Los Angeles County
Department of Regional Planning

Planning for the Challenges Ahead

Richard J. Bruckner
Director

NOTICE OF PREPARATION
AND
NOTICE OF SCOPING MEETING

DATE: June 13, 2012

OVERALL DEVELOPMENT TITLE:

Silverado Power West Los Angeles County
Project 1: R2011-00833 (CUP201100079, RZC201100005), North Lancaster Ranch
Project 2: R2011-00798 (CUP201100070), Western Antelope Blue Sky Ranch
Project 3: R2011-00799 (CUP201100071), American Solar Greenworks
Project 4: R2011-00807 (CUP201100076), Antelope Solar Greenworks
Project 5: R2011-00801 (CUP201100072), Silver Sun Greenworks
Project 6: R2011-00805 (CUP201100074), Lancaster WAD
Environmental Review No. ENV201100109

PROJECT ADDRESSES:

Project 1: 105th Street West & West Avenue B, Lancaster, CA
Project 2: 110th Street West & West Avenue K, Lancaster, CA
Project 3: 70th Street West & West Avenue G, Lancaster, CA
Project 4: 97th Street West & West Avenue I, Lancaster, CA
Project 5: 120th Street West & West Avenue I, Lancaster, CA
Project 6: 35th Street West & West Avenue D, Lancaster, CA

OVERALL DEVELOPMENT APPLICANT:

Silverado Power, LLC
44 Montgomery Street, Ste. 3065
San Francisco, California 94104

CEQA LEAD AGENCY:

County of Los Angeles
Department of Regional Planning
320 W. Temple Street, Room 1348
Los Angeles, California 90012

The County of Los Angeles is the lead agency and will prepare the Environmental Impact Report (EIR) for six proposed solar generating facilities (SGFs) referred to as the "Overall Development". In compliance with Section 15082 of the California Environmental Quality Act (CEQA) Guidelines, the County of Los Angeles is sending this Notice of Preparation (NOP) to each responsible agency,

interested parties, and federal agencies involved in approving the proposed Overall Development and to trustee agencies responsible for natural resources affected by the proposed Overall Development. Within 30 days after receiving the Notice of Preparation, each agency shall provide the County of Los Angeles with specific written details about the scope and content of the environmental information related to the agency's area of statutory responsibility.

The purpose of this NOP is to solicit the views of your agency as to the scope and content of the environmental information germane to your agency's statutory authority with respect to the proposed Overall Development. Your agency may need to use the EIR prepared by our agency when considering your permit or other approval for the proposed Overall Development.

Overall Development Location

The Overall Development is located in the northern portion of unincorporated Los Angeles County, in the western portion of the Antelope Valley. The applicant, Silverado Power, proposes to develop six solar generating facilities at six site locations throughout western Antelope Valley. These six sites together would include development of approximately 747.1 acres and would produce 172 megawatts (MW) of solar power in total. The Overall Development is primarily located on fallow unproductive farmland. The area where these sites are located is rural land west of the State Highway 14.

Overall Development Description

Silverado Power, LLC (Silverado Power) is a utility scale solar photovoltaic (PV) developer proposing the development of six solar PV sites (referred to as the Overall Development) addressed in this EIR. The Overall Development is located in an area of the western Antelope Valley that was historically used for agricultural activities. Production and economic constraints led to the cessation of agricultural activities in the area, resulting in disturbed and vacant land. Silverado Power has located six SGFs on disturbed and vacant land throughout the western Antelope Valley.

The Overall Development proposes to increase electricity generated from renewable technology by generating 172 MW of electrical energy from the sun. Recent legislation enacted in California encourages the development of renewable energy resources to reduce reliance on fossil fuels, diversify energy portfolios, reduce greenhouse gas emissions, and assist creation of "green" jobs within the state of California.

The Overall Development proposes to assist California in meeting the newly established Renewable Energy Portfolio Standards (RPS). Senate Bill 14 established RPS targets for California, stating, "all retail sellers of electricity shall serve 33 percent of their load with renewable energy by 2020." State government agencies have been directed to take all appropriate actions to implement this target in all regulatory proceedings, including siting, permitting, and procurement for renewable energy power plants and transmission lines. The six sites qualify as an eligible renewable energy resource as defined by the California Public Resources Code.

The Overall Development proposes siting to limit impacts to the environment and the local community by:

- Using disturbed land or land that has been previously degraded from prior use
- Using existing electrical distribution facilities, rights-of-way, roads, and other existing infrastructure where possible to reduce the need for new electrical support facilities
- Limiting impacts to threatened or endangered species or their habitats, wetlands and waters of the United States, cultural resources, and sensitive land uses
- Limiting water use

Silverado Power has acquired rights to the real properties and filed zoning applications with the County of Los Angeles for the six solar sites. Environmental studies, Overall Development siting and planning, and interconnection agreements have been ongoing since 2010. The lead agency for this document is the County of Los Angeles. Silverado Power has held several meetings in the Antelope Valley area to inform the public about all aspects of the Overall Development. The Overall Development proposes delivering power to the Southern California Edison (SCE) electrical grid beginning in late 2013. The SGFs would be constructed in phases, followed by commercial operation for an estimated 35 years.

Each of the six SGFs would be designed and built using the same or similar method. The Overall Development would employ a series of photovoltaic (PV) module arrays to convert sunlight into electrical energy without the use of heat transfer fluid or cooling water. The facilities would deliver the electrical output to the existing regional transmission system.

The PV modules would convert sunlight into low-voltage direct current (DC) power, which is subsequently transformed by an inverter into alternating current (AC) power. The PV modules are made of a semiconductor material through which electrons flow to convert light (photons) to electricity (voltage).

