



CERTIFICATION AND FINANCING PROPOSAL

SOL ORCHARD SOLAR PROJECTS IN RAMONA, CALIFORNIA

Revised: August 22, 2013

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EXECUTIVE SUMMARY

SOL ORCHARD SOLAR PROJECTS IN RAMONA, CALIFORNIA

Projects:

This certification and financing proposal covers two adjacent PV solar projects described as follows:

Sol Orchard Solar Project 1 in Ramona, CA: Construction and operation of a 2 MW_{AC} photovoltaic solar park located in Ramona, California ("Ramona 1").

Sol Orchard Solar Project 2 in Ramona, CA: Construction and operation of a 5 MW_{AC} photovoltaic solar park located in Ramona, California ("Ramona 2").

The electricity generated by Ramona 1 and Ramona 2 (jointly the "Projects") will be purchased by San Diego Gas & Electric (SDG&E or the "Utility"), pursuant to two separate long term power purchase agreements (the "PPAs") signed with the project companies.

Project Objective:

The Projects will increase installed capacity of renewable energy resources, reducing the demand on traditional fossil fuel based energy production and contributing to the displacement of greenhouse gas emissions and other pollutants from power generation by fossil fuels.

Expected Project Outcomes:

The anticipated environmental and human health outcomes resulting from the installation of 7 MW_{AC} of new renewable energy generation capacity are:

- a) Approximately 17,481 MWh during the first year of operation, and
- An expected displacement of more than 4,746 metric tons/year of carbon dioxide and 7 metric tons/year of nitrogen oxides. ¹

Sponsor:

Macquarie Infrastructure Company Solar LLC ("Macquarie" or "MIC Solar").

¹ SO₂ emission reductions are not calculated for these Projects due to the minimal SO₂ emission factor based on the California energy generation portfolio. According to the Energy Information Administration, the SO₂ emission factor is less than half of the smallest unit of measure: 0.5.

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Borrowers: Ramona 1: Sol Orchard San Diego 20 LLC ("R1").

Ramona 2: Sol Orchard San Diego 21 LLC ("R2").

Loan Amount: Ramona 1: Up to US\$8.0 million.

Ramona 2: Up to US\$19.9 million.

CERTIFICATION AND FINANCING PROPOSAL

SOL ORCHARD SOLAR PROJECTS IN RAMONA, CALIFORNIA

1. ELIGIBILITY

Project Type

The Projects fall in the category of clean and efficient energy.

Project Location

The Projects are located 31 miles from the U.S. Mexico border in Ramona, California, in an unincorporated area of San Diego County.

Project Sponsor and Legal Authority

The **private-sector project sponsor** is Macquarie Infrastructure Company Solar LLC (the "Sponsor"), which will use the two special purpose companies, R1 and R2, for the implementation of the Projects. R1 and R2 are Delaware based, limited liability companies that were incorporated on February 11, 2011. Their contact representative is William Green.

2. CERTIFICATION CRITERIA

2.1 TECHNICAL CRITERIA

2.1.1. Project Description

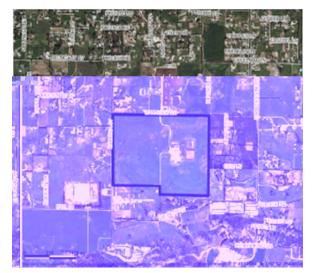
Geographic Location

The Projects are located in the unincorporated community of Ramona in San Diego County, California, and will be developed on a 45 acre parcel located in the northwestern part of the county. The site is located at Warnock Drive and is surrounded by agricultural land and scattered housing.

Figure 1, below, shows the approximate geographical location of the Projects.

Figure 1
PROJECTS VICINITY MAP





General Community Profile

The Projects are expected to benefit San Diego County directly by generating electricity equivalent to the annual consumption of approximately 2,672 households and by creating employment opportunities and additional income from taxes during the construction and operation of the Projects.

According to the 2010 U.S. census, the population of San Diego County was 3,095,313, which represents 8.3% of the state's population. The median household income (MHI) reported in 2010 for San Diego County was US\$59,923. The main work force activities are: management, business and arts (39.7%); services (18.5%); sales (25.5%); natural resources and construction (8.2%); and production and transportation (8.0%).

According to the U.S. Department of Labor, in January 2013, the unemployment rate in San Diego County was 8.6%, higher than the national average of 7.9%. The Projects are expected to generate approximately 81 jobs during construction and one part time job during operation.

