

0150-10592-0000

**TRANSMITTAL**

TO  
Marcie L. Edwards, General Manager  
Department of Water and Power

DATE  
FEB 08 2016

COUNCIL FILE NO.

FROM  
The Mayor

COUNCIL DISTRICT

**SPRINGBOK 3 SOLAR FARM POWER SALES AGREEMENT WITH THE SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY (SCPPA)**

Approved and transmitted for further processing including Council consideration.  
See the City Administrative Officer report attached.



Ana Guerrero

MAYOR

REPORT FROM

## OFFICE OF THE CITY ADMINISTRATIVE OFFICER

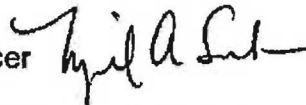
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Date: February 8, 2016

CAO File No. 0150-10592-0000  
Council File No.  
Council District: Outside City Limits

To: The Mayor

From: Miguel A. Santana, City Administrative Officer



Reference: Communication from the Department of Water and Power dated April 2, 2015; referred by the Mayor for report on April 17, 2015

Subject: **SPRINGBOK 3 SOLAR FARM POWER SALES AGREEMENT WITH THE SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY (SCPPA)**

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### SUMMARY

The Department of Water and Power (DWP; Department) requests approval of a proposed resolution that authorizes the DWP Board of Commissioners (Board) to execute several agreements with the Southern California Power Purchase Authority (SCPPA), a non-profit joint power agency, relating to the Springbok 3 Solar Farm Project (Springbok 3; Project), which is owned and developed by 64KT 8ME, LLC (Developer; 8ME). If approved, the proposed Project will consist of a 90 megawatt (MW) fixed tilt photovoltaic solar facility located in Kern County, California with an anticipated commercial operation date (COD) of December 2016.

Approval of the proposed resolution specifically provides authority to the DWP Board to execute the following agreements, collectively identified as the Solar Transaction:

- i. Power Sales Agreement (PSA) BP 15-032 with the SCPPA for the purchase of 90 megawatts (MW) of solar electric generating capacity with an average expected annual generation (EAG) of 235,000 megawatt hours (MWh) annually from the Springbok 3 Project, including the associated environmental attributes. The cost of energy, including environmental credits, is \$51.97 per MWh during a 27-year term and includes an option to extend for 3 additional years, resulting in a total duration of up to 30-years. The PSA also includes an option to purchase the Project based on the fair market value of the facility in Years 15, 20, 27, and 30.
- ii. Agency Agreement (AA) BP 15-033 with SCPPA which designates DWP as the Project Manager to administer and manage the Springbok 3 Project.
- iii. License Agreement BP 15-034 allowing 8ME to construct, own, operate, and maintain certain transmission facilities on DWP owned land facilitating the connection of the Springbok 3 Project to the DWP owned Beacon Substation for a term of 30 years with an option to extend up to a maximum duration not to exceed 35 years.

We have reviewed the proposed resolution and recommend that it be approved. Additional

background information relating to this request is provided in the appendix.

Pursuant to Charter Section 607, approval requires the City Council to make a finding by a two-thirds vote that the long-term nature of the License Agreement is in the best interest of the City, as the terms are greater than 30 years. The City Attorney has reviewed and approved the proposed resolution as to form and legality.

## **RECOMMENDATIONS**

That the Mayor:

1. Approve the proposed resolution relating to the Springbok 3 Solar Farm Project consisting of (a) Power Sales Agreement No. BP 15-032 with the Southern California Power Purchase Authority, (b) Agency Agreement No. BP 15-033 with the Southern California Power Purchase Authority, and (c) License Agreement BP 15-034 with 8Minute Energy;
2. Return the proposed resolution to the Department for further processing, including Council consideration.

## **FISCAL IMPACT STATEMENT**

Approval of the proposed resolution authorizes expenditures of approximately \$12.2 million per year for a total of \$366 million over a 30-year term from the Power Revenue Fund. There is no impact to the City's General Fund. The proposed Agreement complies with the Department's adopted Financial Policies.

Attachment

MAS:JJI:10160053

## APPENDIX

### BACKGROUND

In 2002, the California Legislature passed Senate Bill (SB) 1078 which established the California Renewable Portfolio Standard. SB 1078 requires privately owned utilities and encourages public owned utilities to increase their use of renewable energy resources until 20 percent of generation is obtained from renewables by the year 2017. The RPS Policy was amended in December 2013 to comply with regulatory requirements of the California Renewable Energy Resources Act, also known as SB2 (1X) which requires publicly owned utilities, such as the DWP, to supply 25 percent of its energy from renewable sources by 2016 and 33 percent by 2020. The following table includes the RPS Policy targets that achieve compliance with regulatory mandates:

RPS Policy and Compliance Targets	
Renewable Energy Amount (Average)	Compliance Targets
20%	Dec. 31, 2013
25%	Dec. 31, 2016
33%	Dec. 31, 2020
33%	Each year after 2020

As of December 2015, DWP reports it is at 20.4 percent renewable energy. This solar facility is projected to contribute an additional 0.9 percent towards DWP's renewable energy goals. In light of pending legislation (SB 350), it is anticipated that DWP will be revisiting the RPS goals to potentially raise its renewable energy amount to 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030.

