in the California Rules of Court adopted by the Judicial Council under Section 21185.

Public Resources Code Section 21183(g): *The applicant agrees to pay the costs of preparing the record of proceedings for the project concurrent with review and consideration of the project under this division, in a form and manner specified by the lead agency for the project. The cost of preparing the record of proceedings for the project shall not be recoverable from the plaintiff or petitioner before, during, or after any litigation.*

Included as **Attachment 1** to this document is a letter of acknowledgement and agreement transmitted from the Applicant to CEC, the CEQA lead agency, demonstrating satisfaction of the requirements of Public Resources Code 21183, subdivisions (e), (f), and (g). An EIR is being prepared for the proposed Project pursuant to CEQA. Prior to approval of the Project, the EIR must be certified by the CEC, and a mitigation monitoring and reporting plan must be adopted that contains appropriate mitigation measures to reduce the Project's impacts on the environment. The Applicant agrees to make any mitigation measures required under CEQA and SB 7 conditions of approval for the Project and fully enforceable by CEC or other appropriate agencies delegated by CEC. The Applicant also agrees to pay the court costs in hearing and deciding any case challenging CEC's action on the Project, as well as the costs of preparing the administrative record for the Project concurrent with the CEQA review process.

4.6 The record of proceedings for the Project is being prepared in accordance with Public Resources Code Section 21186, as required under Public Resources Code Section 21183(h).

Public Resources Code Section 21183(h): *For a project for which environmental review has commenced, the applicant demonstrates that the record of proceedings is being prepared in accordance with Section 21186.*

Included as **Attachment 2** to this document is a written statement from the Applicant affirming compliance with the requirements of Public Resources Code Section 21183(h). The EIR for the Project is being prepared and the draft EIR will be circulated for public review in the coming months. As required under Public Resources Code Section 21186, the draft EIR and all other document submitted to, or relied on by, the lead agency in preparing the draft EIR will be made available on an internet website maintained by CEC at the time the draft EIR is released.

4.7 References

SWCA Environmental Consultants Air Quality and Greenhouse Gas Technical Report, June 2024

CEC Staff Report, 2019, "Review of Los Angeles Department of Water and Power's 2017 Power Integrated Resource Plan" (CEC-200-2019-015), pg. 16 (Table 3), *available at*: https://www.energy.ca.gov/filebrowser/download/1901.

California Energy Commission (CEC), 2022, "Final 2021 Integrated Energy Policy Report, Vol. II: Ensuring Reliability in a Changing Climate" (CEC-100-2021-001-V2), *available at*: https://efiling.energy.ca.gov/GetDocument.aspx? tn=241583.

National Renewable Energy Laboratory (NREL), 2015, "Overgeneration from Solar Energy in California: A Field Guide to the Duck Chart" (NREL/TP-6A20-65023, Nov. 2015), *available at*: https://www.nrel.gov/docs/fy16osti/65023.pdf.

California Air Resources Board, 2022, "California's Scoping Plan for Achieving Carbon Neutrality," *available at*: https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf.

CEC Staff Report, 2019 (CEC 2019a). “Estimated Cost of New Utility-Scale Generation in California: 2018 Update” (CEC-200-2019-005), *available at*: https://www.energy.ca.gov/sites/default/files/2021-06/CEC-200-2019-005.pdf.

CEC Staff Report, 2019 (CEC 2019b), “Review of Los Angeles Department of Water and Power’s 2017 Power Integrated Resource Plan” (CEC-200-2019-015), pg. 16 (Table 3), *available at*: https://www.energy.ca.gov/filebrowser/download/1901.