Local Energy Profile

The U.S. Department of Energy (DOE), through the Energy Information Administration (EIA), provides a state by state reference for information and data covering energy production and demand. Figure 2 from the EIA website shows the location of California's power plants, its renewable energy potential, and energy sources.²

² Source: U.S. Department of Energy, Energy Information Administration, State Energy Profiles – California, 2012.

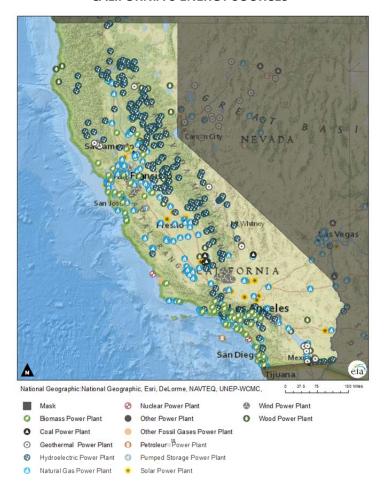


Figure 2
CALIFORNIA'S ENERGY SOURCES

In 2002, California's Renewables Portfolio Standard (RPS) was established in Senate Bill 1078. In November 2008, the California Energy Policy Report's goal of achieving 33% generation from renewable sources by 2020 was confirmed by Governor Arnold Schwarzenegger in Executive Order S 14 08. In 2009, the California Air Resources Board (CARB) under its Assembly Bill 32 authority was directed by Executive Order S 21 09 to enact regulations to achieve the goal of 33% renewables by 2020.

In order to achieve the 33% goal by 2020, Senate Bill X1 2 was signed by Governor Edmund Brown, Jr., in April 2011. Under this new RPS, all electricity retailers in the state, including publicly owned utilities (POUs), investor owned utilities (IOUs), electricity service providers, and community aggregators, must adopt the new goals of 20% of retail sales from renewables by the end of 2013, 25% by the end of 2016, and 33% by the end of 2020.

The electricity generated by the Projects will be sold to SDG&E, a wholly owned subsidiary of Sempra Energy. For more than 125 years, SDG&E has been providing energy services in the San Diego region. With a service area spanning 4,100 square miles and covering most of San Diego

County and part of Orange County, SDG&E currently serves 1.4 million electric customers and 850,000 natural gas customers, representing 3.4 million people.³ Figure 3 shows SDG&E's service area.



Figure 3
SDG&E SERVICE AREA

Over the past 12 years, SDG&E has maintained an active capital investment program aimed at providing sufficient and reliable power to its customers, including investments in renewable and other clean sources of power generation. In 2011, nearly 20.8% of the energy delivered to retail customers was provided by renewable energy resources, such as wind, geothermal, biomass, hydroelectric, and solar facilities. In the same year, SDG&E signed 17 new power contracts, mostly with solar and wind energy projects, which in their aggregate represent 1,482 megawatts of capacity. With these contracts, SDG&E is in a position to reach the 25% renewable power requirement by 2016, and at present rates of procurement, SDG&E is fully on track to meet the California RPS requirement of 33% of retail sales from renewables by 2020.

³ Source: SDG&E, http://sdge.com/aboutus.

Natural gas is the largest single fuel power source for SDG&E, accounting for 42.8% of total installed capacity, followed by nuclear at 20.4%, other renewables at 15.7%, coal at 2.7%, and unspecified sources at 18.4%. Table 1 shows the in state generation capacity of SDG&E by fuel source compared to California's total installed generation mix.

Table 1
ENERGY GENERATION CAPACITY PORTFOLIO COMPARISON

Energy Resources	SDG&E ² (2011)	CA Mix ³ (2011)
Natural Gas	42.8%	62.4%
Nuclear	20.4%	6.4%
Other Renewables ¹	15.7%	11.7%
Coal	2.7%	0.7%
Hydroelectric	%	18.8%
Unspecified ⁴	18.4%	%
Total	100%	100.0%

¹ Includes wind, solar, geothermal, landfill gas, and digester gas and biomass resources.

SDG&E is part of the California Independent System Operator (CAISO), which manages the flow of electricity across the high voltage, long distance power lines that cover 80% of California's power grid. CAISO is a member of the Western Electricity Coordinating Council (WECC), the regional entity responsible for coordinating and promoting system reliability in the Western Interconnection. Geographically WECC is the largest and most diverse of the eight regional entities that have delegation agreements with the North American Electric Reliability Corporation (NERC) (see Figure 4).

This represents physical power purchased to support SDG&E's system load.

² San Diego Gas & Electric Generation Fact Sheet, 2013.

³ Source: California Energy Commission, *Electric Generation Capacity & Energy: 2001 – 2011.*

⁴ Electricity from transactions that are not traceable to specific generation sources.