### REQUEST FOR RENEWABLE ENERGY PROPOSALS

DWP participated with the Southern California Public Power Authority (SCPPA) to issue an annual Request for Proposal (RFP) in 2012 for the purchase and/or acquisition of renewable energy sources. The Department states that this is an open RFP, which allows new proposals to be submitted on a continuous basis and existing proposals to be refreshed with current prices and terms. More than 300 proposals were received.

It is the Intent of the Department to evaluate and implement projects that satisfy the DWP Integrated Resource Plan (IRP) and the Renewal Portfolio Standards (RPS) requirements. It is expected that the Department will consider a combination of existing projects, DWP RFPs for renewable energy projects, and SCPPA-sponsored projects.

### 8MINUTE ENERGY / SPRINGBOK 3 PROJECT

One of the more than 300 proposals received during the SCPPA RFP process was from 8ME, who proposed a power purchase agreement for the purchase of 90 MW of solar energy generating capacity and the associated environmental credits from the Springbok 3 Project. Although the SCPPA team used criteria identified by several SCPPA members, the location and limited transmission availability would increase costs to other SCPPA participants. Consequently,

all other SCPPA members declined allowing DWP to be the sole participant.

DWP states that the Springbok 3 Project was selected because the Solar Facility:

- Utilizes existing transmission lines and the nearby DWP owned Beacon Substation;
- Obtains substantial solar energy resources due to its location and provides geographic diversity of resources;
- Is located nearby existing DWP operation and maintenance crews; and,
- Includes options for the purchase of the facility.

Springbok 3 is the third solar project with 8ME. The first project, Springbok 1, was approved by the City Council and Mayor In October 2014 and the second project, Springbok 2, was approved in June 2015. The Springbok 3 energy cost is \$51.97 per MWh compared to \$68.20 per MWh and \$58.65 per MWh for Springbok 1 and Springbok 2, respectively. The lower price of energy for Springbok 3 is primarily due to lower panel prices that have emerged since the execution of the first contract. Additionally, economies of scale and utilization of existing infrastructure expected to be constructed for Springbok 1 and Springbok 2 have also driven prices lower.

Site Control - According to the Department, the site of the Springbok 3 Project is located on privately-owned, non-tribal land that is secured by the Developer with a land contract that provides a purchase option. Upon approval of the Agreement, the Developer intends to purchase the land outright prior to development of the Springbok 3 project.

A licensing agreement is included in this DWP request to allow the developer to construct, own, operate, and maintain transmission facilities on DWP owned land covering approximately 866,723 square feet to facilitate the connection of the solar facility to the DWP owned Beacon Substation for a term of 30 years with an option to extend up to a maximum duration not to exceed 35 years. The licensing agreement allows shared use of the same property currently licensed to the Springbok 1 and Springbok 2 projects.

Cost of Energy and Term – The solar energy delivered will be priced at a fixed rate of \$51.97 per MWh or \$0.05197 per kilowatt hour (kWh). This project is connecting directly to the DWP owned Beacon Substation and will not incur any third-party transmission costs. The estimated cost of the renewable solar energy and the environmental attribute purchases over the 30-year term of the PSA is expected to total \$366 million or \$12.2 million annually. Energy from Springbok 3 is expected to meet approximately 0.9 percent of DWP's renewable energy requirement.

The environmental attributes provided as part of the purchased price of energy would permit DWP to accumulate Renewable Energy Credits (RECs) as a credit toward the DWP RPS goals. In addition, current tax laws allow for the federal Investment Tax Credits (ITCs) to apply to private entities that develop and operate a qualifying renewable energy generation facility. DWP states that the proposed agreements have been structured to receive the benefits associated with the ITCs through lower energy purchase prices. The estimated value of the ITCs to DWP under the proposed PSA is approximately \$2.43 million per year or \$72.9 million over the 30-year term.

Purchase Option – Included in the proposal is a Purchase Option for the Springbok 3 Project at identified intervals beginning at year 15 of the PSA. This negotiated date corresponds to the

completion of investment tax credits anticipated to be utilized by the developer, which is not available to municipally-owned utilities such as DWP. The purchase option includes minimum and maximum valuation amounts that forecast the value of the solar facility in each option year. The table below outlines the predetermined values of the purchase options at identified intervals.