Each SGF would consist of the following elements:

- PV modules
- PV Module mounting system
- Balance of system and electrical boxes (e.g., combiner boxes, electrical disconnects)
- Electrical inverters and transformers
- Electrical AC collection system, including switchgear
- Data monitoring equipment
- Access roads and chain link perimeter security fencing

A regional Operations and Maintenance (O&M) facility to serve all six SGFs would be located in an existing permitted space within Los Angeles County. Each SGF requires a CUP from Los Angeles County for the construction and operation of the SGF.

Entitlement Requirements and Discretionary Approvals

Discretionary approvals required for implementation of the proposed Overall Development may include, but are not limited to, the following:

- Certification of an Environmental Impact Report
- Zone Change for Project 1 from A-1 (Light Agricultural) to A-2 (Heavy Agricultural)
- Approval of six Conditional Use Permits, one for each of the SGFs, to authorize the development of Projects 1-6 to operate a SGF
- Additional County and other governmental actions as determined necessary

General Plan Designation

The Antelope Valley Areawide General Plan designation for the Project sites is N1 (Non-Urban 1).

Board of Supervisors District

District 5, Michael Antonovich.

Environmental Issues to be evaluated in the EIR

- Aesthetics*
- Agricultural Resources
- Air Quality*
- Biological*
- Cultural*
- Energy
- Geology and Soils*
- Hazards and Hazardous Materials
- Hydrology and Water Quality*
- Land Use and Planning
- Noise*
- Public Services
- Transportation and Traffic*
- Utilities and Service Systems
- Climate Change and Green House Gases, GHG*

*Technical Studies being prepared

Notice of Preparation Review and Comments

The review period for the NOP will be from **June 20, 2012** to **July 20, 2012**.

Due to the time limits mandated by state law, your response must be sent at the earliest possible date, but not later than July 23, 2012. Please direct all written comments to the following address. In you written response, please include the name of a contact person in your agency.

Carolina Blengini
County of Los Angeles Regional Planning Department
Special Projects Section
320 West Temple Street, Room 1362
Los Angeles, California 90012

Tel: (213) 974-1522
Fax: (213) 626-0434
Email: cblengini@planning.lacounty.gov

Public Scoping Meeting

To assist in local participation, a Scoping Meeting will be held to describe the proposed Overall Development and to solicit suggestions from the public and responsible agencies regarding the content of the Draft EIR.

Date: Saturday, July 14, 2012 from 9:00 a.m. to 1:00 p.m.

Location: Lancaster Library, 601 West Lancaster Boulevard. Lancaster, CA 93534

Location of Review Materials

The County of Los Angeles Department of Regional Planning is soliciting input based on your views and opinions concerning the scope of the EIR for the proposed Overall Development.

Additional copies of the Notice of Preparation are available for the public review on the Department of Regional Planning website http://planning.lacounty.gov/case/view/silverado/ , as well as at the follow libraries:

Lancaster Library
601 West Lancaster Blvd.
Lancaster, CA 93534

Canyon Country Jo Anne Darcy Library
18601 Soledad Canyon Rd.
Santa Clarita, CA 91351

Lake Los Angeles Library
16921 East Avenue O, #A
Palmdale, CA 93591

Quartz Hill Library
42018 North 50th St. West
Quartz Hill, CA 93536

Antelope Valley Bookmobile
601 West Lancaster Blvd.
Lancaster, CA 93534

OVERALL DEVELOPMENT DESCRIPTION

1.0 OVERALL DEVELOPMENT LOCATION AND SETTING

Silverado Power, LLC (Silverado Power) is a utility scale solar photovoltaic (PV) developer proposing the development of six solar PV Projects (referred to as the Overall Development) in the western portion of Antelope Valley, located in the northern portion of unincorporated Los Angeles County. These six solar generating facilities (SGFs) together would cover 747.1 acres and would produce 172 megawatts (MW) of solar power in total. The Overall Development is located on unproductive farmland that is no longer used for farming. The area where these Projects are located is rural land west of State Route 14.

Each of the six solar Projects are intended to be developed separately, but will be analyzed by one Environmental Impact Report (EIR). The requirements of the California Environmental Quality Act (CEQA) in Section 17175 (3) provide that an EIR be prepared for an overall development where smaller individual Projects would be carried out in phases. For the purpose of this EIR, the term "Overall Development" will refer to all six of the SGFs.

The six SGFs to be developed are given below by project number, name, acres and mega-watts (MW):

Project Number	Project Name	Acres	MW
1	North Lancaster Ranch	80	20
2	Western Antelope Blue Sky Ranch	157	40
3	American Solar	135.61	35
4	Antelope Solar Greenworks	256	52
5	Silver Sun Greenworks	80	20
6	Lancaster WAD	38.49	5

1.1 DESCRIPTION OF THE OVERALL DEVELOPMENT SETTING

1.1.1 Overview of the Region

The Overall Development is located in the Antelope Valley in unincorporated Los Angeles County and is all west of the Antelope Valley Freeway (State Route 14). All six SGFs are between 30th Street West and 120th Street West. On the north-south axis, the SGFs are between Avenue K to the south and Avenue A to the north. The SGFs range from approximately 39 to 256 acres in size and from 5 to 52 MW in solar generation capacity (See Figure 1 for a map of the SGFs).

1.1.2 Land Description and Uses

The Antelope Valley consists of high desert terrain bounded by the San Gabriel Mountains to the south, portions of Kern County to the north, Ventura County to the west, and San Bernardino County to the east. The Antelope Valley is characterized by relatively flat land,

punctuated by occasional buttes. In general, the Antelope Valley floor is bowl-like, with the low point located near the center of the playas or dry lakes to the northeast, and consists primarily of alluvium soils. Generally, the area alluvium is composed of unconsolidated to moderately consolidated, poorly sorted cobble, gravel, sand, silt, and clay. Elevation within the Antelope Valley ranges from 2,300 to 3,500 feet above mean sea level (amsl).

The Antelope Valley is located in a very arid part of California and as such usually receives less than 10 inches of precipitation per year, mostly in the form of rainfall; infrequent snowfall events are also known to occur within the Antelope Valley. Temperatures within the Antelope Valley range from below freezing in the winter to over 100 degrees Fahrenheit in the summer. Winter temperatures are typically above freezing.

