



REGIONALSAN

TAKING THE WASTE OUT OF WATER

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DATE: January 27, 2016

TO: Honorable Board of Directors
Sacramento Regional County Sanitation District

FROM: Sacramento Regional County Sanitation District

SUBJECT: **Approve the Preferred Alternative for a Solar Project at the Sacramento Regional Wastewater Treatment Plant and Selection of Solar City as the Best Value Solar Provider**

RECOMMENDATION:

The Sacramento Regional County Sanitation District (Regional San) recommends that your Board take the following actions:

1. Approve the preferred alternative for the solar project at the Sacramento Regional Wastewater Treatment Plant (SRWTP)
2. Approve the selection of Solar City as the best value solar provider
3. Direct staff to enter into Power Purchase Agreement (PPA) contract negotiations with Solar City to implement the preferred alternative

BACKGROUND:

On December 9, 2010, the Central Valley Regional Water Quality Control Board adopted a new permit for SRWTP. The new permit requires construction of several new treatment processes including: nutrient reduction, filtration, and disinfection processes. Regional San has until 2023 to plan, design, construct, and commission the new treatment processes.

On September 24, 2014, your Board certified the EchoWater Project Final Environmental Impact Report (EIR) which included Mitigation Measure 4.4-1 to reduce project generated greenhouse gas (GHG) emissions, and provided for a number of GHG-reduction strategies. One of these strategies was to provide solar panels onsite to reduce EchoWater project's overall energy consumption of non-renewable energy. Since approval of the certified EIR, Regional San has decided to pursue a solar facility at SRWTP.

On December 10, 2014, your Board approved an agreement with Sage Renewables to assist Regional San in procuring a solar contractor and developing PPA.

On August 26, your Board selected the low cost option of a solar array in the future dedicated land disposal unit-7 (DLD7) site as the preferred alternative and directed staff to begin the California Environmental Quality Act (CEQA) process. The CEQA analysis also carried forward a secondary (higher cost) alternative consisting of some parking lot canopies with the remainder of solar panels in DLD7. Regional San conducted an environmental evaluation of the solar project options and determined they are consistent with the environmental analyses and mitigation outlined in the certified EIR. The project will not result in any new or significant environmental impacts beyond those described in the certified EIR.

Earlier today, your Board approved the Second Addendum to the certified EIR for the solar project at SRWTP.

DISCUSSION:

On November 20, 2015, Regional San issued a Request for Proposals for a PPA for the solar project to fulfill the GHG mitigation requirements of the certified EIR. Eight proposals were received on December 22, 2015. The Request for Proposals allowed for three alternatives as shown in Table 1.

Alternative	Description
Option 1	Fixed tilt ground mount array in DLD7
Option 1A	Single axis tracker ground mount array in DLD7
Option 2	Parking Canopy and fixed tilt ground mount array in DLD7

Staff and Sage Renewables selected Solar City as the best value solar provider for all three options. A summary of the proposal scoring is included in Attachment B.

Staff recommends Option 1A as the preferred alternative since it is the most cost effective option. Tracker systems rotate with the movement of the sun and therefore produce more power per panel than fixed tilt system, thus requiring fewer number of solar panels for the overall project. However, tracker systems require more space between panels to avoid shading each other, which results in a larger fenced footprint than the fixed tilt system. Option 1A requires approximately 5.6 acres more than Option 1, while saving about \$1.5 million more over the 25-year project life. While additional acreage needs to be converted from habitat lands to project site for Option 1A, the total area of the shaded understory will be lower for this option.

A summary of proposed systems and the financial analysis from the top four ranked proposals is included in Attachment C.

Regional San expects to finalize an agreement with Solar City in the next two months, and anticipates the solar project to be in production by the end of 2016.

PUBLIC OUTREACH:

Regional San held two public meetings in August 2015, to receive input on the project. In early December 2015, Regional San sent an email with project information, including the date and time of this and future Board actions to interested environmental stakeholders. Comments received expressed a preference for solar on rooftops and not in open space, which was previously determined to be impractical due to limited available area on roof tops and maintenance of the roof and roof mounted mechanical equipment. Regional San also sent an update postcard to over 600 homes and businesses south of the treatment plant. No comments were received from that correspondence as of the filing of this Board letter.

The Solar Project Request for Proposals and Second Addendum to the certified EIR can be viewed at Regional San’s web page: <http://www.regionalsan.com/solar-energy>.

FINANCIAL ANALYSIS

A summary of the estimated financial savings of the solar project and approximate area of the future DLD 7 site to be used for each option are shown in Table 2.

Table 2 – Estimated Savings Over 25-year PPA Based on Solar City Proposal (\$ millions)			
	Option 1 (14.6 acres)	Option 1A (20.2 acres)	Option 2 (10 acres)
Nominal Savings	8.78	10.39	6.41
Net Present Value Savings	4.06	4.97	2.72

CONCLUSION:

Regional San recommends that your Board approve the selection of Solar City as the best value solar provider and Option 1A as the preferred alternative for the solar project at the SRWTP. Staff will return to your Board for approval of the 25-year PPA once negotiations are complete.

Respectfully submitted,

APPROVED:

Christoph Dobson
Director of Policy and Planning

Prabhakar Somavarapu
District Engineer

CD:DO:SJN

Attachments: A. Vicinity Map
B. Summary of Proposal Ranking and Scoring
C. Proposal Summary and Financial Analysis

Contact for additional information: Christoph Dobson, Director of Policy and Planning, 876-6042