





# **City of San Diego**

# **Request for Statement of Qualifications for**

# **100% Renewable Energy**

(10088487-18-A)

July 19, 2017

## **EDF Renewable Energy**

Proposal Points of Contact:

Michael Robinson Business Development Manager, Distributed Electricity and Storage

**EDF Renewable Energy** 15445 Innovation Drive San Diego, CA 92128

T: 858.521.3416 T: 858.521.3300 F: 858.521.3333

Michael.robinson@edf-re.com www.edf-re.com Jamie Link Associate Director, Distributed Electricity and Storage

**EDF Renewable Energy** 15445 Innovation Drive San Diego, CA 92128

T: 858.521.3329 M: 858.395.3510 F: 858.521.3333

Jamie.link@edf-re.com www.edf-re.com

#### K. <u>CITY'S UNILATERAL RIGHT</u>

The City reserves the unilateral right to do any of the following if the City determines in its sole discretion that such action is in the City's best interests: Cancel this RFSQ, in whole or in part, or reject all submittals submitted in response to this RFSQ; select a Respondent's submittal in whole or in part; select one or more Respondents; waive or permit cure of minor irregularities; and conduct discussions with Respondents in any manner necessary to serve the City's best interests.

#### **RESPONDENT SIGNATURE IS REQUIRED**

Respondent Name:EDF Renewable Energy
Address: 15445 Innovation Drive, San Diego, CA 92037
Telephone No. and E-Mail Address: (858)521-3416 / michael.robinson@edf-re.com
Website: <u>www.edf-re.com</u>
Authorized Representative Name and Title: <u>Raphael Declercq, Vice President</u>
Representative's Original Signature:
Date Signed:

Goods and Services RFSQ Effective: November 8, 2016 OCA Document No. 855623\_3

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# 1. Cover Letter

The EDF Renewable Energy ("EDF RE") team is pleased to present the enclosed response to City of San Diego ("the City") Request for Statement of Qualifications to provide 100% Renewable Energy to the City. Within this proposal EDF RE will describe its ability to deliver renewable energy to the City and its businesses and residents by designing, financing, building, owning, and operating holistic energy solutions that incorporate renewables, energy delivery, energy management, and energy efficiency services. The proposal will also briefly describe regulatory roadblocks and market place obstacles that will prohibit EDF RE from delivering power to the community in the current environment.

EDF Renewable Energy will lead as the prime contractor on all work with the City, taking responsibility of the performance of its subsidiaries groSolar and EDF Renewable Services ("EDF RS"), as well as its affiliate EDF Energy Services ("EDF RS"). The EDF RE, groSolar, EDF RS and EDF ES Team are able to offer the City competitive long term renewable energy solutions and services with confidence by leveraging advantages:

- Leading Experience and Insight: EDF is currently operating more than 10,000 Megawatts (MW) of Renewable Generation in North America, gaining real world experience and understanding of the different technologies, designs, applications, and operations renewable energy solutions.
- Local Presence and Experience: Headquartered in Carmel Mountain Ranch, San Diego, EDF RE has been active in the local area for over 20 years, resulting in over 340MWs of renewable energy projects in San Diego Gas and Electric territory. Meanwhile, the EDF RS team services 3.4MWs of roof top solar projects at Kohls, Staples, and other locations in San Diego County, as well as the 340MWs of utility scale projects.
- Full Project Lifecycle Capabilities
  - **Development:** EDF RE has developed, financed interconnected, over 1,200 MW of renewable energy projects in California under long term power purchase agreements.
  - Installation: In April 2016, EDF RE acquired 100% ownership of groSolar, a team which has a comprehensive background in Engineering Procurement and Construction, developed from experience in deploying over 2,000 distributed energy projects around the country ranging in size from 100kW 10MW.
  - **Financing:** EDF RE internally financed over 7.4GW of Renewable Energy Projects in North America over the past decade. The City's projects are not contingent upon third-party construction financing.
  - Operations and Maintenance: EDF RE works closely with its wholly-owned subsidiary EDF Renewable Services, the largest Operations and Maintenance entity in North America with over 10GW of renewable energy projects under contract across North America and 4.8GW under Asset Management contracts.
  - **CAISO Energy Delivery Experience:** With more than 25,000MWs of load served across the United States, in 2016 EDF Energy Services served over 100MW of Direct Access customers' peak load with over 700,000MWh in California with a wide variety of energy products.
- Flexible Holistic Solutions Capabilities: EDF RE has the capabilities to provide holistic solutions that include multiple technologies and services by leveraging the EDF group that has capabilities in energy efficiency, energy delivery, and energy storage.





- Technology Agnostic Approach: The EDF RE has strong relationships with a wide range of top tier suppliers and does not have a product line to promote, providing the flexibility to tailor solutions to City's site specific needs
- **Proven Battery Solutions:** EDF RE's 340 MWs of storage deployed globally and 20MWs in the United States, demonstrates the Team's proven track record of successfully designing, installing, owning, and operating sophisticated energy storage and solar integrated systems.
- Long Term Corporate Stability: EDF RE is part of the EDF Group that generated 640 terawatt-hours of energy and EUR 72Bn of revenue in 2016 while operating in 16 countries. The long term financial stability allows the EDF RE team to deliver long term solutions and services with confidence.
- The Value of Safety: Safety is the number one Core Value at EDF RE and is an integral part of everyday operations throughout projects lifecycle and the corporate culture.

We look forward to discussing EDF RE's capabilities and qualifications as well as the City of San Diego's vision and approach to pursuing the 100% Renewable Energy Goal.

Raphael Declercq

Vice President Distributed Electricity and Storage

**EDF Renewable Energy** 15445 Innovation Drive San Diego, CA 92128

T: 858.521.3310 F: 858.521.3333

Raphael.declercg@edf-re.com www.edf-re.com

Date

Digitally signed by Raphael Declercq DN: cn=Raphael Declercq, o=EDF Renewable Energy, ou=Vice President, email=raphael.declercq@ edf-re.com, c=US Date: 2017.07.14 10:33:40 -07'00'





# 2. Minimum Requirements

#### a. Contractor License

EDF Renewable Energy B – General Building License C-10 – Electrical License License #: 642178 Expiration Date: 4.30.18

## b. Department of Industrial Relations Registration

EDF Renewable Energy PWCR Number: 1000045357

## c. Qualified California Electric Service Provider

EDF Industrial Power Services (CA), LLC 4700 W. SAM HOUSTON PARKWAY N. Suite 250, Houston TX 77041

See Appendix A for Registration Certificate





# 3. Qualifications and Experience

## a. EDF Renewable Energy Services

#### i. Transmission and Distribution Experience

EDF RE can effectively integrate projects and services into the Transmission and Distribution grid by leveraging its experience not only as a renewable energy developer in North America, but also its capabilities as a European utility. Within California, EDF RE has developed and interconnected over 1,000MWs of Renewable Energy projects, specifically with 340MWs in the San Diego area. Many of these utility scale projects require the installation of long distribution lines to take the power from the field to the point of interconnection with the distribution or transmission grid. Similarly, EDF ES understands the transmission and distribution market in order to deliver energy to customers effectively. Finally, the EDF Group operates the transmission and distribution grid in France as well as several French islands. In the past EDF ES has leveraged these capabilities to conduct detailed power flow analysis and engineering in order to ensure that the grid can be managed effectively.