The Overall Development vicinity, as shown in the aerial photograph provided in Figure 1, includes a variety of land uses, although a majority of the surrounding lands are unoccupied agricultural and grazing lands. The nearest unincorporated residential communities are Antelope Acres, Quartz Hill and Fairmont. The incorporated City of Lancaster is to the east of the Project sites.

Land uses surrounding the six solar Projects consist of mainly open space, light agricultural, low density single family, and undeveloped grazing lands. Historically, agriculture has been a primary land use in the Antelope Valley. Some properties in the area are still utilized for agriculture; however, the majority of properties do not have enough water to irrigate crops. Many of these properties have ceased farming activity over the last two decades and remain as unproductive fallow land. South of the Antelope Valley in the San Gabriel Mountains is the Angeles National Forest.

1.1.2.1 Zoning

Projects 2, 3, 4, and 5 are located within the County of Los Angeles Heavy Agricultural Zone (Zone A-2). Project 6 is located within the County's Desert Mountain Zone (D-2), which allows any uses permitted in Zone A-2. Zone A-2 allows electric distribution substations, electric transmission substations, and generating plants with a Conditional Use Permit (CUP). Project 1 is currently located within Zone A-1, or Light Agricultural Zone, which does not permit electric generating plants or generating plants that burn fuel within its zoning district. Therefore, a Zone Change is being processed for Project 1.

1.1.2.2 General Plan

The proposed Overall Development is expected to be consistent with the County of Los Angeles General Plan and the Antelope Valley Areawide General Plan N1 (Non-Urban 1) land use designation. The individual Projects meet the definition of a "utility installation" referenced in the listing of non-urban non-residential land uses allowed in remote areas designated Non-Urban 1. Projects 1 through 6 are all located within the County's General Plan Non-Urban designation and would not require a General Plan Amendment.

The Overall Development would first consist of construction and then operation of the six solar Projects. The SGFs would be constructed in phases and each of them operated for an estimated 35 years.

Each SGF would consist of the following elements:

- PV modules
- PV Module mounting system
- Balance of system and electrical boxes (e.g., combiner boxes, electrical disconnects)
- Electrical inverters and transformers
- Electrical AC collection system, including switchgear
- Data monitoring equipment
- Access roads and chain link perimeter security fencing

A regional operations and maintenance (O&M) facility to serve all six SGFs would be located in an existing permitted space within Los Angeles County. Each SGF requires a CUP from Los Angeles County for the construction and operation of the SGF.

1.2 OVERALL DEVELOPMENT BACKGROUND

Silverado Power has acquired rights to the real properties and filed CUP applications with the County of Los Angeles for the six solar Projects. Environmental studies, the Overall Development siting and planning, and interconnection agreements with Southern California Edison (SCE) have been ongoing since 2010. The lead agency for this document is the County of Los Angeles. Silverado Power has held several meetings in the Antelope Valley area to inform the public about all aspects of this Overall Development. The Overall Development would begin delivering power to the SCE electrical grid in late 2013.

Each of the six solar power Projects would be designed and built in a very similar manner. Each of the six Projects would employ a series of photovoltaic (PV) module arrays to convert sunlight into electrical energy without the use of heat transfer fluid or cooling water. The facilities would deliver the electrical output to the existing regional transmission system.

The PV modules would convert sunlight into low-voltage direct current (DC) power, which is subsequently transformed into alternating current (AC) power through an inverter. The PV modules are made of a semiconductor material through which electrons flow to convert light (photons) to electricity (voltage). This process is known as the PV effect.

1.3 OVERALL DEVELOPMENT CHARACTERISTICS

The six SGFs will be designed and built in the same or similar method and will have similar Overall Development characteristics. The SGFs would utilize PV technology on fixed-tilt or tracker mounting supports. The major components of the proposed Overall Development are described as follows.

1.3.1 Solar PV Generating Facilities

The SGFs are designed for optimum performance and ease of maintenance. The Overall Development would construct series of PV module arrays mounted on racking systems, which are typically supported by a pile-driven foundation design. The foundation design would be determined based on the full geotechnical survey. The module mounting system, or racking system, would have a fixed-tilt or tracker PV array configuration and would be

oriented south to maximize the amount of incident solar radiation absorbed over the course of the year.

A series of PV arrays would be funneled and combined at combiner boxes located throughout the solar field; the electrical current would then be collected and combined prior to feeding the inverters. The solar field would be laid out in a PV block design to allow adequate area for maintenance in the way of clearances or access roads.

Inverters would be consolidated in areas to minimize cable routing and trenching and ensure minimal electrical losses. The AC out from the inverters would be routed through an AC collection system and consolidated within system switchgear. The final output from the SGF would be processed through a transformer to match the interconnection voltage. Electrical safety and protection systems would be provided to meet regulatory codes and standards. The energy would be delivered to the regional electrical distribution network.

A security perimeter fence with appropriate signage for public protection would be installed. Points of ingress/egress would be accessed by locked gates for facility services and maintenance.

Additional information for the specific elements of the SGF is provided in the following sections.

1.3.2 Photovoltaic Modules

The SGFs would require installation of PV modules. The total number of PV modules required would depend on the technology selected, optimization evaluation, and detailed design. The market conditions, economic considerations, and the environmental factors would be taken into account during the detail design process. The following PV module technologies or equivalent are being considered for incorporation into the Overall Development:

- PV thin-film technology
- PV crystalline silicon technology
- Fixed-tilt configuration
- Tracking design configuration

The modules configured with a fixed tilt would be oriented toward the south and angled at a degree that would optimize solar resource efficiency. For the tracking configuration, the modules would rotate from east to west over the course of the day. Modules would be non-reflective and highly absorptive.