5.0 Document Preparers

Table 5-1 Soda Mountain Solar Report Preparers

Opt-In Application Item		Preparer
0.0	Data Response Worksheet	Resolution Environmental
1.0	Executive Summary	SWCA Environmental Consultants
2.0	Project Description	SWCA Environmental Consultants
3.0	Environmental Impacts Analysis	SWCA Environmental Consultants
3.1	Aesthetics	SWCA Environmental Consultants
3.2	Agriculture and Forestry Resources	SWCA Environmental Consultants
3.3	Air Quality	SWCA Environmental Consultants
3.4	Biological Resources	SWCA Environmental Consultants
3.5	Cultural Resources	SWCA Environmental Consultants
3.6	Energy	SWCA Environmental Consultants
3.7	Geology and Soils	SWCA Environmental Consultants
3.8	Greenhouse Gas Emissions	SWCA Environmental Consultants
3.9	Hazards and Hazardous Materials	SWCA Environmental Consultants
3.10	Hydrology and Water Quality	SWCA Environmental Consultants
3.11	Land Use and Planning	SWCA Environmental Consultants
3.12	Mineral Resources	SWCA Environmental Consultants
3.13	Noise	SWCA Environmental Consultants
3.14	Population and Housing	SWCA Environmental Consultants
3.15	Public Services	SWCA Environmental Consultants
3.16	Recreation	SWCA Environmental Consultants
3.17	Transportation	SWCA Environmental Consultants
3.18	Tribal Cultural Resources	SWCA Environmental Consultants
3.19	Utilities and Service Systems	SWCA Environmental Consultants
4.0	Alternatives	SWCA Environmental Consultants
5.0	Other CEQA Considerations	SWCA Environmental Consultants
6.0	Report Preparation	SWCA Environmental Consultants
A	Engineering Generation Facility Description, Design and Operation	Resolution Environmental Z Global Kleinfelder Engineering
B	Visual Resources Technical Report	SWCA Environmental Consultants
C	Air Quality and Greenhouse Gas Technical Report	SWCA Environmental Consultants
D1	Biological Resources Technical Report	SWCA Environmental Consultants
D2	Desert Bighorn Sheep Study	Dudek
E1	Aquatic Resources Delineation	SWCA Environmental Consultants
E2	Aquatic Resources Impact Assessment	SWCA Environmental Consultants
F	Archeological Resource Assessment	SWCA Environmental Consultants
G	Historical Resources Assessment	SWCA Environmental Consultants
H	Paleontological Resources Technical Report	SWCA Environmental Consultants
I	Phase I Environmental Site Assessment	SWCA Environmental Consultants
J	Water Supply Assessment	SWCA Environmental Consultants
K	Stormwater Drainage Report	SWCA Environmental Consultants

L	Noise and Ground Vibration Technical Report	SWCA Environmental Consultants
M	Transportation Analysis	Kittleson and Associates
N	Public Noticing Package	Z Global
O1	System Impact Restudy	Los Angeles Department of Water and Power
O2	Large Generator Interconnection Agreement	Southern California Public Power Authority (Authority Interest – LADWP)
P	Socioeconomic Impacts	Michael Baker International
Q	Worker Safety Plan	Michael Baker International
R	Waste Management Plan	Michael Baker International
S	Community Benefit Agreement Strategy	Resolution Environmental
T	Labor Certifications	Resolution Environmental
U	Closure and Decommissioning Plan	Resolution Environmental
V	Supplemental Information	Resolution Environmental

July 8, 2024

Eric Knight, Siting and Environmental Branch Manager

California Energy Commission

715 P Street

Sacramento, CA 95814

Re: Soda Mountain Solar, LLC's Acknowledgement of Obligations under Public Resources Code Sections 21183(e)-(g).

Dear Mr. Knight,

Soda Mountain Solar, LLC (Applicant) is submitting an application for certification of the Soda Mountain Solar Project (Project) as an Environmental Leadership Development Project (ELDP) subject to streamlined judicial review under the Jobs and Economic Improvement through Environmental Leadership Act of 2021, also known as SB 7.

By this letter, the Applicant hereby acknowledges and agrees to its obligations under Public Resources Code Sections 21183(e), (f), and (g). Those statutory provisions provide as follows:

Section 21183(e)

> The applicant has entered into a binding and enforceable agreement that all mitigation measures required under this division [the California Environmental Quality Act] to certify the project under this chapter [the Act] shall be conditions of approval of the project, and those conditions will be fully enforceable by the lead agency or another agency designated by the lead agency. In the case of environmental mitigation measures, the applicant agrees, as an ongoing obligation, that those measures will be monitored and enforced by the lead agency for the life of the obligation.

Section 21183(f)

> The applicant agrees to pay the costs of the trial court and the court of appeal in hearing and deciding any case challenging a lead agency's action on a certified project under this division [the California Environmental Quality Act], including payment of the costs for the appointment of a special master if deemed appropriate by the court, in a form and manner specified by the Judicial Council, as provided in the California Rules of Court adopted by the Judicial Council under Section 21185.

Section 21183(g)

> The applicant agrees to pay the costs of preparing the record of proceedings for the project concurrent with review and consideration of the project under this division, in a form and manner specified by the lead agency for the project. The cost of preparing the record of proceedings for the project shall not be recoverable from the plaintiff or petitioner before, during, or after any litigation.

