



City of Arts & Innovation

Utility Services/Land Use/Energy Development Committee

TO: **UTILITY SERVICES/LAND USE/ENERGY DEVELOPMENT COMMITTEE MEMBERS** **DATE: JULY 7, 2015**

FROM: **PUBLIC UTILITIES DEPARTMENT** **WARDS: ALL**

SUBJECT: POWER SALES AGREEMENTS BETWEEN SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY AND THE CITY OF RIVERSIDE – sPOWER'S ANTELOPE DSR SOLAR PHOTOVOLTAIC PROJECT - DIRECT SUBMITTAL

ISSUE:

The issue for Utility Services/Land Use/Energy Development Committee consideration is to approve a Power Sales Agreement (**PSA**) between the Southern California Public Power Authority (**SCPPA**) and the City of Riverside (**City**) for sPower's Antelope DSR Solar Photovoltaic (**PV**) project.

RECOMMENDATION:

That the Utility Services/Land Use/Energy Development Committee recommend that the City Council:

1. Approve the 20-year PSA between SCPPA and the City to provide renewable solar PV energy and Renewable Energy Credits from sPower's Antelope DSR Solar PV Project;
2. Authorize the City Manager or his designee to execute the PSA, as well as future extensions and purchase and/or storage options associated with the PSAs under terms and conditions substantially similar or superior to this PSA;
3. Authorize the City Manager or his designee to execute any documents necessary to administer the PSA; and
4. Authorize the City Manager or his designee to terminate the PSA for circumstances provided in the PSA.

BOARD RECOMMENDATION:

This item was unanimously approved by the Board of Public Utilities at their regularly scheduled meeting on June 19, 2015.

BACKGROUND:

In 2012 California Senate Bill (**SB**) X1-2 mandated that all electric utilities, including Riverside Public Utilities (**RPU**), procure increasing amounts of renewable power primarily from in-state resources to serve its retail needs during specific compliance periods. RPU's current Renewable Portfolio Standard (**RPS**) requires that it supply 20%, 25% and 33% of retail energy needs using renewable resources by 2010, 2015 and 2020, respectively.

On April 29, 2015 the Governor of California issued Executive Order B-30-15 establishing a Greenhouse Gas (**GHG**) reduction target of 40% below 1990 levels by 2030, including among other things, increasing the RPS targets to 50% by 2030. Several bills are being considered by the state legislature to codify the increased RPS mandate.

The City has been very supportive of the existing renewable targets set by the State and is committed to serving its retail energy requirement using more renewable energy. In order to satisfy the current RPS targets, while anticipating more stringent RPS requirements in the future, RPU continues to explore additional cost-effective, renewable energy procurement opportunities.

Since 2012 the Board and City Council have approved 218 Megawatts (**MW**) of renewable resource contracts/extensions. The RE Columbia II Solar and Cabazon Wind project (combined 50 MW), achieved Commercial Operation Dates (**COD**) by 2014. Tequesquite, AP Northlake and Kingbird projects (combined 41 MW) are expected to come online in 2015, and the Salton Sea expansion (first phase) and Silverado (subsequently acquired by sPower) projects (combined 40 MW) have expected CODs in 2016. These projects qualify as Portfolio Content Category 1 renewable energy resources under California SB X1-2 RPS legislation.

However, one SPPA project (20 MW RE Clearwater solar PV) faced unanticipated permitting challenges, will not be constructed and is being unwound. To date, the developer has paid approximately \$1.8 million in non-refundable liquidated damages (RPU's share is \$1.3 million). Staff is looking to replace this project (using SPPA's ongoing renewable RFP process) with sPower Solar Holding LLC (sPower), and has been negotiating for the City's participation in the 50 MW solar PV Antelope DSR (Project) located in the City of Lancaster. The sPower solar PV price is the lowest RPU has seen in recent years and is about 20% lower than the failed RE Clearwater solar project pricing, resulting in an approximate net present value savings of \$8.8 million. The competitive price offered by sPower is due to several factors:

1. The continued decline in the equipment and labor costs of solar PV projects;
2. The Project is part of a much larger transmission interconnection position with the California Independent System Operator (**CAISO**), with an executed interconnection agreement (with known cost exposures), and certain shared interconnection upgrades;
3. Economies of scale due to sPower's extensive holdings of more than 800 MW of solar development assets in the general Antelope Valley area; and

4. Solar developers' increased efforts to find off-takers to insure a 2016 COD, prior to expiration of the federal Investment Tax Credit (**ITC**).

sPower is in the final project development stage and requires a power purchase commitment no later than fall 2015 to meet its 2016 deadline. The Antelope DSR Project will aid RPU in achieving current and future RPS goals by replacing the failed RE Clearwater project; moreover this project has the following desirable characteristics and favorable terms:

Economy of Scale of Joint SCPPA Project: A 50 MW solar PV project will be shared jointly by Riverside (25 MW) and Vernon (25 MW), through SCPPA. SCPPA will enter into a Power Purchase Agreement (PPA) with sPower, and subsequently SCPPA will enter into individual PSAs with the participating SCPPA members under the same terms and conditions of the SCPPA-Antelope DSR PPA.

