

RESOLUTION	NO	

**BOARD LETTER APPROVAL** 

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**General Manager** 

DATE:

February 10, 2016

SUBJECT:

Los Angeles Department of Water and Power's (LADWP) Springbok 3

Solar Farm Power Sales Agreement (PSA) No. BP 15-032 and Springbok 3

Solar Farm Agency Agreement (AA) No. BP 15-033 with Southern California Public Power Authority (SCPPA), Real Estate License Agreement (License) No. BP 15-034 with 64KT 8ME LLC (8ME)

# **SUMMARY**

PSA No. BP 15-032 is to authorize LADWP to purchase from SCPPA all of the solar energy, 90 Megawatts (MWs), it delivers, associated environmental attributes, and generating capacity rights of the Springbok 3 Solar Farm Project (Project) for 27 years, with an option by either party to extend to 30 years. AA No. BP 15-033 provides for the designation of LADWP as the Project Manager to administer the Project on behalf of SCPPA. The Project will be located in western Kern County, California and will connect directly to the LADWP transmission system at the Beacon Substation. The Project is the third phase of the Springbok Solar Project. The Board of Water and Power Commissioners (Board) approved the Springbok 1 and 2 Projects in September 2014 and May 2015 respectively.

The renewable energy is \$51.97 per MWh and represents 1.0 percent of LADWP's resource requirements. The Resolution authorizes LADWP to apply the energy and environmental attributes received under the PSA towards the compliance targets of LADWP's Renewables Portfolio Standard Policy and Enforcement Program (RPS Policy).

The Resolution also authorizes LADWP to license real property on the Beacon site to 8ME for the Gen-Tie Line to connect the Project to the Beacon Substation. License No. BP 15-034 provides for the grant of this license. The Project will share a Gen-Tie line with the Springbok 1 and 2 Projects.

City Council approval is required according to Charter Section Nos. 606, 607, and 674.

### RECOMMENDATION

It is recommended that your Honorable Board adopt the attached Resolution recommending City Council's approval, by Ordinance, of PSA No. BP 15-032 for the purchase of renewable energy, environmental attributes and capacity, and of AA No. BP 15-033 for project management services with SCPPA. Per Charter Section Nos. 674 (a)(1)(A) and (a)(2), City Council approval by Ordinance is required for the purchase of the electric energy under the PSA and the designation of LADWP as Project Manager under the AA for the term of the Project.

Additionally, Charter Sections 606 and 607 require City Council approval by Resolution for License No. BP 15-034. The License has a total term up to 35 years and is in the best interests for the City of Los Angeles. The License grants the use of 1,157,000 square feet of LADWP Property for 8ME's (Seller) transmission of energy from the Project to LADWP's Beacon Substation through the Gen-Tie Line. The licensed property is the same property licensed to the Springbok 1 and Springbok 2 Projects for the shared Gen-Tie Line.

## **ALTERNATIVES CONSIDERED**

Through the SCPPA Request for Proposal (RFP) process, the Project was selected as an addition to LADWP's generation portfolio because the Project:

- Utilizes existing transmission capacity at the Beacon Substation.
- Is high in LADWP's Open Access Same-Time Information System (OASIS), queue for interconnection requests.
- Has excellent solar insolation due to location.
- Is located in a region where LADWP has existing operation and maintenance crews.
- Has an offer of ownership opportunity after tax benefits are expired.

The impact of not recommending this Project could make compliance with the Renewable Portfolio Standard (RPS) procurement targets for Compliance Period two (25 percent renewable energy by 2016) and Compliance Period three (33 percent renewable energy by 2020) difficult. LADWP's only available alternative would be to start negotiations with another developer for renewable energy, which may not meet the criteria mentioned above and may not be as cost effective as this proposal.