The Applicant acknowledges and agrees that its commitment to comply with the requirements of SB 7 has no impact on CEC's review or processing of the Environmental Impact Report (EIR) for the Project, does not obligate CEC to approve the Project, and does not impact CEC's discretion under applicable law to require modifications or alterations to the Project.

Sincerely,

Michael Cocchimiglio

CEO & Head of Development

Acknowledged and agreed to by:

CALIFORNIA ENERGY COMMISSION

By: _____

[Name], [Title]

Date: _____

July 8, 2024

Eric Knight, Siting and Environmental Branch Manager

California Energy Commission

715 P Street

Sacramento, CA 95814

Re: Soda Mountain Solar, LLC's Affirmation of Compliance with Public Resources Code Sections 12283(h) and 21186.

Dear Mr. Knight,

Soda Mountain Solar, LLC (Applicant), is submitting an application for certification of the Soda Mountain Solar Project (Project) as an Environmental Leadership Development Project (ELDP) subject to streamlined judicial review under the Jobs and Economic Improvement through Environmental Leadership Act of 2021, also known as SB7 (the Act).

By this letter, Soda Mountain Solar, LLC, affirms and agrees that the record of proceedings is being and will be prepared in accordance with Public Resources Code Sections 21183(h) and 21186. Those statutes provide as follows:

Section 21183(h)

For a project for which environmental review has commenced, the applicant demonstrates that the record of proceedings is being prepared in accordance with Section 21186.

Section 21186

Notwithstanding any other law, the preparation and certification of the record of proceedings for a leadership project certified by the Governor shall be performed in the following manner:

> (a) The lead agency for the project shall prepare the record of proceedings under this division concurrently with the administrative process.
>
> (b) All documents and other materials placed in the record of proceedings shall be posted on, and be downloadable from, an internet website maintained by the lead agency commencing with the date of the release of the draft environmental impact report.
>
> (c) The lead agency shall make available to the public in a readily accessible electronic format the draft environmental impact report and all other documents submitted to, or relied on by, the lead agency in preparing the draft environmental impact report.
>
> (d) Any document prepared by the lead agency or submitted by the applicant after the date of the release of the draft environmental impact report that is a part of the record of the proceedings shall be made available to the public in a readily accessible electronic format within five days after the document is released or received by the lead agency.

(e) The lead agency shall encourage written comments on the project to be submitted in a readily accessible electronic format and shall make any comment available to the public in a readily accessible electronic format within five days of its receipt.

(f) Within seven days after the receipt of any comment that is not in an electronic format, the lead agency shall convert that comment into a readily accessible electronic format and make it available to the public in that format.

(g) Notwithstanding paragraphs (b) to (f), inclusive, documents submitted to or relied on by the lead agency that was not prepared specifically for the project and are copyright protected are not required to be made readily accessible in an electronic format. For those copyright protected documents, the lead agency shall make an index of these documents available in an electronic format no later than the date of the release of the draft environmental impact report, or within five days if the document is received or relied on by the lead agency after the release of the draft environmental impact report. The index must specify the libraries or lead agency offices in which hard copies of the copyrighted materials are available for public review.

(h) The lead agency shall certify the final record of proceedings within five days of its approval of the project.

(i) Any dispute arising from the record of proceedings shall be resolved by the superior court. Unless the superior court directs otherwise, a party disputing the content of the record shall file a motion to augment the record at the time it files its initial brief.

(j) The contents of the record of proceedings shall be as set forth in subdivision (e) of Section 21167.6. The California Energy Commission (CEC) is serving as the CEQA lead agency for the Project. CEC is currently in the process of preparing the EIR. CEC and its CEQA consultant are in possession of all currently available materials constituting the administrative record of proceedings for the Project and the Applicant understands they are in the process of storing those materials in a centralized database for prompt posting to a publicly available website upon release of the Draft EIR.

The Applicant acknowledges that, at the time the draft EIR is released, all then-available materials to be included in the record of proceedings must be publicly available and downloadable from an internet website maintained by CEC. The Applicant further acknowledges that materials prepared or received after the release of the draft EIR must be promptly posted from the same website within the time limits prescribed by Public Resources Code Section 21186.

Thank you for considering our application. Please let me know if we can answer any questions or provide additional information.

Sincerely,

Michael Cocchimiglio

CEO & Head of Development