Figure 4
NERC REGIONS

Due to the size and diverse characteristics of the region, WECC and its members face unique challenges in coordinating day to day interconnected system operations and the long range planning needed to provide reliable power service across nearly 1.8 million square miles. CAISO evaluates both off peak and on peak deliverability scenarios to determine base cases that consider all the connected facilities. Renewable energy generation facilities have priority over gas turbines or combined cycle generation facilities. In a typical off peak scenario, renewable energy generation facilities will be on line, while the remaining energy generation required will be supplied by the lowest cost generation facilities.

Project Scope and Design

The scope of the Projects is to design, build, and operate two photovoltaic solar parks: Ramona 1 with a 2 MW $_{AC}$ and Ramona 2 with a 5 MW $_{AC}$. SDG&E will purchase the electricity produced by each project pursuant to separate 25 year PPAs. The Projects will be constructed on a 45 acre parcel (see Figure 5) and will be interconnected through an existing transmission line adjacent to the Projects' site, 1.33 miles east of the Creelman substation.

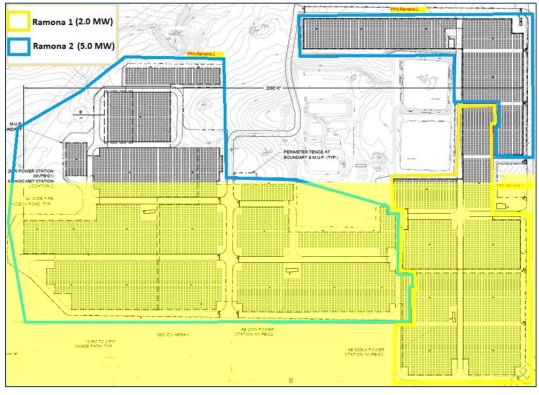


Figure 5
PROJECTS SITE LAYOUT*

The Projects are expected to begin construction in August 2013, with commercial operations beginning no later than December 2013. Table 2 presents the status of key tasks.

Table 2
PROJECTS MILESTONES

Key Milestones	Status
Projects' site lease agreement	Completed
PPAs with SDG&E	Completed
Interconnection agreement with SDG&E	Completed
Engineering, procurement and construction (EPC) contract	Completed
Independent engineer report	In process
Environmental authorization (Mitigated Negative Declaration)	Completed
Major Use Permit (land use and access)	Completed
Construction permits	Pending
Commercial Operation Date (COD)	December 2013

Construction permits will be obtained prior to the start of construction.

^{*} The power blocks for each PPA had to be bifurcated in order to achieve the most efficient design. Specific factors that contributed to this include the unique shape of each site, the combination of using two different types of panels and two different size inverters, as well as differences in the size of each Project's PPA.

NADB's procurement policies require that private sector borrowers use appropriate procurement methods to ensure a sound selection of goods, works and services at fair market prices and that their capital investments are made in a cost effective manner. As part of its due diligence process, NADB will review compliance with this policy.

2.1.2. Technical Feasibility

Selected Technology

All equipment and suppliers have been selected on the merits of performance and cost. The Projects have been evaluated for viability based on the use of bankable technologies. Below is a description of the main components of the Projects:

- <u>Modules</u>: A mixture of 285W and 300W polycrystalline photovoltaic modules will be installed and mounted on a single axis tracking system.
- Inverters: The inverters selected for the Projects will be rated at 500 kW of AC output.
- <u>Interconnection</u>: The point of interconnection (POI) is adjacent to the site of the Projects at a 12 kV distribution circuit line. The POI will connect the Projects through an existing SDG&E transmission line to the Creelman Substation located 1.33 miles west of the site. The two Projects are interconnected and have one common output line to the POI.
- <u>Monitoring and control system</u>: A SCADA system will be used to monitor remotely, track, and document the performance of the PV system relative to its predicted output.

Solar Resource Assessment

The Projects are located in Ramona, California, which boasts some of the best solar resources in the world. According to the National Renewable Energy Laboratory (NREL), the photovoltaic solar resource in Ramona ranges from 6 to 6.5 kWh/m²/day (see Figure 6).