#### FINANCIAL INFORMATION

The price of energy under this agreement is \$51.97 per Megawatt-hour (MWh). This result in total payments of \$366 million over the term and an average expected expenditure of \$12.2 million annually. The funds will be used to purchase renewable energy and environmental attributes as part of LADWP's RPS Policy. The Project's energy price is discounted because of Seller's ability to take advantage of the ITC,

which is not available to governmental entities, such as LADWP. This City's ratepayers receive the financial benefit from the discounted energy price for renewable energy and the environmental benefits resulting from reduced emissions and consumption of fossil fuels.

The Project's anticipated commercial operation date (COD) is December 31, 2016, but the Seller has an option to extend the COD past this date. The energy price will not change as a result of the Project achieving commercial operation after December 31, 2016. The Project's guaranteed commercial operation date (Guaranteed COD) must occur on or before December 31, 2019.

Funding is budgeted in the Power Revenue Fund's Power and Fuel Purchase Division's budget. The rate impact for this facility for the ratepayer is expected to be an increase of 0.07 percent over the term of the PSA.

The PSA and PPA allows for the option to purchase the Project (Purchase Option) at the end of the 15-, 20-, 27-, or 30-year anniversary of the Project's COD (the Purchase Option Opportunities), provided that LADWP exercise notice during the period that is twelve to eighteen months before the applicable Purchase Option Opportunity.

The Purchase Option Price will be based on the Fair Market Value (FMV) of the Facility at the time of purchase, with a price that will be within the range of the Minimum Purchase Price and Maximum Purchase Price summarized below for each Purchase Option Opportunity:

COD Anniversary	Minimum Purchase Price (\$ millions)	Maximum Purchase Price (\$ millions)
15 <sup>th</sup> Anniversary	110.40	127.02
20 <sup>th</sup> Anniversary	82.20	94.50
27 <sup>th</sup> Anniversary	34.80	41.76
30 <sup>th</sup> Anniversary	29.52	35.46

The FMV for the Purchase Option will be determined by a qualified appraiser taking into account all facility assets and liabilities, lease obligations, disclosure schedules, and any remaining obligations. Seller is obligated to sell the Project at the Minimum Purchase Price if the Purchase Option Price is less than the Minimum Purchase Price during that particular Purchase Option Opportunity. There is no obligation to purchase the Project under the Purchase Option, even if the Purchase Option Price is below the Maximum Purchase Price for the particular Purchase Option Opportunity.

### **BACKGROUND**

### LADWP's RPS Policy

The RPS Policy represents the guiding principles for LADWP's procurement and implementation of energy from renewable resources. The current version of the RPS Policy was adopted in December 2013 and is consistent with Public Utilities Code Section 399.30, which establishes RPS requirements for publicly owned utilities, like LADWP. The RPS Policy requires that LADWP procure 25 percent of its energy from renewable resources by December 31, 2016 for Compliance Period two, and 33 percent by December 31, 2020 for Compliance Period three.

## California Senate Bill (SB) 350

On October 7, 2015, California Governor Jerry Brown signed into law SB 350, which becomes effective as of January 1, 2016. Among other things, SB 350 raises the RPS procurement targets for future compliance periods occurring after December 31, 2020. SB 350 requires publicly owned utilities, like LADWP, to procure 40 percent of its energy from eligible renewable resources by December 31, 2024, 45 percent by December 31, 2027, and 50 percent by December 31, 2030.

## LADWP's Integrated Resource Plan (IRP)

LADWP's IRP presents several potential strategies for meeting LADWP's regulatory mandates and policy objectives for increasing renewable energy generation, reducing greenhouse gas emissions, maintaining electric power service reliability, and minimizing the financial impact on ratepayers.

The IRP establishes key selection principles for renewable projects, they are:

- Maintain a high level of electric service reliability by taking advantage of the geographic diversity of renewable projects.
- Maximize the use of existing LADWP assets such as the Beacon Substation and transmission lines.
- Take advantage of the benefits of clustering resources to optimize efficiency for operations and maintenance of facilities.
- Ownership or ownership options of projects using proven technology in strategic locations.
- Maintain options/flexibility.

LADWP rigorously evaluates each potential strategy to identify and recommend the best overall tactical plan to meet these key objectives.