1.3.3 Standard Installation, Array Assembly, and Racking

There are a variety of module mounting systems and manufactures that are available in the solar industry, the majority of which can be mounted on a variety of foundations. Fixed-tilt, single-axis trackers, and dual-axis trackers, all of which provide various levels of energy efficiency, are under consideration for the Overall Development. The final racking system would be determined by optimization evaluations and economic assessments and incorporated into the detailed design.

The module mounting system provides the structure that supports the PV module arrays. The foundations are typically cylindrical steel pipes/piles, which would be driven into the soil using pneumatic techniques, similar to hydraulic pile driving. The final foundation design would be determined based on the geotechnical survey for the Overall Development location. Once the foundation has been installed, the module mounting system would be installed to support the PV modules. For a tracking configuration, motors would be installed to drive the tracking mechanism. The PV modules would be delivered to the Overall Development location during construction to support the installation schedule.

The module mounting system would be oriented in rows within a PV design block, presenting a standard and uniform appearance across the facility. The panel configuration would be uniform in height and width.

1.3.4 Collection, Inverters, AC Collection, and Transformers

Modules would be electrically connected into strings. Each string would be funneled by electrical conduit (typically underground) wiring to combiner boxes located throughout the solar field power blocks. The output power cables from the combiner boxes would be again consolidated and feed the DC electricity to inverters, which convert the DC to AC.

Underground electrical cables would be installed using ordinary trenching techniques, which includes excavation of trenches to accommodate conduits. Wire depth, and trench backfill would be in accordance with local, state, and federal codes.

The AC energy would be stepped up to the appropriate interconnection voltage by system transformers to match the voltage at the grid interconnection. As required, switchgear cabinetry would be provided where necessary for circuit control.

All electrical inverters, transformers, and gear would be placed on concrete foundation structures. The SGFs would be designed and laid out in MW increments/blocks including inverter equipment.

Commissioning of equipment would include testing, calibration of equipment, and troubleshooting. All electrical equipment, inverters, collector system, and PV array systems would be tested prior to commencement of commercial operations.

1.3.5 SGF Substations

For SGF projects that require a new substation, the area would be appropriately graded and excavated to accommodate transformer equipment, the control building foundation, and oil containment area. Foundations for the substation would be constructed with reinforced concrete.

Structural components in the substation area would include:

- Transformers, switchgear, and safety systems
- Footings and oil containment system for transformers

1.3.6 SGF Interconnection Descriptions

Each inverter would be fully enclosed and pad mounted and will be approximately 90 inches in height. The AC output of two inverters would be fed via underground cable into the low-voltage side of the inverter step-up transformer, generally within 20 feet of the inverters. Each transformer would be mounted on a concrete pad and enclosed together with switchgear and a junction box. Transformers are typically 87 inches in height. The high-voltage output of the transformer would be combined in series via underground collector cables to the junction box of the nearest transformer, ranging from as little as 60 feet to as much as 700 feet. The collector system cables would be tied throughout the SGFs at underground junction boxes to the main underground collector cables, which would be composed of a larger wire gauge, to the location of the generator step-up transformer (GSU). The main collector cables would rise into the low-voltage busbar and protection equipment that would be enclosed together with the GSU. The primary switchgear includes the main circuit breaker and utility metering equipment, and it would be enclosed separately but pad-mounted together with the GSU. Both the GSU and the primary switchgear would stand approximately 87 inches in height. The output of the switchgear would be the start of the generation tie-line (gen-tie). The gen-tie would consist of three phases of overhead conductor and a disconnect switch on 55-foot wood poles.

1.3.7 Data Collection Systems

Each SGF facility would be designed with a comprehensive Supervisory Control and Data Acquisition (SCADA) system for remote monitoring of facility operation and/or remote control of critical components. Within the SGFs, the fiber optic, or other cabling required for the monitoring system, would be installed throughout the solar field leading to a centrally located (or series of appropriately located) SCADA system cabinets. The external telecommunications connections to the SCADA system cabinets may be through either wireless or hard-wired telecommunications to a centralized data collection center.

The system would also include a meteorological data collection system. The station would have several weather sensors: a pyranometer for measuring solar irradiance, a thermometer to measure air temperature, a barometric pressure sensor, and two wind sensors to measure speed and direction. These sensors would be connected to a data logger, which would compile the data for transmission to the data collection center.

1.3.8 Overall Development Construction

The construction for each facility would consist of three major phases: (1) site preparation, (2) PV system installation testing and startup, and (3) site cleanup/restoration. “Best Practices” would be required during all construction phases of the Overall Development. A Storm Water Pollution Prevention Plan incorporating BMPs for erosion control would be prepared and approved before the start of construction. The Overall Development would also comply with applicable post-construction water quality standards adopted by the Regional Water Quality Control Board.

1.3.9 Site Preparation

Construction of each PV facility would begin with initial clearing and grading of the staging areas. Access to the Projects from public roads would be improved to appropriate standards for the construction period. The staging areas typically include construction offices, a first aid

station and other temporary buildings, worker parking, truck loading and unloading facilities, and an area for system assembly. Road corridors would then be surveyed, cleared, and graded to bring equipment, materials, and workers to the areas under construction. Buried electrical lines, PV array locations, and the locations of other facilities may be flagged and staked in order to guide construction activities. Each SGF would be enclosed by a security fence. The fenced area would include at least two gates. A secured controlled main access gate would be located at the entrance.

BMPs for erosion control during SGF preparation, initial erosion, and sedimentation controls would be employed. In addition, water truck reloading stations (as required) would be established for dust control.

1.3.10 PV System Installation

PV system installation would include earthwork, grading, and erosion control, as well as construction of the plant substation and erection of the PV modules, supports, and associated electrical equipment. System installation would begin with teams installing the mounting and steel/concrete piers support structures. The exact design would be finalized pending evaluation of soil conditions. The methods may include (but are not limited to) vibration-driven screw piles or aboveground ballast foundations. This step would be followed by panel installation and electrical work.