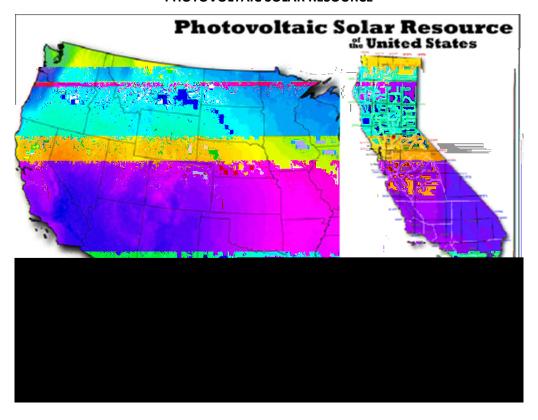


Figure 6
PHOTOVOLTAIC SOLAR RESOURCE

The Projects' energy production was calculated using Photovoltaic System (PVSyst) software, published by the University of Geneva, Switzerland. A 7 MW_{AC} solar plant performance study was developed. Based on the results of this study, it is estimated that the Projects will generate approximately 17,481 MWh of electricity in the first year of operation. Performance losses due to direct current to alternating current conversion, dust, inverter losses and shading were taken into consideration. The energy generation estimate will be vetted by an independent engineer.

2.1.3. Land Acquisition and Right-of-way Requirements

The Projects are located in Ramona in San Diego County and are bordered to the north by the Warnock Drive and to the west by Ramona Street. The land has been secured through a lease agreement.

The Projects require a Major Use Permit (MUP)⁴ from San Diego County. For MUP approval, San Diego County opens a period for public comments through its Planning Commission, which meets on monthly basis to consider land use projects that affect the unincorporated portion of the county. The MUP was granted on February 6, 2013, allowing for the construction and

⁴ Major Use Permit (MUP).

operation of the Projects. The County of San Diego Department of Planning and Land Use (SDDPLU) filed a Notice of Determination (NOD) for the Projects. The NOD indicates that, since the Projects will not have a significant effect on the environment, a Mitigated Negative Declaration (MND) was adopted pursuant to the provisions of the California Environmental Quality Act (CEQA). Additionally, mitigation measures were adopted as a condition of the approval of the Projects, as well as the preparation of a Mitigation Reporting or Monitoring Plan.

The Projects' MUP and MND were challenged in California state court with a complaint against these permits granted by San Diego County (the "Ramona Litigation"). A Settlement Agreement and Release was reached on July 16, 2013. This agreement released the Petitioner's claims, and the petitioners agree that they shall not take any action against the Projects.

Additional permits will be required for the Projects:

- Construction Permit;
- Excavation Permit;
- Encroachment Permit;
- General Construction Storm Water Permit;
- Fire District Approval;
- Minor Deviation Permit;
- Storm Water Pollution Prevention Plan Notice of Intent Permit;
- Well Deconstruction Permit.

All these permits are part of the Projects' designs and will be obtained prior or during the construction process in accordance with San Diego County's regulations.

2.1.4. Management and Operations

The Projects will be constructed by Blattner Energy, an experienced contractor with a track record of over 15 GW of installed wind, solar and transmission capacity since it began operations in 1997. Blattner Energy has served as the engineer, procurement and construction (EPC) contractor for a great number of the wind farms constructed in the U.S. and in more than 10 solar and wind projects in California.

Solar photovoltaic systems are highly reliable and require minimal maintenance. The Sponsor will provide a comprehensive O&M program for the Projects through an O&M operator. The O&M contractor will provide services in accordance with an operations and maintenance agreement that shall include, *inter alia*, the following:

- Providing all materials and services necessary for solar facility maintenance;
- Performing routine and non routine maintenance on the solar facility during and after the EPC warranty period;

- Washing solar panels periodically;
- Managing onsite vegetation by typical landscape maintenance techniques;
- Monitoring the operations of the Projects via the computer monitoring system;
- Complying with all regulatory obligations;
- Developing operation and safety plans; and
- Maintaining all Projects information and facility data, including providing reports to their stakeholders.

The Sponsor is expected to finalize an operation and maintenance agreement in the third quarter of 2013.

2.2 ENVIRONMENTAL CRITERIA

2.2.1. Compliance with Applicable Environmental Laws and Regulations

Applicable Laws and Regulations

The Projects will be constructed in California and therefore the formal environmental clearance process for the Projects must comply with CEQA.⁵ CEQA's purpose is to inform governmental decision makers and the general public about potentially significant environmental effects of proposed activities; require changes in projects through the use of alternatives or mitigation measures, when feasible; and disclose to the public the reasons why a project was approved, if significant environmental effects result from the project's implementation. CEQA is applicable to projects undertaken, funded, or requiring an issuance of a permit by a public agency.

Environmental Studies and Compliance Activities

The development of any project that is not exempt from the CEQA must include the preparation of an "Initial Study" by a lead agency to determine whether the project may have a significant adverse effect on the environment. If adverse effects are detected, the lead agency must prepare an environmental impact report (EIR). When no substantial evidence is found for such effects or they can be reduced to a level of insignificance through project revisions, a MND can be adopted.