## ii. CAISO Experience and Capabilities

Our competitive market affiliate, EDF Energy Services (EDF ES), serves as the Qualified Scheduling Entity (QSE) and Retail Energy Provider (REP) for the City, depending on the legal entity it decides to pursue. EDF ES currently manages over 25,000 MW of generation and commercial, industrial and aggregated load across the United States. EDF ES is ranked as one of the top five Power Marketers by Platts Power Sales Analysis, and was recently awarded the 2012 US Electricity House of the Year by Energy Risk magazine. EDF ES offers a wide range of products and services to its customers to help them minimize their energy costs while actively participating CAISO market programs, such as demand response programs. EDF ES tailors individual energy management services that can incorporate dispatch, scheduling, origination, fuel supply and risk management services according to the customer's needs. EDF ES currently has more than 25,000 MW of capacity under management. As a result, in addition to providing the retail service described in this proposal, EDF ES can serve as a long-term partner to for the City to achieve long term its energy management objectives.

#### iii. Renewable Energy Expansion

EDF Renewable Energy is uniquely positioned to offer both utility and distributed renewable energy solutions. For 25 years EDF RE has been delivering power purchase agreements from large utility scale projects to clients across North America, including both utilities and more recently large Corporate and Industrial customers such as Microsoft, Google, and Procter and Gamble. The large scale projects will have a large and immediate impact on the City's pursuit of reaching 100% renewable energy.

Meanwhile, EDF RE and groSolar can leverage its experience and capabilities to offer distributed energy solutions that can be implemented locally, creating jobs, and adding local generation resilience. groSolar has installed over 2000 systems, ranging from ground mount systems, to roof top and carports, to even residential systems. GroSolar's full range of distributed generation capabilities, combined with the internal financing and long term O&M services of the EDF Teams traditional business structure, will provide the City with the flexibility to take advantage of both large impact utility scale projects as well as local generation with job creation.





## iv. Sourcing Renewable Energy

EDF Renewable Energy is constantly developing rolling portfolio of utility scale renewable energy projects that can effectively deliver power throughout Southern California. By collaborating with EDF Energy Services, the EDF team can effectively deliver power to the meter of any direct access customer, Community Choice Aggregation ("CCA"), or Utility. Meanwhile, the groSolar team is highly effective at identifying, building, and financing local sources of renewable energy. The EDF RE team can also leverage the EDF Groups experience in Biomass, Biogass, and Geothermal sources, to improve the local energy mix and diversify resources. For example, if EDF RE can identify a local feed stock, the group can leverage its experience with 40MWs of Biomass projects in South Carolina that have been operating since 2013.

#### v. Implementation Timeline

EDF Renewable Energy has a rolling portfolio of projects in development that can begin to deliver power as soon as 2018. Most projects will not begin construction until a project is awarded and a Power Purchase Agreement is signed. However, during the Power Purchase Agreement negotiations, data collection, design and permitting can be wrapped up so that mobilization and construction begin when the contract is signed and EDF RE is given Notice to Proceed. Depending on the size of the project construction will from 6 months to a year.

Technology	Size	Data Collection	Design + Permitting	Construction
Wind	Wind Utility Scale		1-3 Years	1-2 Years
Solar	Utility Scale	< 1 Month	1-2 Years	1-2 Years
Solar	Distribution	< 1 Month	< 1 Year	.05 - 1 Year
Solar + Storage	Distribution	< 1 Month	<1 Year	.05 - 1 Year
Solar	Onsite	< 1 Month	3 Months	6 Months
Storage	Onsite	< 1 Month	2 Months	3 - 6 Months
Energy Efficiency	Onsite	< 1 Month	3 Months	6 Months

#### vi. Cost Estimates

The prices for Renewable Energy Power Purchase agreements will vary greatly depending on the size, location, and type of renewable energy solution. Typically utility scale solar projects can produce some of the cheapest power in Southern California because of economies of scale, but can be impacted by the cost of delivery over the grid depending on the location. However, onsite solar has the advantage of avoiding delivery costs and can also be integrated into a holistic solutions that incorporate energy efficiency and storage to further reduce costs. For example, integrating solar, storage, and efficient lighting will increase savings and improve payback periods. Every site will have a different mix of potential technologies and so it is difficult to estimate the costs of these types of solutions. Below are some typical prices for Power Purchase Agreements that include everything from design, to management, to operations.





Technology	Size	Term	PPA Price <sup>1</sup>
Wind	Utility Scale	20 Years	\$0.040 - \$0.060/kWh
Solar	Utility Scale	20 Years	\$0.035 – \$0.055/kWh
Solar + Storage	Utility Scale	20 Years	\$0.045 – \$0.065/kWh
Solar	Onsite	20 Years	\$0.060 - \$0.080/kWh
Solar + Storage	Onsite	20 Years	\$0.070 - \$.090/kWh

#### vii. Greenhouse Gas Analysis

EDF RE will calculate the GHG offsets that result from the renewable energy delivered to the City of San Diego and include the figures on the monthly bills.

#### viii. Potential Risks and Roadblocks

Regulatory obstacles to delivering power to the City of San Diego and its residents will be the biggest issue. Currently EDF Renewable Energy only have the ability to deliver power to corporate customers that have become direct access customers, CCAs, or utilities and municipalizes. The City must implement a method of purchasing power on behalf of the residential and commercial community. There are three potential options

- 1. **Municipality** City of San Diego can form a Municipal Power district in which it will take responsibility for both the energy commodity and delivery of power. By taking control of both transmission and generation requirements, the City will have a lot of flexibility and control over how new generation is implemented, especially within the local community.
- 2. **SDG&E ECO Choice Program Expansion** San Diego Gas and Electric currently offers a program that allows customer to select to purchase 100% renewable energy from the grid for an additional fee. The City can work with SDG&E to aggressively market the ECO friendly program and expand is procurement of Renewable Energy. Currently SDG&E generation mix is over 40% Renewables energy, however to get to 100% the local community will have to support the program and the slightly higher costs associated with it.
- 3. **Community Choice Aggregation (CCA)** By forming a CCA the City will have the authority to purchase energy on behalf of its local customer base. EDF Renewable Energy has worked with other CCA's such as Marin Clean Energy, to deliver renewable energy to its customer base through long term power purchase agreements.