Concrete would be required for the footings, foundations, pads for the transformers, and substation equipment. Concrete would be produced at an off-site location by a local provider and transported to the Overall Development Projects by truck. The enclosures housing the inverters would have a pre-cast concrete base. Final concrete specifications would be determined during detailed design engineering consistent with applicable building codes.

The PV modules require a moderately flat surface for installation. Some earthwork, including grading, fill, compaction, and erosion control cultivation, may be required to accommodate the placement of PV arrays, foundations or footings, access roads, and drainage features. Erosion control techniques used during construction may include the use of silt fencing, straw bales, temporary catch basins, inlet filters, and truck tire muck shakers. Construction of the PV arrays includes the installation of support beams, module rail assemblies, PV modules, inverters, transformers, and buried electrical cables.

Wastes generated during construction will include the following: cardboard, wood pallets, copper wire, scrap steel, common trash, and wood wire spools. Silverado Power does not expect to generate hazardous waste during construction. However, field equipment used during construction would contain various hazardous materials such as hydraulic oil, diesel fuel, grease, lubricants, solvents, adhesives, paints, and other petroleum-based products contained in construction vehicles.

1.3.11 Overall Development Operation and Maintenance

Upon commissioning, the Overall Development would enter the operational phase. For the duration of the operational phase, the Overall Development would be operated and monitored remotely, with regular on-site personnel visitations for security, maintenance, and system monitoring. There would be no full-time SGF personnel on-site during operation. The Overall

Development's PV arrays produce electricity passively with minimal moving parts; therefore, maintenance requirements would be limited. Any required planned maintenance would be scheduled to avoid peak-load periods, and unplanned maintenance would typically be responded to as needed depending on the event. An inventory of spare components would be readily available from a remote warehouse facility.

Other operational details are summarized in the following sections.

1.3.12 Operations

Silverado Power would ensure consistent and effective facility operations by:

- Responding to automated alarms based on monitored data, including actual versus expected tolerances for system output and other key performance metrics
- Communicating with customers, transmission system operators, and other entities involved in facility operations

1.3.13 Maintenance

The maintenance performed on the Projects would consist of equipment inspection and replacement. Maintenance would occur during daylight hours when possible. However, maintenance activities on the PV modules and DC systems would be performed at night. Maintenance program elements include:

- Managing a group of prequalified maintenance and repair firms who can meet O&M needs of the facility throughout its life
- Creating a responsive, optimized cleaning schedule
- Responding to plant emergencies and failures in a timely manner
- Maintaining an inventory of spare parts to ensure timely repairs and consistent plant output
- Systematically maintaining a log to effectively record and track all maintenance problems
- Performing maintenance of the SGF as required to clear obstructive ground cover

1.3.14 Security

To ensure the safety of the public and the facilities, the Projects would be fenced and signs would be posted. Security measures would be installed as necessary to prevent and/or deter unauthorized access. Access to the Projects would be controlled, and gates would be installed at the roads entering the property.

1.3.15 Land Reclamation Plan

A Reclamation (Decommissioning) Plan for each solar Project will be prepared and submitted for approval to Los Angeles County prior to the beginning of grading for each of the six Projects. The plan will assure the land is protected during operation and returned to a beneficial use upon termination of the use of the land as a solar site.

1.3.15.1 Timeline for Reclamation Plan

The life of each facility is presently proposed to be 35 years. The reclamation plan will be implemented in the early summer of the year the facility closes. Removal of the equipment will

take three months and after that, the completion of the reclamation will take two months. For example, if the facility closes by May 1, then the equipment would be removed by August 1 and the final reclamation would be completed by October 1, thus allowing the reclamation to be completed outside of the rainy season and before winter begins.

1.3.15.2 Removal of All Chemicals

Once the power facility is shut off, a first step will be to remove all chemicals, fuels, oils, transformer oils, and other potential hazards chemicals and wastes from the SGFs. These will be disposed of in accordance with Los Angeles County, California, and federal laws.

1.3.16 Removal of Equipment

All equipment and H-beam foundations will be removed from the SGFs so that it may be used as productive wildlife habitat or farmland without further work.

Solar modules will be unbolted from the support structures and consolidated in the laydown area. The modules have value and will be sold to an off-site recycler. They will be loaded onto trucks in batches and moved off-site. Bids will be taken from vendors whose costs will include purchasing the equipment and removing it from a site consolidation area.

The H-beams supporting the panels will have been driven up to 12 feet deep. These H-beams will be pulled out of the ground and the entire length of beam moved to the lay down area where they will be cleaned, stockpiled, and consolidated. The H-beams have value and will be sold to an off-site recycler. They will be loaded onto trucks in batches and moved off-site by the selected recycler.

The top layer of soil will be removed from all buried electrical conduit trenches with a backhoe and the electrical conduit will be pulled out of the ground by the backhoe. All electrical conduits will be moved to the lay down area and stockpiled. The conduit has value and will be sold to an off-site recycler. They will be loaded onto trucks in batches and moved off-site by the selected recycler.

The inverters will be removed from the SGFs and moved onto an impermeable base in the lay down area. Care will be taken that no leaks or spills occur from this temporary storage area. The inverters have value and will be sold to an off-site recycler. They will be loaded onto trucks in batches and moved off-site..

The electrical substation will be removed and the components moved to the lay down area. Care will be taken that no leaks or spills occur from this temporary storage area. The substation equipment has value and will be sold to an off-site recycler. This will be loaded onto trucks in batches and moved offsite. A bid to purchase the electrical substation “as is” and “where is” will be solicited. The concrete foundation for the substation will also be removed.

The H-beam pile foundations for the inverter boxes and the substation will be pulled up with a back hoe. None of the H-beams will be left in the ground. These will be sold to a recycler as specified above.

The chain link fence will be taken down and sold with the other scrap material. Any other miscellaneous equipment will be removed from the SGFs.

All road and pathways will be removed and restored to the previous or better condition than prior to construction.