In this case, the lead agency, the SDDPLU, conducted the Initial Study and, based on the provided information, it was determined that a MND would be applicable to the Projects since their potential environmental effects can be reduced to a level of insignificance, including the mitigation measures described in Section 2.2.2.

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⁵ CEQA was enacted in 1970 and incorporated into Public Resources Code §§21000 21177.

As part of the MND, the following environmental reports were prepared to evaluate the potential impacts and mitigation requirements of the Projects:

- <u>Air Quality Study</u>. The purpose of this study was to determine potential air quality impacts that might be created during the construction of the Projects. The study concluded that the expected impacts will be minimal and health risks are not anticipated. The Sponsor has considered mitigation measures to reduce temporary emissions and comply with the San Diego Air Pollution Control District standard.
- <u>Biological Resources Report</u>. The purpose of the study was to perform biological surveys in the immediate vicinity of the site of the Projects, and analyze potential impacts to sensitive biological resources. No off site impacts would occur. With the exception of field/pasture lands and non native grassland, the Projects would not result in any impacts to native or naturalized habitat types. Compensatory mitigation measures were considered in accordance with County of San Diego requirements. The potential jurisdictional waters and wetlands in the northern portion of the survey area would be avoided and would not be adversely affected by the proposed Projects, either directly or indirectly.
- <u>Cultural Resources Report</u>. A field survey was conducted to determine the potential for cultural resources. Nine prehistoric sites were identified within the area surveyed, but outside of the Major Use Permit boundary. No cultural resources have been documented by the Native American Heritage Commission (NAHC).
- <u>Hydrology Study</u>. The purpose of the study was to assess potential impacts or alterations to existing hydrologic and hydraulic properties of the site as compared to existing conditions. The assessment was conducted in accordance with the County of San Diego Hydrology Manual, the San Diego Unit Hydrograph software, and the Natural Resources Conservation Service method. The study concluded that there is no anticipated increase in the peak flow runoff of the project site, and peak flow attenuation is not necessary.
- <u>Noise Assessment</u>. A study was completed to determine the noise impacts associated
 with the development of the Projects. Construction activities are anticipated to be
 below County Noise Ordinance Section 36.410 which defines the standard for San Diego
 County. No impacts are anticipated and no mitigation measures are required.
- Hazardous Materials Environmental Site Assessment (Phase I ESA). The purpose of the Phase I ESA was to assess the presence or likely presence of an existing, historical, or threatened release of any hazardous substances or petroleum products into structures, soil, and/or groundwater beneath the Projects' site. No evidence of likely presence of recognized environmental conditions was revealed.⁶

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⁶ The American Society for Testing and Materials (ASTM)defines *recognized environmental conditions* as the "presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property."

- Phase II Environmental Site Assessment. Although no recognized environmental conditions were revealed in the ESA Phase I study, the Sponsor also conducted a Phase II study to assess whether detectable concentrations of organochlorine pesticide residue and heavy metals exist in the on site soils analyzed. No detectable concentrations of organchlorine pesticides were detected in 11 samples. The remaining four soil samples reported concentrations were below established California Human Health Screening Levels for industrial soils or within accepted normal ranges of elemental concentrations in area soils.
- <u>Visual Resources</u>. This study was conducted to identify the potential impacts on existing
 visual resources and character the Projects would have in Ramona. Since the Projects
 would not result in the introduction of features that would significantly detract from or
 contrast with the visual character of the surrounding community, the Projects would not
 result in significant impacts on visual resources. No mitigation measures are required.

Pending Environmental Tasks and Authorizations

There are no environmental authorizations pending.

Compliance Documentation

The following environmental compliance documentation is available for the Projects:

- Notice of Intent to Adopt a Mitigated Negative Declaration
- Mitigated Negative Declaration
- Air Quality Assessment
- Biological Resources Report
- Cultural Resources Report
- Hazardous Materials Environmental Site Assessment
- Phase II Environmental Site Assessment
- Hydrology Study
- Initial Study
- Noise Assessment
- Storm Water Management Plan Minor
- Visual Resources
- Major Use Permit 3300 11 029 (MUP)

2.2.2. Environmental Effects/Impacts

There is a need for affordable and environmentally beneficial alternatives to conventional fossil fuel derived energy resources. Renewable energy projects create an opportunity to generate electricity without the atmospheric emissions generated by fossil fuel based plants. Sunlight is a source of renewable energy, which means it can be produced without the depletion of natural

resources. It is a clean form of renewable energy and is currently used in many developed and developing nations to meet their demand for electricity. Solar power does not produce waste byproducts that require disposal or gas emissions that contribute to air pollution. It does not pollute or consume water for electricity production. Water may be used in small amounts for the cleaning of panels from time to time. Any water used for cleaning purposes will be disposed of at appropriate facilities and in accordance with environmental regulations. Solar energy projects provide an opportunity to displace greenhouse gases (GHG) and other pollutants produced by traditional fossil fuel based energy generation, while providing local residents with a safe and reliable energy alternative.