## Selection Criteria

The Seller's Project was chosen based on a detailed comparison of the submittals for each project using LADWP's selection criteria, which includes.

- Total Delivered Cost to Load Center
- Transmission Availability and Expected Losses
- Project Capacity and Expected Energy Delivery
- Clustering of Resources to Maximize Operational and Maintenance Efficiency
- Level of Existing Site Control
- Level of Environmental Review
- Use of Trained and Qualified Labor
- Expected COD
- Experience in Developing Utility-Scale Solar Projects
- Level of Financial Guarantee

By using a weighted average scoring matrix of these criteria, LADWP determined that the Seller's Project provided the best overall value to LADWP's ratepayers.

#### **SCPPA**

SCPPA is a non-profit joint power agency formed in 1980 to facilitate joint power and transmission projects for the benefit of the Southern California municipal utilities. SCPPA's members include LADWP, the cities of Anaheim, Azusa, Banning, Burbank, Cerritos, Colton, Glendale, Pasadena, and Riverside and Imperial Irrigation District. On April 4, 2006, the Board approved the SCPPA Phase I Development Agreement No. 96125-76 under Resolution No. 006-157 (Phase I Agreement), subsequently superseded and replaced by the Phase II Renewable Development Project created by adoption of Resolution No. 2012-008, which authorized LADWP to participate with other members of SCPPA for the purpose of investigating and performing due diligence on potential new renewable resource options.

In January 2015, SCPPA issued an RFP, a competitive selection process, for the purchase and/or acquisition of renewable energy resources. LADWP jointly participated with multiple municipal utilities for the purpose of acquiring renewable energy resources. Over 300 proposals were received from several firms having the capability to provide renewable energy from sources, such as solar, wind, biomass, landfill gas, and geothermal. This is an open RFP that allows new proposals to be submitted on a continuous basis and existing proposals to be refreshed with current prices and terms. This Project was refreshed a number of times since its initial submittal, always with terms more favorable to LADWP. 8ME responded to SCPPA's RFP with its proposal for the Springbok 3 Solar Farm Project.

Through separate PSAs between SCPPA and each participant, SCPPA sells all of the renewable energy received from the Project and passes through to each participant in accordance with its respective output entitlement share, the rights, benefits, and obligations provided under the PPA. Here, LADWP will be the only project participant.

### PPA Between SCPPA and 8ME

Under the PPA, SCPPA will receive energy from the Project for the 27-year term and up to 30 years if the option is exercised. The option to extend the term to 30 years may be exercised by either party under the PPA, and the exercise of the option by Seller does not require SCPPA's consent. The PSA, however, requires Board approval before the option to extend the PPA's term may be exercised by SCPPA. Under the terms of the PPA, SCPPA contractually agrees to the following terms:

- The purchase of 90 MWs of renewable energy, for an average of 235,000 MWhs of generation per year. This will enable the LADWP to meet approximately 0.9 percent of LADWP's resource requirements.
- The renewable energy will be delivered through the Beacon Substation, which is directly connected to LADWP's balancing authority for its transmission system.
- LADWP will receive all of the renewable energy delivered, the associated environmental attributes, and the rights, benefits and obligations provided under the PPA.

LADWP's RPS Policy provides that eligible renewable resources procured after June 1, 2010 should be classified into Portfolio Content Categories (PCC). For these resources, LADWP must procure an increasing proportion of its renewable energy from resources classified as PCC-1, which includes resources that are interconnected to a California Balancing Authority, such as LADWP. LADWP must procure a minimum of 65 percent of its renewable energy from PCC-1 resources by December 31, 2016, and a minimum of 75 percent by December 31, 2020. Here, the Project will help LADWP achieve its PCC-1 requirements because the Project will interconnect to LADWP's Beacon Substation, which is located within LADWP's balancing authority.

In addition, during each contract year, the Project must deliver facility energy in an amount equal to 75 percent of the Annual Contract Quantity for such period. To the extent there is a shortfall of guaranteed energy delivered, that replacement energy will be made-up in the following contract year.