## ix. Additional Benefits

EDF Renewable Energy recommends that the City looks closely at the opportunity to develop holistic solutions that incorporate not only on-site and off-site renewable generation, but also storage, energy efficiency, and energy delivery services. Integrating multiple technologies and services into a single solution allows the City to leverage:

- A single contractor working on a holistic solution with multiple technologies will have a better understanding of the energy environment a whole and how each of the technologies and

<sup>&</sup>lt;sup>1</sup> Prices are heavily influences by the size, location, term, and type of project. Prices are subject to change without notice.





services will impact each other in order to optimize system for most cost effective delivery of 100% renewable energy.

- Working with a single entity will streamline the design, contracting, and implementation process by facilitating communications, providing a single point of coordination, and requiring input from fewer stakeholders.
- A single provider removes conflicts of interest that can arise with multiple companies working with competing technologies and services. For example an energy efficiency solution provider is trying to reduce consumption, while an offsite renewable energy provider is motivated by serving larger loads with renewable energy and is not incentivized to reduce load.
- Contracting with a single entity that is responsible for the performance of the entire system reduces performance liabilities.
- A single point of contact simplifies Asset Operations and Administration such as emergency response and creates a single point for billing.

By working with large system integrators, such as EDF Renewable Energy, that can offer a comprehensive set of energy services, the City of San Diego will accelerate the progress towards a clean energy future for the region.

## b. Limitations, Exceptions, and Requirements

EDF Renewable Energy will be able to deliver 100% renewable energy to the San Diego community through multiple methods. However, EDF Renewable Energy will not be able to eliminate GHG emissions without the support of the transportation industry. EDF RE team will have to work with local policy makers to incentivize the adoption of electric vehicles on a massive scale. Once converted to an electric vehicle, EDF Renewable Energy will be able to provide additional renewable generation to meet those needs.

## c. EDF Renewable Energy Characteristics

The EDF Renewable Energy team will be able to leverage its unique size, experience, and range of expertise and capabilities to provide the City with a single point of contact for flexible holistic solutions.

As outlined in the cover letter, the City will benefit from working with the EDF Renewable Energy Team due to our:

- Leading Renewable Energy Experience: EDF has 25 years of real world experience and understanding of the utility scale renewable energy solutions
- Renewable Energy O&M Services: the largest Operations and Maintenance entity in North America for EDF RE and third parties.
- Energy Delivery Experience: EDF Energy Services is serving load across the united states with a wide array of energy products and services

North America RE Experience					
Developed	9GW				
Own and Operate	4.5GW				
San Diego Area Solar Exp	perience				
Developed	340MW				
Operations and Maintenance	343.4MW				
Renewable Energy O	&M				
North America	10,000MWs				
Southern California	340MWs				
Energy Storage Experi	ience				
Globally	330MW				
North America	20MW				
Energy Delivery Exper	ience				
North America	25,000MWs				
California	100MWs				





- **EPC Capabilities:** the groSolar team has a comprehensive background in Engineering Procurement and Construction, developed from experience in deploying over 2,000 distributed energy projects around the country.
- Local Presence and Experience: Headquartered in Rancho Bernardo, EDF RE has been active in the local area for over 20 years. Meanwhile, the EDF RS team services local Kohl's, Staples, and other locations in San Diego County.
- Understanding of California Utility Operations: EDF RE has developed, financed interconnected, over 1.2GW of renewable energy projects in California under long term power purchase agreements.
- Flexible Holistic Solutions Capabilities: EDF RE has the capabilities in energy efficiency, energy delivery, and energy storage. For example EDF Renewable Energy was recently qualified as a Super Energy Savings Company by the Department of Energy.
- Long Term Corporate Stability: The EDF Group's size and distribution of energy capabilities, markets, and revenue streams diversify risk and provide long term financial stability for EDF RE and its clients.
- **Balance Sheet for Internal Financing:**. The City projects are not contingent upon third-party construction financing.
- **Technology Agnostic Approach**: The EDF RE s does not have a product line to promote and so is not incentivized to install products that are not appropriate to the sites unique characteristics.
- **The Value of Safety:** Safety is the number one Core Value at EDF RE and is an integral part of everyday operations throughout projects lifecycle and the corporate culture.

## d. EDF Renewable Energy Commitment

"Turning innovative renewable energy ideas and long-term relationships into ethical, high value, sustainable business"

EDF Renewable Energy's has operated under this mission statement for more than 25 years, to successfully develop, design, finance, own, operate, and maintain one of the largest portfolios of sustainable generation in North America. As a part of a global organization with capabilities and experience throughout the energy ecosystem, the EDF team is able to integrate holistic energy saving solutions that incorporate not only renewables and storage, but also energy efficiency technologies, energy management systems, combined heat and power systems. For example, in April EDF Renewable Energy was qualified as a Super Energy Savings Company ("Super ESCO") by the Department of Energy (DOE)<sup>2</sup>, and so is one of only twenty-one companies in the world that is prequalified to do energy savings contracts with the federal government. Relying on core values such as safety, good sense, accountability, transparency, teamwork, respect, and passion, EDF RE has developed a proven track record of working closely with all key stakeholders to deliver high performance sustainable and cost effective energy solutions. EDF RE also stays engaged and supports the energy savings community

<sup>&</sup>lt;sup>2</sup> Department of Energy (April 28<sup>th</sup> 2017) Energy.gov - DOE Awards 21 Contracts to Provide New and Efficient Energy and Water Infrastructure Improvements to Federal Facilities <u>https://www.energy.gov/articles/doe-awards-21-contracts-provide-new-and-efficient-energy-and-water-infrastructure</u>





through its involvement with the DOE Better Building alliance. EDF RE's internal financing and performance contract based business model relies on long term projects that deliver sustainable energy savings and value to both EDF RE's clients and the local community. EDF Renewable Energy has proven this commitment to sustainable energy savings projects through the development of over 9GW and the Operation and Maintenance of over 10GW of sustainable energy projects across North America.





# 4. Provisos and Conditions

EDF Renewable Energy's statement of qualifications is not subject to any provisos, conditions, or consents of other parties or agencies.