1.3.17 Contouring, Erosion, and Sediment Control

Contouring of the SGFs will be conducted using standard grading and farming equipment to return the land to approximately match the pre-construction surface conditions. The SGFs drainage features will be restored to their original condition. Temporary erosion and sediment control measures such as use of sediment fences, hay bales, mulch, and soil stabilizers will be used as needed. As noted above the original site conditions will be recorded prior to beginning construction on the SGFs.

1.3.18 Land Reclamation

This section of the plan will provide information on the post-closure uses of the site which may be wildlife habitat, crops, or some other use. Details of ground treatments, erosion control, fertilization, seed sources, vegetation planting methods, and irrigation systems will be added to the plan before it is implemented. It is unknown at this time if solar will continue to be utilized on this land in excess of 35 years, and thus the future long-term use of the site will be updated periodically with the reclamation plan as it becomes better known.

1.4 DESCRIPTION OF SIX INDIVIDUAL SGF PROJECTS

1.4.1 Project 1 – North Lancaster Ranch

Silverado Power plans to develop the proposed North Lancaster Ranch SGF as described herein. The proposed Project would have a generating capacity of 20 megawatts alternating current (MW-AC) and be located on approximately 80 acres of primarily unproductive agricultural land in Los Angeles County. The facility would operate year-round, producing electric power during daytime hours.

1.4.1.1 Project and Interconnect Location

The North Lancaster Ranch SGF is located in an unincorporated northern section of Los Angeles County. The Project is approximately 12 miles northwest of downtown Lancaster. The power generated by the SGF would be connected to SCE's existing transmission network with the voltage transformation equipment and system safety equipment constructed on the Project. The SGF would ultimately interconnect at 34.805275°, -118.324064°. Electricity would be delivered to the existing SCE 66 kilovolt (kV) transmission line via an undergrounded 0.5-mile gen-tie originating at the DC collection system within the SGF. The 66 kV transmission line is 0.5 miles due west of the facility.

The interconnection process has been initiated and a queue position with the California Independent System Operator has been secured for 20 MW. The facility is expected to be producing power by the second quarter of 2014.

1.4.1.2 Construction

The proposed schedule is to begin Project preparation and construction in the fourth quarter of 2013, complete construction within approximately six months, and be commercially operational by the second quarter of 2014.

Construction of the Project begins with site preparation and grading through equipment setup and commencement of commercial operation. The on-site workforce would consist of laborers, electricians, supervisory personnel, support personnel, and construction management personnel. Construction would generally occur during daylight hours, Monday through Friday. Weekend and non-daylight work hours may be necessary to make up schedule deficiencies or to complete critical construction activities. For instance, during hot weather, it may be necessary to start work earlier to avoid pouring concrete during high ambient temperatures. Construction activities would be conducted consistent with Los Angeles County regulations regarding hours of construction. The SGF is expected to create 100 new jobs at peak crew size during the construction phase and would provide full- and part-time positions over the life of the facility for O&M activities.

1.4.2 Project 2 – Western Antelope Blue Sky Ranch

Silverado Power plans to develop the proposed Western Antelope Blue Sky Ranch SGF as described herein. The proposed Project would have a generating capacity of 40 MW-AC and be located on 157 acres of disturbed land in Los Angeles County. Of the 157 acres, approximately 118 acres will be developed for the purpose of solar power generation. The facility would operate year-round, producing electric power during daytime hours.

1.4.2.1 Project and Interconnect Location

The Western Antelope Blue Sky Ranch SGF is located in an unincorporated northern section of Los Angeles County. The Project is approximately 11 miles west of downtown Lancaster. The power generated by the SGF would be connected to SCE's existing transmission network with the voltage transformation equipment and system safety equipment constructed on the Project. The SGF would ultimately interconnect at 34.687562°, -118.300466°. Electricity would be delivered to the existing SCE Antelope Substation via an undergrounded 2-mile gen-tie originating at the DC collection system within the SGF. The Antelope Substation is located 1.5 miles northeast of the facility.

The interconnection process has been initiated and a queue position with the California Independent System Operator has been secured for 40 MW. The facility is expected to be producing power by the fourth quarter of 2013.

1.4.2.2 Construction

The proposed schedule is to begin site preparation and construction in the first quarter of 2013, complete construction within approximately eight months, and be commercially operational by the fourth quarter of 2013.

Construction of the Project begins with site preparation and grading through equipment setup and commencement of commercial operation. The on-site workforce would consist of laborers, electricians, supervisory personnel, support personnel, and construction management personnel. Construction would generally occur during daylight hours, Monday through Friday. Weekend and non-daylight work hours may be necessary to make up schedule deficiencies or to complete critical construction activities. For instance, during hot weather, it may be necessary to start work earlier to avoid pouring concrete during high ambient temperatures. Construction activities would be conducted consistent with Los Angeles County regulations regarding hours

of construction. The SGF is expected to create 140 new jobs at peak crew size during the construction phase and would provide full- and part-time positions over the life of the facility for O&M activities.

1.4.3 Project 3 – American Solar Greenworks

Silverado Power plans to develop the proposed American Solar Greenworks SGF as described herein. The proposed Project would have a generating capacity of 35 MW-AC and be located on 135.61 acres of primarily unproductive agricultural land in Los Angeles County. The facility would operate year-round, producing electric power during daytime hours.

1.4.3.1 Project and Interconnect Location

The American Solar Greenworks SGF is located in an unincorporated northern section of Los Angeles County. The Project is approximately seven miles northwest of downtown Lancaster. The power generated by the SGF would be connected to SCE's existing transmission network with the voltage transformation equipment and system safety equipment constructed on the Project. The SGF would ultimately interconnect at 34.732654°, -118.255107°. Electricity would be delivered to the existing SCE 66 kV transmission line adjacent to the northern border of the property.

The interconnection process has been initiated and a queue position with the California Independent System Operator has been secured for 35 MW. The facility is expected to be producing power by the second quarter of 2014.