SCPPA is guaranteed an annual delivery of 176,000 MWh of energy, at a fixed rate of \$51.97 per MWh, including the green energy attributes, with no annual escalation factor. The Expected Average Annual Generation of the Project is 235,000 MWh. The price for the excess energy that is in excess of 120 percent of the Expected Annual Generation energy will be \$18.19 per MWh. This price includes environmental attributes. The price for startup and test energy delivered before the commercial operation date will be \$46.77 per MWh. This price includes environmental attributes.

The Project's anticipated commercial operation date is December 31, 2016, but the Seller has an option to extend the commercial operation date. The energy price will not change as a result of the Project achieving commercial operation after December 31, 2016, even if the ITC expires before the Project's COD. The estimated cost of the renewable energy and environmental attributes purchases over the 27-year term and 3-year option that results in a total PPA term up to 30 years is expected to be up to \$341 million. This estimated cost assumes that the Early Buyout Option (EBO) was not exercised.

Finally, as discussed above, the PPA also includes the option to purchase the Project under the Purchase Option. SCPPA could choose to exercise the Early Buyout Option (EBO) under the Purchase Option at the end of the 15-, 20-, 27-, or 30-year anniversary of the Project's COD at the applicable Purchase Option Prices discussed above. Following the exercise of the Purchase Option, the PPA would terminate and SCPPA would enjoy ultimate ownership of the Project. If SCPPA acquires ownership of the Project under the PPA, SCPPA will transfer ownership of the Project to LADWP as provided under the PSA. In addition to its rights under the Purchase Option, the PPA gives SCPPA a right-of-first offer and right-of-first refusal for any proposed sale of the Project during the term of the PPA.

## PSA Between SCPPA and LADWP No. BP 15-032

Under the PSA, LADWP contractually agrees to mutual covenants and agreements in order to pay SCPPA for its costs for the Project's renewable energy, environmental attributes, and capacity. The estimated costs for the Project's energy, environmental attributes, and capacity over the 30-year term of the PSA is expected to be up to \$341 million, if the EBO is not exercised. In addition, the PSA:

- Identifies the roles and obligations of SCPPA and LADWP including, but not limited to, project deliverables, project manager, setting up of an annual budget, and reporting requirements.
- Establishes LADWP as the Project Manager for the purpose of project control, communication, and coordination with SCPPA.
- Establishes payment mechanisms including, but not limited to, payment pledges, charges and billing procedures, and interest payments.
- Establishes the rights and obligations of SCPPA and LADWP under the PSA to deliver energy, capacity, environmental attributes, and exercise of purchase options.
- Encompasses other agreements and obligations including, but not limited to, nonperformance and payment defaults, and liability conditions to termination or amendments.
- Establishes the PSA term for a period to cover obligations of SCPPA during the 30-year term and the pass-through payments for the total 30-year term, and additional time required for SCPPA administrative and financial matters.

Under the terms of the PSA, LADWP contractually agrees:

- To purchase test energy from the Project (at a cost of \$46.77 per MWh) expected to begin in mid-2016, and an average of 90 MW of solar energy from the time the Project is completed for a period of 30 years. The Project is expected to have a measured initial generation capacity factor of up to 34 percent with a 0.7 percent annual degradation. LADWP expects to receive on average 235,000 MWhs annually from this renewable energy resource.
- To pay for the average annual delivery of 235,000 MWh of energy, at a fixed rate of \$51.97 per MWh, with no annual escalation factor.
- To pay for the excess energy that is in excess of 120 percent of the Expected Annual Generation energy at a cost of \$18.19 per MWh. This price includes environmental attributes.
- The price for startup and test energy delivered before the commercial operation date will be \$46.77 per MWh. This price includes environmental attributes.