# 5. EDF Qualifications and Experience

EDF RE Team brings a strong portfolio of both development and operations experience for renewable energy projects to ensure that the City will receive a high-quality project with minimal risk. EDF Renewable Energy (EDF RE) is one of the nation's most established renewable energy companies, having developed, constructed, or operated more than 10,000 MWs of wind, solar, biogas, and biomass renewable energy projects in North America.

Once projects are developed and built, EDF RE's Services Arm ensures performance of facilities and integration with the electric grid. EDF is the largest provider of third-party renewable energy operations and maintenance services in North America, currently managing more than 8,000 MW of renewable energy projects.

Our competitive market affiliate, EDF Energy Services (EDF ES), will serve as the Qualified Scheduling Entity (QSE) and Retail Energy Provider (REP) for Fort Hood. EDF ES currently manages over 25,000 MW of generation and commercial, industrial and aggregated load across the United States. EDF ES is ranked as one of the top five Power Marketers by Platts Power Sales Analysis, and was recently awarded the 2012 US Electricity House of the Year by Energy Risk magazine. EDF ES offers a wide range of products and services to its customers to help them minimize their energy costs while actively participating in demand response and coincidental peak management programs. In addition to providing the retail service described in this proposal, EDF ES can serve as a long-term partner to Fort Hood to achieve its energy management objectives over time.

## a. EDF RE Development Experience

A full list of 10,000 MWs of EDF Renewable Energy Projects can be found in Appendix B.

## b. EDF Energy Services Experience

With more than 25,000MWs of load served across the United States, in 2016 EDF Energy Services served over 100MW of Direct Access customers' peak load with over 700,000MWh in California with a wide variety of energy products.

## c. Staff Responsibility

Throughout the project lifecycle, communication between key stakeholders is critical. As a result there will always be a single point of contact between the City and The EDF RE Team throughout the life contract and specific projects. During initial design, proposal, and development stages of a project a Development Manager is responsible for facilitating the flow of information between groups. During construction phase the Project Manager leads with close interaction with onsite personnel, while the Development Manager supports communications with City personnel. At least four representatives of the EDF RE and groSolar Team will be onsite for the entire construction phase of the project, including a Safety Manager, Superintendent, Construction Manager and Project Engineer. The representatives will work with subcontractors on a daily basis, conducting safety meetings, overseeing construction, maintaining quality control, and coordinating logistics. As the construction nears completion, the Asset Manager becomes increasingly involved, participating in activities prior to commissioning to ensure a





smooth handoff from construction to operations. Moving forward, the Asset Manager will be the primary point of contact for the operating projects, however the Development Manager will remain as the primary point of contact for future projects. The Development Manager's primary responsibility throughout the contract will be to facilitate communication and information sharing between the City and any of the individual EDF RE Team members.

The EDF RE and groSolar Team is full of qualified and experience personnel to ensure successful development, construction, and operations of the system. Some key employees include:

#### Ian Black, Development Director - West

(858) 521-3427 / <u>ian.black@edf-re.com</u> / 15445 Innovation Drive, San Diego, CA 92128 Mr. Black joined EDF Renewable Energy in 2010 as Developer for the west region and was responsible for the entire development cycle of utility scale renewable energy projects, from land acquisition, to permitting, to interconnection, and securing off-takers. In 2016, Mr. Black became the Director of Business Development for the West Region, where he now manages 10 developers and controllers. During his time at EDF Renewable Energy, Mr. Black has been involved in the development of over 450MW of Renewable Energy projects, most recently completing 2 projects in PG&E Territory: the 27MW Corcoran Irrigation District Solar project and 1MW Buck Institute Carport Solar Project, which was part of the larger 30MW Cottonwood Solar Portfolio.

# Jamie Link, Associate Director for Business Development, Distributed Electricity and Storage (858) 521 3329 / Jamie.link@edf-re.com / 15445 Innovation Drive, San Diego, CA 92128

Jamie Link leads business development for EDF RE's Distributed Electricity and Storage team in the West Region and is the current project manager for EDF RE's microgrid demonstration project with the U.S. Air Force. She brings a decade of energy technology, policy, business, and management experience to this role. Prior to joining EDF Renewable Energy, Jamie served as a Senior Technical Advisor and Acting Office Director at the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy. Link holds a BA and PhD in electrochemistry from Princeton University and UC San Diego.

#### Xavier Goy, Senior Construction Project Manager

(858) 521-3459 / Xavier.goy@edf-re.com / 15445 Innovation Drive, San Diego, CA 92128 Xavier Goy has a proven track record of bringing projects in on time and on budget. Prior to joining EDF RE, Mr. Goy managed Department of Defense projects for Converteam (formerly Alstom, now part of GE) for more than five years. He was responsible for overseeing compliance to Government specifications on fixed price and cost plus contracts. His experience working on a wide variety of contracts has given him a full understanding of commercial contracting practices, preparing him for any challenges that may arise on a project. Mr. Goy has successfully served as overall project manager on two large scale PV projects: 11.83 MW<sub>P</sub> St. Isidore B and 143 MW<sub>P</sub> Catalina Solar.

#### Foad Alvandi, Senior Project Design Engineer

(802) 359-6586 / <u>foad.alvandi@groSolar .com</u> / 9175 Guilford Rd, Columbia, MD 21046 Mr. Alvandi has over 30 years of experience in practice and teaching of electrical engineering and engineering related technical disciplines, including 6 years of experience in residential, commercial and





utility-scale PV solar generation facilities design and installation. Mr. Alvandi has received his Master of Science degree in Electrical and Computer Engineering from George Mason University in Fairfax Virginia, and is a registered professional engineer in several Mid Atlantic and New England states. He is a NABCEP Certified PV Installation Professional.

#### Pete Byron, Senior Site Superintendent

(802) 359-6519 / peter.byron@groSolar .com / 9175 Guilford Rd, Columbia, MD 21046 Mr. Byron has over 30 years of experience in electrical design and installation. He is a licensed electrician, a certified OSHA Instructor, and certified in High Voltage Splicing up to 35kV. Mr. Byron serves as the Senior Site Superintendent on the majority of groSolar's technically challenging projects including those on landfills. Prior to joining groSolar, Mr. Byron owned his own electrical contracting business and prior to that served numerous roles for Spencer Electric Co. He holds a Bachelor of Science in Business Administration from the University of Massachusetts.