1.4.3.2 Construction

The proposed schedule is to begin site preparation and construction in the fourth quarter of 2013, complete construction within approximately eight months, and be commercially operational by the second quarter of 2014.

Construction of the Project begins with site preparation and grading through equipment setup and commencement of commercial operation. The on-site workforce would consist of laborers, electricians, supervisory personnel, support personnel, and construction management personnel. Construction would generally occur during daylight hours, Monday through Friday. Weekend and non-daylight work hours may be necessary to make up schedule deficiencies or to complete critical construction activities. For instance, during hot weather, it may be necessary to start work earlier to avoid pouring concrete during high ambient temperatures. Construction activities would be conducted consistent with Los Angeles County regulations regarding hours of construction. The SGF is expected to create 130 new jobs at peak crew size during the construction phase and would provide full- and part-time positions over the life of the facility for O&M activities.

1.4.4 Project 4 – Antelope Solar Greenworks

Silverado Power plans to develop the proposed Antelope Solar Greenworks SGF as described herein. The proposed Project would have a generating capacity of 52 MW-AC and be located on 256 acres of primarily unproductive agricultural land in Los Angeles County. The facility would operate year-round, producing electric power during daytime hours.

1.4.4.1 Project and Interconnect Location

The Antelope Solar Greenworks SGF is located in an unincorporated northern section of Los Angeles County. The Project is approximately 8.0 miles northwest of downtown Lancaster. The power generated by the Project would be connected to SCE's existing transmission network with the voltage transformation equipment and system safety equipment constructed on the Project. The SGF would ultimately interconnect at 34.689088°, -118.288985°. Electricity would be delivered to the existing SCE 66 kV transmission line adjacent to the southern border of the property. Additionally, this Project will have interconnection points at 34.695766°, -118.289538° and 34.704051°, -118.301546° to the existing distribution lines.

The interconnection process has been initiated and a queue position with the California Independent System Operator has been secured for 52 MW. The facility is expected to be producing power by the fourth quarter of 2013.

1.4.4.2 Construction

The proposed schedule is to begin site preparation and construction in the first quarter of 2013, complete construction within approximately nine months, and be commercially operational by the end of the fourth quarter of 2013.

Construction of the Project begins with site preparation and grading through equipment setup and commencement of commercial operation. The on-site workforce would consist of laborers, electricians, supervisory personnel, support personnel, and construction management personnel. Construction would generally occur during daylight hours, Monday through Friday. Weekend and non-daylight work hours may be necessary to make up schedule deficiencies or to complete critical construction activities. For instance, during hot weather, it may be necessary to start work earlier to avoid pouring concrete during high ambient temperatures. Construction activities would be conducted consistent with Los Angeles County regulations regarding hours of construction. The SGF is expected to create 160 new jobs at peak crew size during the construction phase and would provide full- and part-time positions over the life of the facility for O&M activities.

1.4.5 Project 5 – Silver Sun Greenworks

Silverado Power plans to develop the proposed Silver Sun Greenworks SGF as described herein. The proposed Project would have a generating capacity of 20 MW-AC and be located on 80 acres of primarily unproductive agricultural land in Los Angeles County. The facility would operate year-round, producing electric power during daytime hours.

1.4.5.1 Project and Interconnect Location

The Silver Sun Greenworks SGF is located in an unincorporated northern section of Los Angeles County. The Project is approximately 11 miles west of downtown Lancaster. The power generated by the SGF would be connected to SCE's existing transmission network with the voltage transformation equipment and system safety equipment constructed on the Project. The SGF would ultimately interconnect at 34.687562°, -118.300466°. Electricity would be delivered to the existing SCE Antelope Substation via an undergrounded 3-mile gen-tie originating at the DC collection system within the SGF. The Antelope Substation is 2.5 miles southeast of the facility.

The interconnection process has been initiated and a queue position with the California Independent System Operator has been secured for 20 MW. The facility is expected to be producing power by the second quarter of 2014.

1.4.5.2 Construction

The proposed schedule is to begin site preparation and construction in the fourth quarter of 2013, complete construction within approximately eight months, and be commercially operational by the second quarter of 2014.

Construction of the Project begins with site preparation and grading through equipment setup and commencement of commercial operation. The on-site workforce would consist of laborers, electricians, supervisory personnel, support personnel, and construction management personnel. Construction would generally occur during daylight hours, Monday through Friday. Weekend and non-daylight work hours may be necessary to make up schedule deficiencies or to complete critical construction activities. For instance, during hot weather, it may be necessary to start work earlier to avoid pouring concrete during high ambient temperatures. Construction activities would be conducted consistent with Los Angeles County regulations regarding hours of construction. The SGF is expected to create 100 new jobs at peak crew size during the construction phase and would provide full- and part-time positions over the life of the facility for O&M activities.

1.4.6 Project 6 – Lancaster WAD

Silverado Power plans to develop the proposed Lancaster WAD SGF as described herein. The proposed Project would have a generating capacity of 5 MW-AC and be located on 38.49 acres of primarily unproductive agricultural land in Los Angeles County. The facility would operate year-round, producing electric power during daytime hours.

1.4.6.1 Project and Interconnect Location

The Lancaster WAD SGF is located in an unincorporated northern section of Los Angeles County. The Project is approximately six miles north of downtown Lancaster. The power generated by the SGF would be connected to SCE's existing transmission network with the voltage transformation equipment and system safety equipment constructed on the Project. The SGF would ultimately interconnect at 34.776892°, -118.191271°. Electricity would be delivered to the existing SCE 12.47 kV distribution line adjacent to the southern border of the Project.

The interconnection process has been initiated and a queue position with the California Independent System Operator has been secured for 5 MW. The facility is expected to be producing power by the fourth quarter of 2013.

1.4.6.2 Construction

The proposed schedule is to begin site preparation and construction in the third quarter of 2013, complete construction within approximately five months, and be commercially operational by the fourth quarter of 2013.