Existing Conditions and Project Impact – Environment

Historically, the United States has depended to a great extent on fossil fuels for the generation of energy. These conventional sources of energy adversely affects the environment due to the harmful emissions produced in their generation processes, including GHG and other pollutants, such as sulfur dioxide (SO₂) and nitrogen oxides (NOx).

Current electricity generation in California relies on a mix of energy technologies, including: natural gas (45.3%), hydroelectric (21.3%), nuclear (18.3%), other renewables (13.6%), and coal (1.6%). Based on nearly 200,000 GWh of net power generation in California in 2011, 47.9 million metric tons of CO₂Iand (1.6%). Based on the coal (1.6%) and (1

Table 3
2011 CALIFORNIA ELECTRIC POWER INDUSTRY GENERATION

Energy Source	Total Generation 2011 (GWh) ¹
Natural Gas	90,919
Coal	3,120
Nuclear	36,666
Hydroelectric	42,731
Other Renewables ²	27,200

¹Source: California Energy Commission, *Electric Generation Capacity & Energy:*

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Mitigation of Risks

As previously determined by the Planning Commission, the Projects will not have significant effect on the environment. The expected impacts will be managed according to the following mitigation measures considered in the MUP:

- <u>Aesthetics</u>. In order to provide adequate landscaping that addresses visual impacts, and to comply with the approved Conceptual Landscape Plan, the applicant shall submit Final Landscape Plans.
- <u>Agricultural resources</u>. In order to mitigate for agricultural resources, as evaluated in the County Agricultural Resource Guidelines for Determining Significance, mitigation of the impacts to agricultural resources will be required and the soils on site shall be left in their natural state, and not coated with any materials that would sterilize the soil. The Sponsor will implement one of the following mitigation options:
 - Off site preservation at a ratio of 1:1 for all impacted agricultural soils for a total of 7.19 acres.
 - On site preservation of 7.19 acres of agricultural land. The agricultural mitigation shall be increased at a 1:1 ratio for any additional ballasted footings over 10% of the total solar panel supports.
- <u>Air Quality</u>. In order to mitigate fugitive dust caused by the permanent disturbance of the site from clearing and grading, a permeable soil binding or permeable rock material shall be used to limit the dust. Additional measures for dust suppression include:
 - The areas located between the arrays and any non drivable surface may be revegetated with native, noninvasive plant species.
 - A Revegetation Plan shall be prepared that provides sufficient ground cover to mitigate fugitive dust from the ground disturbances. The Revegetation Plan shall conform to the most current version of the County of San Diego Report Format and Content Requirements for Revegetation Plans.
- Anti-reflective surfaces. In order to reduce solar panel glare or any other reflective surface pursuant to §6952.b.3.c.iv of the Zoning Ordinance, the Projects' components shall be designed with anti reflective surfaces.
- <u>Archaeological grading monitoring</u>. In order to mitigate for potential impacts to undiscovered buried archaeological resources on the site of the Projects, a grading monitoring program and potential data recovery program shall be implemented pursuant to the County of San Diego Guidelines for Determining for

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site mitigation shall be acquired. The Sponsor shall purchase habitat credit, or provide for the conservation of habitat of 9.41 acres of non native grassland.

- <u>Fauna</u>. In order to avoid impacts to migratory birds and raptors, which are sensitive biological resources pursuant to the Migratory Bird Treaty Act (MBTA), a Resource Avoidance Area (RAA) shall be implemented on all plans. No brushing, clearing and/or grading will be allowed within the RAA during the breeding season of migratory birds and raptors.
- <u>Fire protection</u>. In order to assure fire safety in compliance with the County of San Diego Fire Code, Sections 96.1.4703 and 96.1.4707, signs shall be placed at each disconnecting point and shall indicate what equipment it de energizes. Additionally, fire apparatus access roads shall be designed and maintained to support the load of fire apparatus.
- <u>Traffic</u>. In order to mitigate temporary traffic impacts to levels below significance, a Traffic Control Plan shall be prepared that includes, but is not limited to, haul routes, number of trips per day, and destination.
- <u>Trail/Pathway improvements</u>. In order to promote orderly development and to comply
 with the Community Master Trails Plan, the Sponsor shall improve a pathway along the
 project frontage to a width of ten (10) feet within the outer edge of the road right of
 way for Warnock Drive and Ramona Street.