#### Dan Summa, Asset Manager

(858)521 3507 / <u>Daniel.summa@edf-re.com</u> / 15445 Innovation Drive, San Diego, CA 92128 Dan Summa joined EDF RE in 2011 and manages the day to day operations of five renewable energy projects under PPAs, totaling more than 200 MW. Prior to joining EDF RE, Mr. Summa was an asset manager at Invenergy, LLC, where he managed the operation of five renewable energy projects totaling more than 350 MW. Prior to joining Invenergy, Mr. Summa was a surface warfare officer (nuclear) and served onboard the USS ENTERPRISE and USS SAN JACINTO. He holds a BS in ocean engineering from the United States Naval Academy, and an MBA from Northwestern University.

#### Darin Rouse, Health, Safety, and Environment Management

(858) 521-3465 / <u>Darin.rouse@edf-re.com</u> / 2156 W. Grant Line Road, Ste 215, Tracy, CA 95377 Darin Rouse assumed his current position in EDF RE's Health, Safety and the Environment Management in November 2012. In this role he oversees Health, Safety and Environmental compliance for over 300 MW of solar projects in the United States, Mexico and Canada. Prior to EDF RE, Mr. Rouse worked as a senior EHS program manager for Chevron for 5 years. Mr. Rouse was selected by Chevron's executive management committee to serve as a member of Chevron Corporation's international emergency response team. Mr. Rouse will be responsible for assuring that all federal and state health, safety and environment regulations are followed in the project and will hire and oversee the field safety manager for this solar project.

#### Bojana Popovic, Vice President

# 281 653 5833 / <u>Bojana.popovic@edfenergyservices.com</u> / 4700 West Sam Houston Pkwy N, Houston, TX 77041

Bojana leads our strategy and product development team focused on developing tailored solutions for our customers – portfolio optimization, risk management programs and renewable and demand side management solutions. Bojana previously held senior roles in EDF Trading's power and natural gas trading teams. Today, she uses her expertise of the wholesale energy markets to refine our activities in areas such as structured products, go-to-market strategy and new business development.





# 6. Financial Capacity

As a part of one of the world's largest energy firms, the EDF Group which generated 71.2 Billion Euro of revenue in 2016, EDF Renewable Energy has access to substantial financial resources, allowing for internal financing and access to market financing for Solar and Storage projects. Accordingly, EDF RE is not reliant upon third-party financing, including complicated contractual demands, construction schedule delays, and financial risks during the development and construction phase. Similarly, EDF RE is a financially-sound long term counter party for the life of the project and contract, as proven over 25 years of experience in signing 10 and 20 year Power Purchase Agreements (PPAs). EDF RE has been the counter party to PPAs with off-takers across the country including both Utilities and Commercial customers, such as Microsoft, Google, and Proctor and Gamble. Specifically, EDF RE has signed over 300MW of long term Power Purchase Agreements in San Diego Gas and Electric Territory. With all of EDF RE PPAs, EDF Renewable Services provides the long term O&M and asset management services which includes warranty execution, 24-7-365 performance monitoring, availability and reliability assurances and ongoing performance optimization. As a direct subsidiary to EDF Energy Nouvelles (EDF EN) which is part of the EDF Group, EDF Renewable Energy and EDF Renewable Services can deliver long term Power Purchase Agreements and Energy Savings Contracts with confidence based on proven performance. As a subsidiary, EDF Renewable Energy's financial statements role up into EDF Energy Nouvelles audited financial statements. Below are is the summary of the EDF EN Financial Statements:

## EDF Energy Nouvelles Statement of Financial Positions 2014 - 2016

Financial Ratios				
	2014	2015	2016	
Debt to Revenue	560%	604%	541%	
Debt to Equity	155%	171%	172%	
Debt to Assets	61%	63%	63%	
Gross Profit Margin (GPM)	59%	72%	68%	
Operating Profit Margin	25%	37%	35%	
Return on Assets (ROA)	1%	2%	3%	
Cre	edit Rating		•	
Agency	Long-te	rm rating	Date	

Agency	Long-term rating	Date
Moody's	A3, stable outlook	28/09/2016
Standard & Poor's	A-, stable outlook	22/09/2016
Fitch ratings	A-, stable outlook	7/6/2016

Consolidated Income Statement					
(in millions of dollars)	2014	2015	2016		
Revenues	1,226	1,287	1,535		
Purchases used in generation and other purchases (1)	350	62	(146)		
Personnel Expenses	(254)	(302)	(318)		





External Expenses	(861)	(525)	(562)
Taxes other than income taxes	(44)	(51)	(58)
Other operating expenses	(297)	(418)	(686)
Other operating income	603	895	1,309
Allowance for operating provisions	-	(17)	(38)
EBITDA	722	931	1,036
Net depreciation and amortization	(306)	(339)	(370)
Impairment losses	(109)	(121)	(138)
Operating Income	307	471	530
Cost of net debt	(138)	(153)	(190)
Other financial income and expenses	(19)	(59)	(45)
Net financial income/(expenses)	(158)	(212)	(235)
Income before tax of consolidated companies	149	260	295
Income tax	(26)	(65)	(33)
Share in income of equity affiliates	18	48	86
Consolidated Net Income	141	242	348

(1) There is a credit balance at 31 December 2014 and 31 December 2015 due to the activation of costs for projects under development.

Consolidated Balance Sheet				
Asset	ts			
(in millions of dollars)	2014	2015	2016	
Goodwill	47	45	45	
Other intangible assets	137	185	263	
Property, plant and equipment	8,132	8,619	8,267	
Investments in equity affiliates	456	717	966	
Non-current financial assets	212	282	417	
Other receivables	101	66	53	
Deferred tax assets	212	230	292	
Non-current assets	9,296	10,144	10,303	
Inventories and work in progress	103	122	122	
Trade receivables	277	281	295	
Current financial assets	588	508	625	
Other receivables	375	312	741	
Cash and cash equivalents	650	951	1,009	
Current assets	1,993	2,175	2,830	
Total Assets	11,290	12,319	13,132	

Liabilities and Equity					
(in millions of dollars)	2014	2015	2016		
Share Capital	256	256	257		
Reserves and retained earnings	4,130	4,249	4,487		
Group shareholders' equity	4,386	4,505	4,744		
Minority interests	39	46	93		





Total Equity	4,426	4,551	4,836
Provisions for employee benefits	5	6	7
Other provisions	73	136	114
Non-current provisions	77	142	121
Non-current financial liabilities	4,182	4,929	5,396
Other payables	751	955	1,000
Deferred tax liabilities	248	302	388
Non-current liabilities	5,182	6,186	6,783
Provisions	21	17	28
Trade payables	155	176	165
Current financial liabilities	790	672	651
Current tax liabilities	27	46	27
Other payables	612	530	231
Current liabilities	1,606	1,440	1,391
Total Liabilities	6,864	7,768	8,295
Total liabilities & equity	11,290	12,319	13,132