**Summary of Purchase Options by Year**

Year	Purchase Option for the Springbok 3 Project Minimum Price – Maximum Price
15	\$110,400,000 – \$127,020,000
20	\$82,200,000 – \$94,500,000
27	\$34,800,000 – \$41,760,000
30	\$29,520,000 – \$35,460,000

The proposed resolution states that prior to execution of any purchase option or assumption of any Springbok Project debt, the Department will require further authorization from the DWP Board and the City Council. This Office and DWP agree that this subsequent approval could allow for an elevated level of review by both the DWP Board and City Council. Additionally, given that the future facility and energy costs are speculative, it could provide DWP an opportunity to prepare a comprehensive financial analysis and review of the facility conditions, operations and maintenance costs, regulatory costs, project costs, market conditions, industry developments, and new technologies. Ultimately, the results of any future analysis or reviews of the Springbok 3 Project could improve the City's ability to determine if the estimated pricing in the Purchase Option Agreements is appropriate or if the Department should continue to solely purchase the energy through the duration of the PSA.

Further Aspects of the Proposal – The average expected annual generation (EAG) from Springbok 3 is approximately 235,000 MWh. Total energy generated ranging from a guaranteed minimum of 75 percent EAG to a maximum of 120 percent EAG will cost the Department \$51.97 per MWh including green energy credits. To the extent there is a shortfall of guaranteed energy delivered in a contract year, a two year replacement period is provided for the Project to deliver qualifying replacement energy. If a shortfall remains after the replacement period, the Developer shall pay SCPPA liquidated damages for the replacement of similar renewable energy and credits at market prices. Energy generated that is in excess of 120 percent EAG will be purchased at a lower rate of \$18.19 per MWh. The likelihood of excess energy is uncertain and highly dependent on technological advancements in solar generation as well as declines in the cost of generating solar energy.

**SOURCE OF FUNDING**

DWP states that funding for this PSA has been included in the Fuel and Purchased Power Budget within the Power Revenue Fund. The PSA provides for the purchase of solar energy from 8ME. However, should DWP decide to purchase the Springbok Project at the option dates indicated in the PSA, the impact on ratepayers will change from a fuel expense to a capital expenditure, which should be carefully considered in the DWP financial plan for future budgets as well as for potential rate increases during the 30-year term of this Agreement. The Agreement

does not require purchase of the Springbok 3 Project and DWP did not factor a purchase into its rates.

## **POWER TRANSMISSION**

The Developer is committed to building a new two-mile, 34.5kV transmission line that will connect the Springbok 1, Springbok 2, and Springbok 3 Projects with the DWP Beacon Substation. Subsequently, the energy will transmit through existing capacity on the Barren Ridge 230kV transmission line into Los Angeles.

## **RISK MANAGEMENT**

To ensure delivery and performance of the solar project, the Developer will provide a project performance security (in a letter of credit) totaling \$3.87 million before commercial operation date (COD) and \$12.575 million after COD until the completion of the PSA term. The Department states that the coverage provided by the performance security deposit is sufficient to protect the interests of the City and the Department's demand for qualifying renewable energy.

The current COD is December 31, 2016. Under the terms of the Agreement, the Developer can revise the COD to be no later than December 31, 2019. The Department is satisfied with this flexibility as there is sufficient renewable energy deployment planned to meet RPS policy targets.

There are three key milestones the Developer is required to meet during the Project development. Failure to achieve a milestone allows for the collection of liquidated damages (LDs) funded by the performance security. Each milestone is provided as follows:

1. Developer must deliver a Notice to Proceed allowing them to begin construction on the Project site by July 1, 2016, or six months prior to revised COD, and if that date is missed, SCPPA will collect LDs at the rate of \$17,104 per day;
2. Developer must install the first MW of solar capacity by October 31, 2016, or two months prior to revised COD, and if that date is missed, SCPPA will collect LDs at the rate of \$17,104 per day; and,
3. Springbok 3 must achieve commercial operation no later than three months after the COD. If that date is missed, SCPPA will collect LDs at the rate of \$17,104 per day.

## **CANCELLATION OF AGREEMENT**

The Agreement provides for multiple scenarios in which DWP can terminate the Agreement with 8ME. One of the scenarios for termination is a Force Majeure Event that is commonly found in agreements and provides for cancellation due to an uncontrollable condition such as a disaster or act of God, preventing one of the parties from performing obligations listed in the Agreement. Additional scenarios in which DWP can terminate the agreement include if 8ME fails to meet the COD as well as if the facility fails to deliver 70 percent of the Guaranteed Generation for a period of 3 consecutive years.