Natural Resource Conservation

The Projects will support natural resource conservation by reducing the demand on fossil fuels for energy production and associated improvements to air quality. The Projects are anticipated to produce approximately 17,481 MWh of zero carbon electricity in the first year of operation, equivalent to the annual energy consumption of approximately 2,672 households. In addition, clean technologies such as solar energy require no water for electricity production, whereas fossil fuel fired generation is typically water intensive.

No Action Alternative

The no action alternative to the development of renewable energy sources would result in greater demand for conventional fossil fuel based energy production, further depleting natural resources for the purposes of meeting an ever growing demand for energy, as well as a lost opportunity to generate emission free energy, such as that derived from solar energy.

Additionally, the Projects will help meet California's RPS requirements and comply with GHG emission legislation, while satisfying increased demand for electricity. Should the Projects not be implemented, the mix of renewables in SDG&E's portfolio would be delayed and the intent of California's GHG emission reduction goals could be affected.

Existing Conditions and Project Impact – Health

In general, epidemiological research has shown that both chronic and acute exposure to harmful emissions associated with fossil fuel based energy production can lead to serious respiratory

problems. It is estimated that, at the very least, prolonged exposure to excessive levels of pollutants can deteriorate the respiratory capacity of humans and greatly contribute to the increased incidence of cardiopulmonary diseases, such as asthma, heart ailments, and lung cancer.

By using clean renewable resources instead of conventional fossil fuel sources in power generation, the Projects will positively impact the region by reducing pollutants and thus help to contain the severity of respiratory and other diseases aggravated or caused by air pollution. In addition, the reduction of GHG emissions is expected to mitigate climate effects that create more vulnerable conditions for human health.

Transboundary Effects

No negative transboundary impacts are anticipated as a result of the implementation of the Projects; on the contrary, a beneficial effect is anticipated on the air quality due to the decreased demand on fossil fuel fired electrical plants in the region. Furthermore, the Projects will aid in addressing the larger environmental concerns related to greenhouse gases and global warming targeted by international agendas.

Other Local Project Benefits

During construction, the Projects are expected to generate approximately 81 jobs; during operation, one part time job is expected to be created.

2.3. FINANCIAL CRITERIA

This certification and financing proposal covers two separate PV solar Projects located adjacent to each other on the same site. The Projects have the same off taker, but under separate power purchase agreements. As a result, there will be two different borrowers with separate loan agreements; nevertheless, the Projects will share most of the key project documents, most notably the EPC and O&M agreements. The Projects are being contractually structured vis à vis the loan documentation as independent from one another in order to ensure tax incentive security for the tax equity investor.

The Sponsor has requested a loan from the North American Development Bank (NADB) to complete the financing of each of the Projects. The proposed payment mechanism is consistent with the project structure normally seen in the U.S. renewable energy industry. The source of payment will be the revenue generated by the Projects in accordance with the pricing established under the PPAs signed with SDG&E for a term of 25 years. NADB will have no recourse beyond the Project companies, Sol Orchard San Diego 20 LLC and Sol Orchard San Diego 21 LLC. The Sponsor will become the owner of both Projects at or before NADB debt closing.

NADB performed a financial analysis of the source of payment, SDG&E; the proposed payment structure; and the Projects' cash flow projections over the 25 year term of the PPAs. SDG&E's financial ratios indicate that it has maintained a sound financial position. Currently, SDG&E is

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rated A/Stable by Fitch, A2/Stable by Moody's, and A/Stable by Standard & Poor's, which indicates a strong credit quality.

The Projects' expected revenue from the sale of electricity is estimated to be sufficient to: a) cover scheduled O&M expenses, b) fund any debt service reserve, c) pay the debt service on the senior loan, and d) comply with debt service coverage requirements.

In addition, NADB's analysis verified that R1 and R2 have the legal authority to contract financing and pledge their revenue for the payment of financial obligations. R1 and R2 also have the capacity to operate and maintain the Projects based on the experience provided by their development team. R1 and R2 will contract the Projects' O&M services with a firm with ample experience and expertise in the industry. NADB will verify that the projected O&M costs and contract warranties are in accordance with industry standards.