Financials have been converted from Euros to USD using the conversion rate on June 14, 2017Conversion Rate:1.13





# 7. Contractor Standards Form

#### City of San Diego CONTRACTOR STANDARDS Pledge of Compliance

The City of San Diego has adopted a Contractor Standards Ordinance (CSO) codified in section 22.3004 of the San Diego Municipal Code (SDMC). The City of San Diego uses the criteria set forth in the CSO to determine whether a bidder or proposer has the capacity to fully perform the contract requirements and the business integrity to justify the award of public funds. This completed Pledge of Compliance signed under penalty of perjury must be submitted with each bid and proposal. If an informal solicitation process is used, the bidder must submit this completed Pledge of Compliance to the City prior to execution of the contract. All responses must be typewritten or printed in ink. If an explanation is requested or additional space is required, Respondents must provide responses on Attachment A to the Pledge of Compliance and sign each page. Failure to submit a signed and completed Pledge of Compliance may render the bid or proposal non-responsive. In the case of an informal solicitation, the contract will not be awarded unless a signed and completed Pledge of Compliance is submitted. A submitted Pledge of Compliance is a public record and information contained within will be available for public review except to the extent that such information is exempt from disclosure pursuant to applicable law.

#### A. BID/PROPOSAL/SOLICITATION TITLE:

City of San Diego - Request for Statement of Qualification for 100% Renewable Energy(10088487-18-A)

#### B. BIDDER/PROPOSER INFORMATION:

EDF Renewable Energy, Inc.				
Legal Name		DBA		
15445 Innovation Drive	San Diego	CA	92128	
Street Address	City	State	Zip	
Michael Robinson, Business Development Manager	858 521 3416	858 521 3000		
Contact Person, Title	Phone	Fax		

#### C. OWNERSHIP AND NAME CHANGES:

1. In the past five (5) years, has your firm changed its name?

Yes 🖌 No

If Yes, use Attachment "A" to list all prior legal and DBA names, addresses, and dates each firm name was used. Explain the specific reasons for each name change.

2. In the past five (5) years, has a firm owner, partner, or officer operated a similar business?

es	$\checkmark$	No
----	--------------	----

If Yes, use Attachment "A" to list names and addresses of all businesses and the person who operated the business. Include information about a similar business only if an owner, partner, or officer of your firm holds or has held a similar position in another firm.

#### D. BUSINESS ORGANIZATION/STRUCTURE:

Indicate the organizational structure of your firm. Fill in only one section on this page. Use Attachment "A" if more space is required.

 Corporation
 Date incorporated:
 6
 / 22
 / 1987
 State of incorporation:
 Delaware

 List corporation's current officers:
 President:
 Tristan Grimbert
 Tristan Grimbert

 Vice Pres:
 Ryan Pfaff
 Ryan Pfaff
 Rest of the second se

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Is your firm a publicly traded corporation? Yes No	
If Yes, name those who own ten percent (10 %) or more of the corporation's stocks:	
Limited Liability Company Date formed:// State of formation:	
List names of members who own ten percent (10%) or more of the company:	
Partnership Date formed:/ State of formation:	
List names of all firm partners:	
Sole Proprietorship Date started: / /	
List all firms you have been an owner, partner or officer with during the past five (5) years. Do not include	ownership of stock
in a publicly traded company:	
	•
Joint Venture Date formed://	
List each firm in the joint venture and its percentage of ownership:	

Note: To be responsive, each member of a Joint Venture must complete a separate Pledge of Compliance.

#### E. FINANCIAL RESOURCES AND RESPONSIBILITY:

1. Is your firm preparing to be sold, in the process of being sold, or in negotiations to be sold?

Yes 🖌 No

If Yes, use Attachment "A" to explain the circumstances, including the buyer's name and principal contact information.

2. In the past five (5) years, has your firm been denied bonding?

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If Yes, use Attachment "A" to explain specific circumstances; include bonding company name.

3. In the past five (5) years, has a bonding company made any payments to satisfy claims made against a bond issued on your firm's behalf or a firm where you were the principal?

Yes	✓	No
-----	---	----

If Yes, use Attachment "A" to explain specific circumstances.

 In the past five (5) years, has any insurance carrier, for any form of insurance, refused to renew the insurance policy for your <u>firm</u>?



If Yes, use Attachment "A" to explain specific circumstances.

- Within the last five years, has your firm filed a voluntary petition in bankruptcy, been adjudicated bankrupt, or made a general assignment for the benefit of creditors?
- Please provide the name of your principal financial institution for financial reference. By submitting a response to this Solicitation Contractor authorizes a release of credit information for verification of financial responsibility.

Name of Bank: Wells Fargo
Point of Contact: Fidela Irigoyen
Address 5901 Priestly Dr., Ste. 130, Carlsbad, CA 92008
Phone Number: 760 931 3526

7. By submitting a response to a City solicitation, Contractor certifies that he or she has sufficient operating capital and/or financial reserves to properly fund the requirements identified in the solicitation. At City's request, Contractor will promptly provide to City a copy of Contractor's most recent balance sheet and/or other necessary financial statements to substantiate financial ability to perform.

#### F. PERFORMANCE HISTORY:

 In the past five (5) years, has your firm been found civilly liable, either in a court of law or pursuant to the terms of a settlement agreement, for defaulting or breaching a contract with a government agency?



If Yes, use Attachment "A" to explain specific circumstances.

In the past five (5) years, has a public entity terminated your firm's contract for cause prior to contract completion?
 Yes

If Yes, use Attachment "A" to explain specific circumstances and provide principal contact information.

 In the past five (5) years, has your firm entered into any settlement agreement for any lawsuit that alleged contract default, breach of contract, or fraud with or against a public entity?

If Yes, use Attachment "A" to explain specific circumstances.

V No

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Yes

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4. Is your firm currently involved in any lawsuit with a government agency in which it is alleged that your firm has defaulted on a <u>contract</u>, breached a contract, or committed fraud?

Yes 🖌 No

If Yes, use Attachment "A" to explain specific circumstances.

5. In the past five (5) years, has your firm, or any firm with which any of your firm's owners, partners, or officers is or was associated, been debarred, disqualified, removed, or otherwise prevented from bidding on or completing any government or public agency contract for any reason?

If Yes, use Pledge of Compliance Attachment "A" to explain specific circumstances.

6. In the past five (5) years, has your firm received a notice to cure or a notice of default on a contract with any public agency?



If Yes, use Attachment "A" to explain specific circumstances and how the matter resolved.

7. Performance References:

Please provide a minimum of three (3) references familiar with work performed by your firm which was of a similar size and nature to the subject solicitation within the last five (5) years.