## AA Between SCPPA and LADWP No. BP 15-033

The AA provides for the designation of LADWP as the Project Manager to administer the Project on behalf of SCPPA. SCPPA maintains a very small staff to minimize administrative and general fees charged to the projects, and the largest Participant of each project typically acts as SCPPA's agent for project management and administration. In this case, LADWP would be SCPPA's agent for project management and administration.

Under the AA, LADWP contractually agrees to act as the Project Manager for SCPPA, in order for SCPPA to carry out activities necessary to place the Project in operation. The mutual covenants and agreements addressed by the AA include:

- Providing for the designation of LADWP as the Project Manager to administer all Project Agreements on behalf of SCPPA and for the benefit of LADWP, and sets forth mutual covenants and agreements between SCPPA and LADWP in order to enable SCPPA to carry out activities necessary for the planning, development, acquisition, maintenance, improvement, administration, and operation of the Project on behalf of SCPPA.
- Identifying the roles and obligations of SCPPA and LADWP in connection with project reviews, monitoring, accounting, billing, reporting, and controls, including the setting up of an annual budget and reporting requirements.
- Establishing payment mechanisms, and billing procedures including, but not limited to, payments between LADWP and SCPPA for costs, and charges, related to the Project.
- Establishing that LADWP will utilize its own procurement rules and policies unless other rules and policies are determined to be in the best interest of the Project.

• Establishing that the term of the AA is the same as the PSA, which is inclusive of the 30-year Springbok 3 Solar Farm PPA term, facility construction, and additional time required for SCPPA administrative and financial matters.

## Risk Management Provisions

The PPA provides SCPPA priority step-in rights to the Project in the event that Seller defaults on its obligations. The Project's assets include, among other things, the following hard assets:

- Solar panels
- Inverters
- Land
- Transmission Lines
- Structures
- Environmental Permits

The PPA also requires that Seller post performance securities for various stages of construction and during the PPA's term, which SCPPA can draw upon if certain conditions are not met. The PPA requires that Seller post development security in the amount of \$3.870 million within 20 days following the PPA's effective date. After the Facility achieves COD, Seller must post additional performance security in the total amount of \$12.575 million, which is the level of security Seller must maintain throughout the term of the PPA.

There are three key project milestones that the Seller must meet; otherwise, liquidated damages (LDs) funded by the performance security will be collected.

- Seller must deliver a Notice to Proceed to its construction contractor allowing it to begin construction on the Project no later than six months before the Guaranteed COD. If that date is missed, SCPPA will collect LDs at the rate of \$17,104 per day.
- Seller must install the first MW of solar capacity no later than two months before the Guaranteed COD. If that date is missed, SCPPA will collect LDs at the rate of \$17,104 per day.
- Seller must achieve commercial operation no later than three months after the Guaranteed COD. If that date is missed, SCPPA will collect LDs at the rate of \$17,104 per day.

In addition, Seller must pay SCPPA liquidated damages for any shortfall of energy not made up by the following contract year. These liquidated damages are in the amount equal to the time weighted average of the sum of (1) the Market Price at SP-15, plus (2) the Green Value.

Several additional provisions protect LADWP's participation in the Project. LADWP has secured rights to review and inspect the design and construction of the Facility to ensure the Project is built according to design specifications. LADWP's inspection rights include, among others:

- Review of designs
- Factory inspections
- Quality Assurance inspections

## City Administrative Officer (CAO) Report

The CAO Report dated February 8, 2016 is attached.

## **ENVIRONMENTAL DETERMINATION**

In accordance with the California Environmental Quality Act (CEQA), it has been determined that the entering into agreements with SCPPA to purchase power and provide project management services is exempt pursuant to the General Exemption described in CEQA Guidelines Section 15061(b)(3). General Exemptions apply in situations where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment.

## **CITY ATTORNEY**

The Office of the City Attorney reviewed and approved the Resolution, PSA, AA, and License as to form and legality.

## **ATTACHMENTS**

- Resolution
- Draft Ordinance
- Power Sales Agreement No. BP 15-032
- Agency Agreement No. BP 15-033
- Real Estate License Agreement No. BP 15-034
- CAO Report