Considering the Projects' characteristics and based on the financial and risk analyses performed, the proposed Projects are considered to be financially feasible and presents an acceptable level of risk. Therefore, NADB proposes providing;

- (i) a market rate loan of up to US\$8.0 million to Sol Orchard San Diego 20 LLC for Ramona 1; and
- (ii) a market rate loan of up to US\$19.9 million to Sol Orchard San Diego 21 LLC, for Ramona 2.

3. PUBLIC ACCESS TO INFORMATION

3.1. PUBLIC CONSULTATION

BECC released the Draft Project Certification and Financing Proposal for a 30 day public comment period beginning July 22, 2013. The following documentation is available upon request for both projects:

- Notice of Intent to Adopt a Mitigated Negative Declaration
- Mitigated Negative Declaration
- Initial Study
- Ordinance Compliance Checklist
- Air Quality Assessment
- Biological Resources Report
- Cultural Resources Report
- Fire Protection Plan
- Grading Plan and Slope Map
- Noise Assessment

- Hazardous Materials Environmental Site Assessment
- Phase II Environmental Site Assessment
- Hydrology Study
- Storm Water Management Plan Minor
- Visual Resources

The documents above are also available at the County of San Diego's website: http://www.sdcounty.ca.gov/pds/ceqa/3300 11 029.html

The public comment period ended on August 21, 2013, with no comments received.

3.2. OUTREACH ACTIVITIES

As part of CEQA, the SDDPLU as the lead agency conducted a public process that included publication of documents for review and comment, as well as direct consultation with relevant federal and state agencies, such as the Native American Heritage Commission ("NAHC"), for determining the direction of necessary environmental studies.

As part of the consultation with the NAHC, nine prehistoric sites were identified within the area surveyed, but outside of the Major Use Permit boundary. The NAHC was contacted to request a search of their files for any recorded Native American heritage sites located within 0.5 miles of the Area of Potential Effects (APE) within the site. NAHC responded that no tribally significant Native American cultural resources have been documented. The Native American groups and individuals identified by the NAHC were also contacted to seek additional knowledge of such sites within the APE. Consultation was conducted through letters with no responses received.

A notice of intent to adopt a MND for the Ramona Projects was made available for public review from May 3, 2012 through June 1, 2012. On May 4, 2012, the SDDPLU received comments from the Laborers International Union of North America (LIUNA), Local Union No. 89. LIUNA stated that the Projects needed an exhaustive Environmental Impact Report rather than a MND due to the expected environmental impacts.

On February 6, 2013, the MUP was approved by the SDDPLU. On March 8, 2013, the approved MUP and MND were challenged in California state court in the Ramona Litigation. A Settlement Agreement and Release was reached on July 16, 2013. This agreement released the Petitioner's claims, and the petitioners agree that they shall not take any action against the Projects.

BECC conducted a media search on the Internet to identify public opinions about the Projects, and several articles were found related to the MUP issued by the Board of Supervisors to the Sol Orchard Solar Energy Projects located in Ramona, CA. The following provides a brief summary of the articles identified:

- October 22, 2012, Ramona Sentinel. The article describes the approval of the MUP by the County Planning Commissioners with of vote of 6 1 and mentions that the Ramona Community Planning Group (RCPG), an advisory group, was contemplating the filing of an appeal. The article also quoted three members of the group and some Ramona residents who expressed opposition to the Projects at the commission hearing and notes that the residents' concerns were related to establishing an industrial facility on agricultural land.
- <u>February 7, 2013, Ramona Patch</u>. The article indicates that the County Board of Supervisors voted 4 1 to deny appeals to the MUP approved for the proposed solar energy plant in Ramona.
- <u>March 13, 2013, San Diego Reader</u>. The publication describes the lawsuit against the County.
- May 19, 2013, San Diego Reader. The article states that local farmers think that solar energy is not needed since fossil fuels will suffice for electricity needs. The same article mentions that on July 7, 2011, Sol Orchard made an introductory presentation to the RCPG, at which 10 local residents expressed concerns mainly regarding the loss of farmland and aesthetics. The article went on to note that by the end of 2011 and after several hearings, Sol Orchard agreed to provide landscaping in accordance with the Ramona Design Review Board. The article also indicated that, in January 2012, representatives of the RCPG continued to oppose the Projects despite the proposed measures and that in October 2012, the San Diego Planning Commission voted 6 1 to approve the permit with construction conditions, despite opposition from several members of the RCPG during the public hearing. According to this article, the community of Ramona has approximately 45,000 residents.

The Project Sponsor has demonstrated willingness to work with the County authorities, as well as residents, to address comments. The Project Sponsor has followed all public consultation requirements in order to comply with the CEQA and County permitting processes.