Dominion Power Supply Company Company Name: Brandon Flemington, Renewable Energy Asset Manager, 661.295.6702 Contact Name and Phone Number: Contact Email: brandon.flemington@dom.com Address: 28494 Westinghouse Place, Suite 314, Valencia, CA 91355 Contract Date: Commercial Operation Date: June 2014 Contract Amount: NA CID Solar Project: EDF RE design, finance, construction, commissioning, operations Requirements of Contract: Company Name: Green Mountain Power Kirk Shields, Director of Business Development, 802.770.4246 Contact Name and Phone Number: Contact Email: kirk.shields@greenmountainpower.com Address: 163 Acron Lane, Colchester, VT 05446 Contract Date: Commerical Operation Date: December 2014 Contract Amount: Stafford Hill Solar and Storage Project 2.5MW Solar & 4MWh Battery storage Project Design, Construction, Commissioning Requirements of Contract:

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**gro**Solar

Company Name:	Union Bank	
		ber:
		ng@unionbank.com
		eroa St. G14-200, Los Angeles, CA 90071
		rcial Operation Date: July 2016
	Amount: NA	
		talina Solar Project: EDF RE Design, financing, construction, commissioning, operations

- G. COMPLIANCE:
  - 1. In the past five (5) years, has your firm or any firm owner, partner, officer, executive, or manager been criminally penalized or found civilly liable, either in a court of law or pursuant to the terms of a settlement agreement, for violating any federal, state, or local law in performance of a contract, including but not limited to, laws regarding health and safety, labor and employment, permitting, and licensing laws?



If Yes, use Attachment "A" to explain specific circumstances surrounding each instance. Include the name of the entity involved, the specific infraction(s) or violation(s), dates of instances, and outcome with current status.

2. In the past five (5) years, has your firm been determined to be non-responsible by a public entity?

✓ No	 	-	1.	
		١	/	No

If Yes, use Attachment "A" to explain specific circumstances of each instance. Include the name of the entity involved, the specific infraction, dates, and outcome.

#### H. BUSINESS INTEGRITY:

Yes

1. In the past five (5) years, has your firm been convicted of or found liable in a civil suit for making a false claim or material misrepresentation to a private or public entity? VN0



If Yes, use Attachment "A" to explain specific circumstances of each instance. Include the entity involved, specific violation(s), dates, outcome and current status.

2. In the past five (5) years, has your firm or any of its executives, management personnel, or owners been convicted of a crime, including misdemeanors, or been found liable in a civil suit involving the bidding, awarding, or performance of a government contract?



If Yes, use Pledge of Compliance Attachment "A" to explain specific circumstances of each instance; include the entity involved, specific infraction(s), dates, outcome and current status.

3. In the past five (5) years, has your firm or any of its executives, management personnel, or owners been convicted of a federal, state, or local crime of fraud, theft, or any other act of dishonesty? Yes 🖌 No

If Yes, use Pledge of Compliance Attachment "A" to explain specific circumstances of each instance; include the entity involved, specific infraction(s), dates, outcome and current status.

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#### I. WAGE COMPLIANCE:

In the past five (5) years, has your firm been required to pay back wages or penalties for failure to comply with the federal, state or local prevailing, minimum, or living wage laws? Yes No If Yes, use Attachment "A" to explain the specific circumstances of each instance. Include the entity involved, the specific infraction(s), dates, outcome, and current status.

#### J. STATEMENT OF SUBCONTRACTORS:

Please provide the names and information for all subcontractors used in the performance of the proposed contract, and what portion of work will be assigned to each subcontractor. Subcontractors may not be substituted without the written consent of the City. Use Attachment "A" if additional pages are necessary. If no subcontractors will be used, please write "Not Applicable."

Com	pany Name: TBD
	act Name and Phone Number: TBD
Conta	act Email: TBD
	ess: TBD
Contr	ract Date TBD
Sub-	Contract Dollar Amount TBD
	irements of Contract: TBD
What	portion of work will be assigned to this subcontractor:
	Subcontractor a certified SLBE, ELBE, MBE, DBE, DVBE, or OBE? (Circle One) YES NO
If YE	S, Contractor must provide valid proof of certification with the response to the bid or proposal.
	pany Name:
Conta	act Email:
Addre	
Contr	ract Date
Sub-	Contract Dollar Amount:
Reau	irements of Contract:
What	portion of work will be assigned to this subcontractor:
Is the	Subcontractor a certified SLBE, ELBE, MBE, DBE, DVBE, or OBE? (Circle One) YES NO
If YE	S, Contractor must provide valid proof of certification with the response to the bid or proposal.
	dards Form





#### K. STATEMENT OF AVAILABLE EQUIPMENT:

List all necessary equipment to complete the work specificied. Use *Pledge of Compliance Attachment "A"* if additional pages are necessary. In instances where the required equipment is not owned by the Contractor, Contractor shall explain how the equipment will be made available before the commencement of work. The City of San Diego reserves the right to reject any response when, in its opinion, the Contractor has not demonstrated he or she will be properly equipped to perform the work in an efficient, effective manner for the duration of the contract period.

If no equipment is necessary to complete the work specified, please write "Not Applicable."

Equipment Description: TBD				
Owned Rented Other (explain below)				
If Owned, Quantity Available:				
Year, Make & Model:				
Explanation: EDF RE is technology agnostic and tailors solutions to site specific requirements				
Equipment Description:				
Owned Rented Other (explain below)				
If Owned, Quantity Available:				
Year, Make & Model:				
Explanation:				
Equipment Description:				
Owned  Rented  Other  (explain below)				
If Owned, Quantity Available:				
Year, Make & Model:				
Explanation:				

L. TYPE OF SUBMISSION: This document is submitted as:

Initial submission of Contractor Standards Pledge of Compliance.	
Update of prior Contractor Standards Pledge of Compliance dated	 

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#### Complete all questions and sign below.

Under penalty of perjury under the laws of the State of California, I certify that I have read and understand the questions contained in this Pledge of Compliance, that I am responsible for completeness and accuracy of the responses contained herein, and that all information provided is true to the best of my knowledge and belief. I agree to provide written notice to the Purchasing Agent within five (5) business days if, at any time, I learn that any portion of this Pledge of Compliance is inaccurate. Failure to timely provide the Purchasing Agent with written notice is grounds for Contract termination.

I, on behalf of the firm, further certify that I and my firm will comply with the following provisions of SDMC section 22.3004:

(a) I and my firm will comply with all applicable local, State and Federal laws, including health and safety, labor and employment, and licensing laws that affect the employees, worksite or performance of the contract.

