Santa Clara Valley Water District

File No.: 20-0417

Agenda Date: 4/28/2020
Item No.: *3.12.

BOARD AGENDA MEMORANDUM

SUBJECT:
Authorize the Chief Executive Officer to Negotiate and Execute the Rate Agreement with the Power and Water Resources Pooling Authority for the Rehabilitation of the Almaden Campus Solar Carport, at a Not-to-Exceed Rate of $132 Per Megawatt Hour (San Jose) (District 4).

RECOMMENDATION:
Authorize the Chief Executive Officer to Negotiate and Execute the Rate Agreement with the Power and Water Resources Pooling Authority for the rehabilitation of the Almaden Campus Solar Carport at a not-to-exceed rate of $132 per megawatt hour.

SUMMARY:
Background:

Santa Clara Valley Water District (Valley Water) recognizes the benefits of developing in-county solar projects to help diversify Valley Water's energy portfolio and improve power resiliency. In-county onsite solar development is a subset of a larger effort to improve power resiliency and may be supplemented in the future by a battery storage system as battery technologies become more cost effective. Additionally, solar projects constructed at Valley Water facilities are not subject to utility transmission and distribution (T&D) charges and can directly offset the electricity purchased from the utility grid at that facility.

Since 2004 Valley Water has been producing solar power at the Almaden Campus. However due to performance issues, on March 27, 2018, the Board of Directors authorized District Counsel to accept a settlement offer from BP Solar International (BP Solar) for the defective solar panels at the Almaden Campus carport installation. The carport solar panels were removed in January 2019 to meet the conditions of the settlement letter.

In preparation for the solar panel removal and in support of the Board Ends Policy 4.3.1 to reduce greenhouse gas emissions to achieve carbon neutrality by 2020, Valley Water released a Request for Proposals (RFP) through its joint powers authority, the Power and Water Resources Pooling Authority (PWRPA), to solicit interest in solar rehabilitation efforts for Almaden Campus.

Valley Water subsequently reached an agreement-in-principle with the initial highest-ranked solar developer and, on November 20, 2018, the Board of Directors authorized the Chief Executive Officer

(CEO) to negotiate and execute a rate agreement for the carport rehabilitation at a rate not-to-exceed $100 per megawatt hour (MWh). However, in August 2019, after extensive negotiations, the solar developer notified Valley Water that they could not proceed without increasing the project costs by 50% based on their recent small projects' true costs.

As a result, staff worked with PWRPA to restructure and release a new RFP in October 2019 with additional participation from other PWRPA agencies.

Updated Proposal:

A total of four solar developers responded to the proposal and CalCom Energy was ranked as the highest ranked proponent. Valley Water received an updated proposal from CalCom Energy for the rehabilitation of the Almaden Campus solar carport. The current proposal includes a 168 kilowatts (KW) solar installation, nearly 40% more capacity than the original system size due to the increased efficiency of modern solar panels and is expected to produce over 240 MWh of energy per year, resulting in approximately 5% utility offset for Almaden Campus. This proposed system size was optimized to increase energy production of the system while reusing key infrastructure of the original system to help keep project costs competitive.

The project would be structured as a power purchase agreement (PPA), in which CalCom will finance the upfront costs to design, construct, operate and maintain the rehabilitated system; while Valley Water, through the subject Rate Agreement with PWRPA, will only pay for the actual renewable energy generated by the systems. If authorized by the Board, the not-to-exceed amount of this Rate Agreement for distributed generation (onsite) solar will be fixed at $132 per MWh for the energy produced throughout the 20-year duration of the project. This onsite solar project is not subject to T&D costs since the energy generated will be used directly onsite at Almaden Campus and the total project cost will be partially offset by the carport settlement payment, which is intended to compensate for the defective original panels.

Compared to the utility-scale solar project (Recurrent Energy Slate Solar Project in Kings County, California) that Valley Water participates in through PWRPA, solar power generation through this onsite project is estimated to cost an additional $4,500 annually after factoring in the one-time settlement payment from BP Solar. This estimate is based on current power purchase costs and includes an estimated 5% annual escalation related to the T&D costs required for offsite utility-scale solar projects. However, T&D costs may rise at an increased rate of up to 10% due to recent utility volatility intensified by wildfires bankruptcy and investments in aging infrastructure. Considering 10% annual escalation for T&D costs related to offsite utility-scale solar projects, this onsite project could result in marginal annual savings compared to current PWRPA rates after factoring in the one-time settlement payment from BP Solar.

Staff is seeking authorization for the CEO to negotiate and execute the Rate Agreement with CalCom Energy for the rehabilitation of the Almaden Campus solar carport to continue to diversify Valley Water's energy portfolio and provide another step towards improving the in-county onsite power resiliency of Valley Water facilities. If authorized to proceed staff will also plan to enter into a site license agreement with CalCom Energy to be able to begin construction by Winter 2020.

FINANCIAL IMPACT:
Throughout the 20-year duration of the project, staff estimates an average annual cost of $16,800 (net present value) associated with approval of this item for the rehabilitation of the Almaden Campus carport solar installation after factoring in the one-time settlement payment from BP Solar. Staff estimate the total cost of the project is $336,000 (net present value). Currently, the estimated average annual cost for same amount of energy from an equivalent offsite utility-scale solar project is $12,300 (net present value). Therefore, this project represents an increased average annual expenditure of $4,500 (net present value) when compared to the delivered energy rates secured through participation in recent utility-scale solar projects. While this onsite project is not subject to T&D, this comparison assumes 5% escalation for the T&D costs associated with the offsite utility-scale solar generation. Adequate funding is currently budgeted in the FY2019-20 Building and Grounds Project (60101002).

CEQA:
The rehabilitation work of the Almaden Campus carport solar installations qualifies for categorical exemptions under CEQA. Public Resource Code Section 21080.35 exempts from CEQA review the installation of solar energy systems installed on the roof of an existing building and parking lots. In addition, the project activities are exempt pursuant to CEQA Guidelines Section 15301 which exempts “operation, repair, maintenance or minor alteration of public or private structures, facilities, mechanical equipment, or topographical features” and CEQA Guidelines Section 15303 which exempts “construction and location of limited numbers of new, small facilities or structures

ATTACHMENTS:
*(ATTACHMENT REMOVED) Attachment 1: CEQA Exemption

UNCLASSIFIED MANAGER:
Bhavani Yerrapotu, 408-630-2735