Familiar Developer: sPower is formerly known as Silverado. SCPPA/RPU already have two PSAs for solar PV projects (Summer Solar and Antelope Big Sky Ranch), originally approved by the Board and City Council on December 7, 2012 and January 8, 2013, respectively, with an expected 2016 COD. sPower and its parent company, FTP Power, have a substantial solar footprint in the Antelope Valley area and as of December 2014, the companies have \$500 million in equity and \$60 million in cash to support its development and operation activities.

Project Site and Interconnection: sPower has either lease or purchase options over multiple parcels in the City of Lancaster, with sufficient acreage to develop the Project. All necessary interconnection studies have been completed and the interconnection agreement has been executed. The Project will be interconnected to Southern California Edison's Antelope 230kV Substation.

Term of the PSA: Twenty-year PSA commencing on the COD, anticipated at the end of 2016, but absolutely no later than June 30, 2017.

Pricing: The all-in price for the energy, capacity (local) and environmental attributes is \$53.75 per megawatt/hour (**MWh**), which is fixed over the term of the contract.

Performance Security: sPower will post a letter of credit (**LOC**) or cash in the amount of \$2.25 million as a Development Security. After COD, sPower will replace the Development Security with a Delivery Term Security in the amount of \$6.91 million during the first 10 years and \$5.41 million in the last 10 years, using a combination of cash, a LOC and a performance bond.

Mitigation of Development Risks: The PPA includes enforceable development milestone dates with significant financial penalties, ranging from \$5,000 to \$10,000 per day if dates are missed, or in the more severe cases, SCPPA can unilaterally terminate the PPA.

Scheduling Coordinator Fee: sPower will compensate SCPPA \$91,000 each year to perform Scheduling Coordinator services for the Project. RPU intends to offer Scheduling Coordinator services to SCPPA for the Project and receive the revenues for performing such service.

Right of First Offer and Right of First Refusal: sPower must first offer to sell the Project to SCPPA before it can be offered to third parties.

Purchase Option: SCPPA has the option to purchase the Project in years 10, 15 and 20 (after COD) at the then fair market value. A Purchase Option Agreement will be an appendix to the PPA and will be executed concurrently with the PPA.

Storage Option: SCPPA has the option in the first 15 years of the contract to install up to 12 MW of energy storage at the project site. This provides the opportunity to integrate energy storage with the solar facility to: 1) shape the output of the solar production if needed, and 2) help meet any potential future storage mandates. sPower will reserve sufficient area on site to accommodate the storage installation. In addition, sPower will fund up to \$182,000 for permitting and interconnection modifications. A Storage Option Agreement will be an appendix to the PPA and will be executed concurrently with the PPA.

Step-Up Provisions for Tax Exempt Debts: In case SCPPA exercises the purchase option or the storage option and issue tax exempt bonds to finance these options on behalf of the project participants, then project participants will be required to guarantee the payment of such bonds. In the event of a payment default by a project participant, then SCPPA would issue a Step-Up Invoice to the other non-defaulting participant, who would pay such invoice to cover the non-payment on behalf of the defaulting participant. The non-defaulting participant would then be reimbursed by means of: a) receiving a repayment by the defaulting participant; b) taking delivery of defaulting participant's share of the facility output; or c) collecting proceeds from the sale of defaulting participant's share of the facility output to a third party. Such step-up provisions are typical provisions in SCPPA jointly financed projects including Palo Verde Nuclear Generating Station, Hoover Uprating Project, Mead-Adelanto Transmission Project, Mead-Phoenix Transmission Project and Southern Transmission Project which RPU is party to.

Contribution toward RPU's RPS Goal: RPU's share of the Project will generate approximately 71,000 MWh of renewable energy, or 3% of the City's RPS requirements in 2017, and is contemplated in the recently completed Integrated Resource Plan presented to the Board on February 20, 2015 and June 4, 2015. This also assists the City's GHG reduction efforts and the strategic replacement of other expiring contracts. The project qualifies as an in-state renewable resource under SB X1-2 rules.

FISCAL IMPACT:

The annual cost of power under the PSA is estimated to be approximately \$1.9 million in Fiscal Year 2016/17 and \$3.8 million each Fiscal Year thereafter. This cost is fixed with no annual escalation for 20 years. Staff will incorporate the costs of the PSA in future power supply budgets.

Prepared by:

Girish Balachandran, Public Utilities General Manager

Certified as to availability

Brent A. Mason, Finance Director/Treasurer

of funds:

John A. Russo, City Manager

Approved by:

Gary G. Geuss, City Attorney

Approved as to form:

Attachments:

1. Power Sales Agreement between SPPA and Riverside
2. Minutes from June 19, 2015 Board of Public Utilities meeting