(b) I and my firm will notify the Purchasing Agent in writing within fifteen (15) calendar days of receiving notice that a government agency has begun an investigation of me or my firm that may result in a finding that I or my firm is or was not in compliance with laws stated in paragraph (a).

(c) I and my firm will notify the Purchasing Agent in writing within fifteen (15) calendar days of a finding by a government agency or court of competent jurisdiction of a violation by the Contractor of laws stated in paragraph (a).

(d) I and my firm will notify the Purchasing Agent in writing within fifteen (15) calendar days of becoming aware of an investigation or finding by a government agency or court of competent jurisdiction of a violation by a subcontractor of laws stated in paragraph (a).

(e) I and my firm will cooperate fully with the City during any investigation and to respond to a request for information within ten (10) working days.

Failure to sign and submit this form with the bid/proposal shall make the bid/proposal non-responsive. In the case of an informal solicitation, the contract will not be awarded unless a signed and completed *Pledge of Compliance* is submitted.

Name and Title	Signature	Date
Da	Digitally signed by F DN: cn=Raphael De Renewable Energy, President, email=raphael.decle re.com, c=US Date: 2017.07.13 16	clercq, o=EDF ou=Vice ercq@edf-





## 8. Appendix A – EDF Energy Services CA Registration

#### PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA REGISTRATION CERTIFICATE TO OPERATE AS AN ELECTRIC SERVICE PROVIDER

ESP NO: \*\* 1384 \*\*



EDF INDUSTRIAL POWER SERVICES (CA), EDF Industrial Power Services (CA), LLC 4700 W. SAM HOUSTON PARKWAY N. SUITE 250 HOUSTON, TX 77041

The above named Electric Service Provider, having made written application to the Public Utilities Commission of the State of California to register its operations as an Electric Service Provider mandated by Assembly Bill (AB) 117 and pursuant to Commission Decision (D.) 03-12-015, dated December 4, 2003, and having complied with all the requirements, is granted this certificate of registration authorizing its operations in the State of California, subject to the following conditions:

- If said electric service provider's business type changes, for example, from a proprietorship to a corporation, said electric service provider must reregister its operations with the Commission.
- (2) Pursuant to future legislation, the electric service provider may be required to publish its registration number on all service contracts, billing documents and advertising materials.
- (3) This registration certificate is subject to suspension or cancellation as provided by Section 394 of the Public Utilities Code.
- (4) Said electric service provider shall comply with all Commission orders, rules, directions and requirements governing electric service providers.
- (5) An annual renewal fee as authorized by the Commission for electric service providers which shall be paid to the Commission upon receipt of the annual fee invoice.

Dated this day: 01-MAY-2012

California Public Utilities Commission--Energy Division





# 9. Appendix B – EDF RE Project List

10. PROJECT NAME	Commercial Operation Date	Project Size (kW)	State	Power Offtaker	Project Owner
Desert Harvest*	2020	186,000	CA	Marin Clean Energy	EDF EN
Maverick (Palen Phase I)*	2020	308,000	CA	Southern California Edison	EDF EN
Valentine Solar*	2019	111,000	CA	Southern California Edison	EDF EN
Bluemex*	2019	90,000	Mexico	Federal Electricity Commission	EDF EN
Barlow Solar*	2018	10,000	Ontario	Independent Electricity System Operator	EDF EN
Pendleton Solar*	2018	12,000	Ontario	Independent Electricity System Operator	EDF EN
Longboat Solar	2016	20,000	CA	Southern California Edison	Duke Energy
Yield Co Pair	2015	5,600	VT	Green Mountain Power	Green Mountain Power
Cottonwood Carport (Buck Institute)	2015	1,000	CA	Marin Energy Authority	Dominion
Catalina Solar 2	2015	25,000	CA	SCE	EDF EN
Cottonwood	2015	31,600	CA	Marin Energy Authority	Dominion
Marion County Solar	2015	7,100	IN	Indiana Power & Light	Indiana Power & Light
Mustang Solar	2015	3,300	OK	OG&E	OG&E
Cambridge Solar	2015	4,300	MD	Constellation Energy	Constellation Energy
CID	2014	27,200	CA	PG&E	Dominion
Lancaster Solar	2014	5 <i>,</i> 860	MA	Billerica, MA	EDF EN
Lepomis Solar	2014	5,990	MA	Wareham MA	EDF EN
Stafford Hill Landfill	2014	2,500	VT	Green Mountain Power	Green Mountain Power
Templeton	2014	4,500	MA	Templeton Municipal Light and Water Plant	Templeton Municipal Light and Water Plant
Ashburnham	2014	4,000	MA	Ashburnham Municipal Electric Light Plant	Ashburnham Municipal Electric Light Plant
Catalina Solar 1	2013	71,600	CA	SDG&E	50% owned by TIAA CREF
Pukana (Hilo)	2013	300	HI	Safeway	EDF EN
Lake County Solar	2013	5,400	IN	NIPSCO	NIPSCO
Berkley East	2013	3,900	MA	Taunton Municipal Light Plant	Taunton Municipal Light Plant
Sterling	2013	2,400	MA	Sterling Municipal Light Department	Sterling Municipal Light Department





Pukana (Beretania)	2012	260	HI	Safeway	EDF EN
Pukana (Ewa)	2012	330	HI	Safeway	EDF EN
LIPA (Cohalan East)	2012	2,830	NY	LIPA	Capital Dynamics
LIPA (Cohalan West)	2012	1,390	NY	LIPA	Capital Dynamics
LIPA (Deer Park)	2012	2,950	NY	LIPA	Capital Dynamics
LIPA (H. Lee Dennison Site)	2012	2,180	NY	LIPA	Capital Dynamics
LIPA (North County Site)	2012	1,050	NY	LIPA	Capital Dynamics
LIPA (Riverhead)	2012	1,570	NY	LIPA	Capital Dynamics
Keystone Solar	2012	6,000		Exelon	Exelon
Camden Solar Center	2012	1,800	NJ	CCMUA	CCMUA
Matrix	2011	2,860	NJ	PSE&G	EDF EN
RPI 100	2011	430	NJ	PSE&G	Sunlight General
RPI 400	2011	2500	NJ	PSE&G	Sunlight General
LIPA (Brentwood Site)	2011	840	NY	LIPA	Capital Dynamics
St. Isidore B SP	2011	11,830	Ontario	OPA	Fiera Axium
Bellevue	2011	1,660	OR	PGE	EDF EN
Yamhill	2011	1,190	OR	PGE	EDF EN

\*Projects have been developed and PPAs have been signed by off-takers. Construction