Construction of the Project begins with site preparation and grading through equipment setup and commencement of commercial operation. The on-site workforce would consist of laborers, electricians, supervisory personnel, support personnel, and construction management

personnel. Construction would generally occur during daylight hours, Monday through Friday. Weekend and non-daylight work hours may be necessary to make up schedule deficiencies or to complete critical construction activities. For instance, during hot weather, it may be necessary to start work earlier to avoid pouring concrete during high ambient temperatures. Construction activities would be conducted consistent with Los Angeles County regulations regarding hours of construction. The SGF is expected to create 40 new jobs at peak crew size during the construction phase and would provide full- and part-time positions over the life of the facility for O&M activities.

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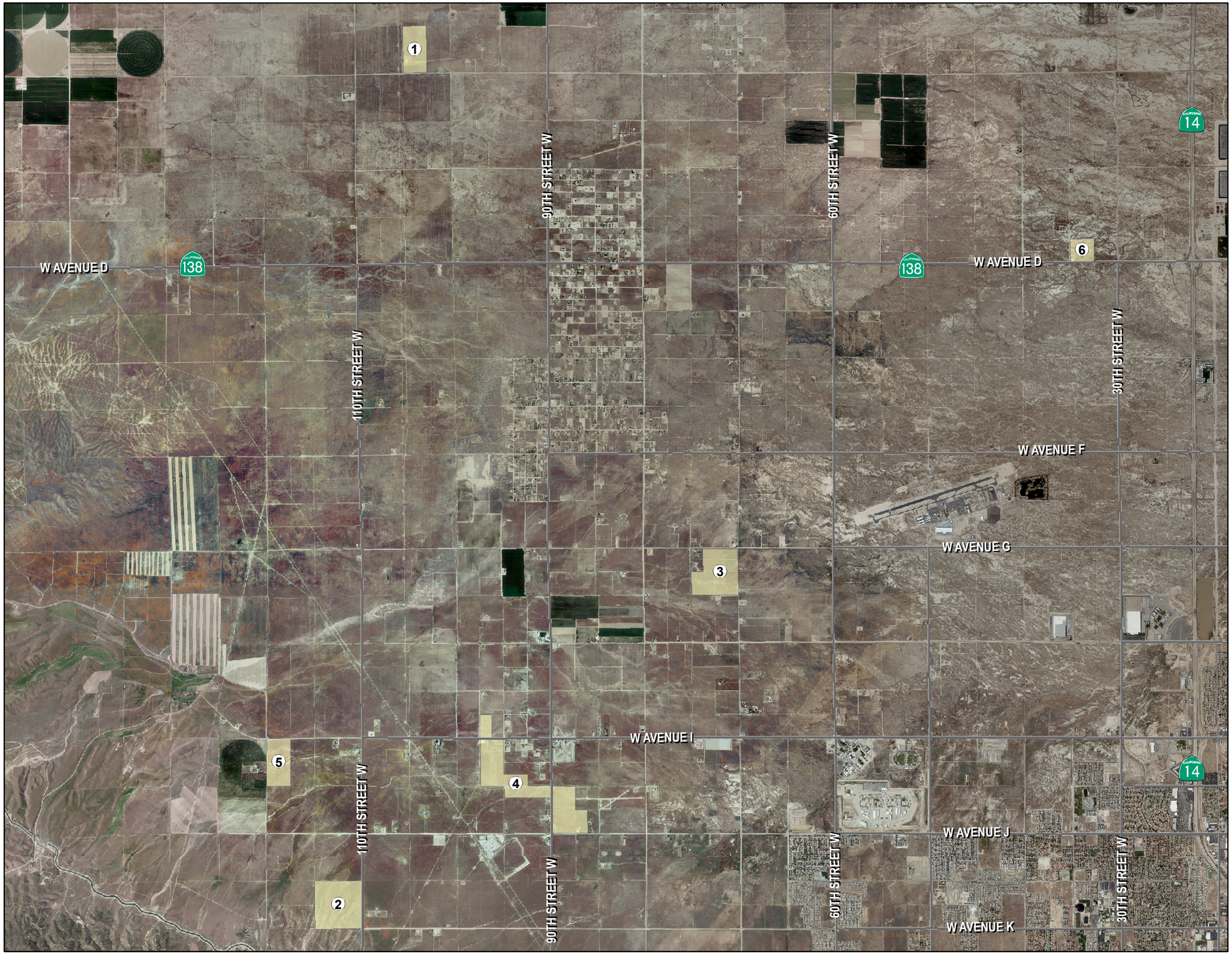
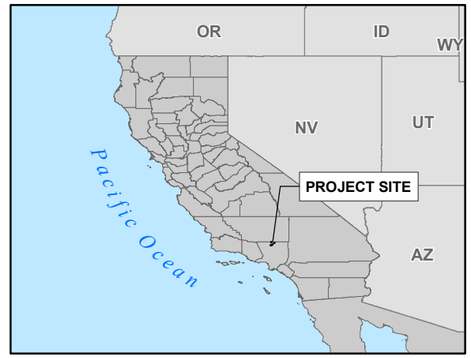


SILVERADO power

SILVERADO POWER WEST
LOS ANGELES COUNTY



LEGEND

PROJECT 1 - NORTH LANCASTER RANCH

PROJECT 2 - WESTERN ANTELOPE BLUE SKY RANCH

PROJECT 3 - AMERICAN SOLAR GREENWORKS

PROJECT 4 - ANTELOPE SOLAR GREENWORKS

PROJECT 5 - SILVER SUN GREENWORKS

PROJECT 6 - LANCASTER WAD

NOTE:
(a) State Plane, Zone V (NAD83), US Survey Feet.
(b) Source Data: ESRI, TTEC.

FIGURE 1
SILVERADO POWER WEST
LOS ANGELES COUNTY
PROJECTS

0 0.5 1 2
Miles

TETRA TECH EC, INC.