

Agenda Report

November 14, 2022

TO: Honorable Mayor and City Council

THROUGH: Municipal Services Committee (November 8, 2022)

FROM: Water and Power Department

SUBJECT: AUTHORIZATION TO ENTER INTO A POWER SALES CONTRACT WITH SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY ("SCPPA") FOR SOLAR PHOTOVOLTAIC ENERGY AND BATTERY ENERGY STORAGE FROM SAPPHIRE SOLAR, LLC FOR THE WATER AND POWER DEPARTMENT

RECOMMENDATION:

It is recommended that the City Council:

1. Find that the proposed action is exempt from the California Environmental Quality Act ("CEQA") pursuant to State CEQA Guidelines Section 15061(b)(3) (Common Sense Exemption); and
2. Authorize the City Manager, or his designee, to enter into a contract with Southern California Public Power Authority ("SCPPA") without competitive bidding pursuant to City Charter Section 1002 (H) (Contracts with other governmental entities or their contractors for labor, material, supplies, or services), for the purchase of renewable energy and capacity from Sapphire Solar, LLC that includes daily delivery of a maximum of 39 megawatts ("MW") of solar photovoltaic energy and up to four hours of dispatchable battery energy storage not to exceed 19.67 MW during a 20-year contract term beginning December 31, 2026; and
3. Grant the proposed contract an exemption from the Competitive Selection process pursuant to Pasadena Municipal Code Section 4.08.049 A. 3. Contracts with other governmental entities.

EXECUTIVE SUMMARY:

Senate Bill (SB) 100 requires that 60 percent of retail electricity sales be derived from renewable resources by 2030, with the goal of transitioning to 100 percent carbon free delivered energy by 2045. To date, PWP has consistently exceeded the state's

Renewable Portfolio Standard (“RPS”) and carbon reduction targets, focusing on resources best suited to meet Pasadena’s energy needs.

The Sapphire Photovoltaic Solar facility and Battery Energy Storage System (“Sapphire Project”), is a planned development located in Riverside County, California with a design capacity of 117 megawatts (“MW”) of solar generation and 59 MW of battery storage. The Sapphire Project is expected to commence operation in late 2026.

Through an agreement with SCPPA, a Joint Powers Authority and governmental entity comprised of eleven municipal utilities (including PWP) and one irrigation district, one third of the capacity generated by the Sapphire Project will be received by Pasadena beginning on December 31, 2026. Two other SCPPA members will share the remaining balance.

In addition to augmenting PWP’s RPS portfolio to help achieve state and local targets, the Sapphire Project will also support reliability by providing approximately 25 MW of capacity, partially offsetting the 108 MW capacity that will be eliminated with the termination of Pasadena’s interest in the Intermountain Power Project (“IPP”) in June 2027.

The proposed contract will help meet future RPS requirements in alignment with the City of Pasadena’s (City) RPS Procurement Plan and RPS Enforcement Program (collectively, “Pasadena RPS Policy”), which was approved by the City Council on December 10, 2018.

BACKGROUND:

In 2018, the City Council approved the Power Integrated Resource Plan (“IRP”), which includes a commitment to remove carbon from PWP’s energy resource portfolio. A key component of the IRP is the termination of PWP’s 108 MW interest in the IPP effective June 2027. In addition, other energy resource contracts representing at least 40 MW are set to expire by the end of 2030, making it imperative to secure replacement renewable capacity.

California has set aggressive RPS and greenhouse gas emissions reduction goals. SB 350 (2015) requires that 65 percent of all renewable energy contracts be long-term (at least 10 years in duration) and represent a diverse set of resources and resource types. Additionally, SB 100 (2018) requires 60 percent of retail sales to be served by renewable resources by 2030, with a goal of 100 percent carbon free delivered energy by 2045. To replace the capacity represented by IPP and other expiring contracts, PWP plans to procure a mix of short and long-term renewable energy contracts that support reliability, meet future state compliance requirements, and limit potential exposure to stranded investments.

Sapphire Project Selection Process

On January 23, 2022, SCPPA issued a Request for Proposals (“RFP”) through its website for Renewable Energy Resources and Energy Storage Solutions. As part of an evaluation process that included Pasadena and two other SCPPA members, over 20 proposals were considered based on the criteria defined in the RFP that focused on resource type and location, electricity reliability, contract duration, and comparability with existing member contracts.

The proposal for the Sapphire Project, submitted by EDF Renewables with whom SCPPA will be contracting, offered the most competitive price and was ultimately determined to be the most responsive because it qualifies for RPS compliance and will provide over 25 MW of Resource Adequacy (“RA”) capacity to help meet the requirements set by the California Independent System Operator. PWP is not aware of any local businesses that develop utility-scale renewable energy projects with associated environmental attributes and therefore did not conduct any local outreach.

The Sapphire Project is located near PWP’s service area, which reduces the risk of transmission congestion and increased transmission costs. Delivery of power is expected to begin in 2027, when the IPP contract expires. The Sapphire Project qualifies as a long-term contract for RPS compliance purposes.

The prices for both the Solar and Battery Energy Storage components will ultimately be based on the adjusted development costs. The parties have negotiated a floor and ceiling price for energy from the project, and the final price will be determined after project completion and a review of the development costs. The floor and ceiling annual costs per MWh for both resources are provided in Table 1.

***Table 1: Sapphire Project Estimated Annual Cost for PWP**

	Floor Price	Estimated Price	Ceiling Price
Solar (\$/MWh)	28.00	33.00	35.36
Battery Energy Storage Price Conversion (\$/MWh)	9.72	15.14	16.25
Annual Cost (\$)	\$4,713,374	\$6,180,554	\$6,627,393

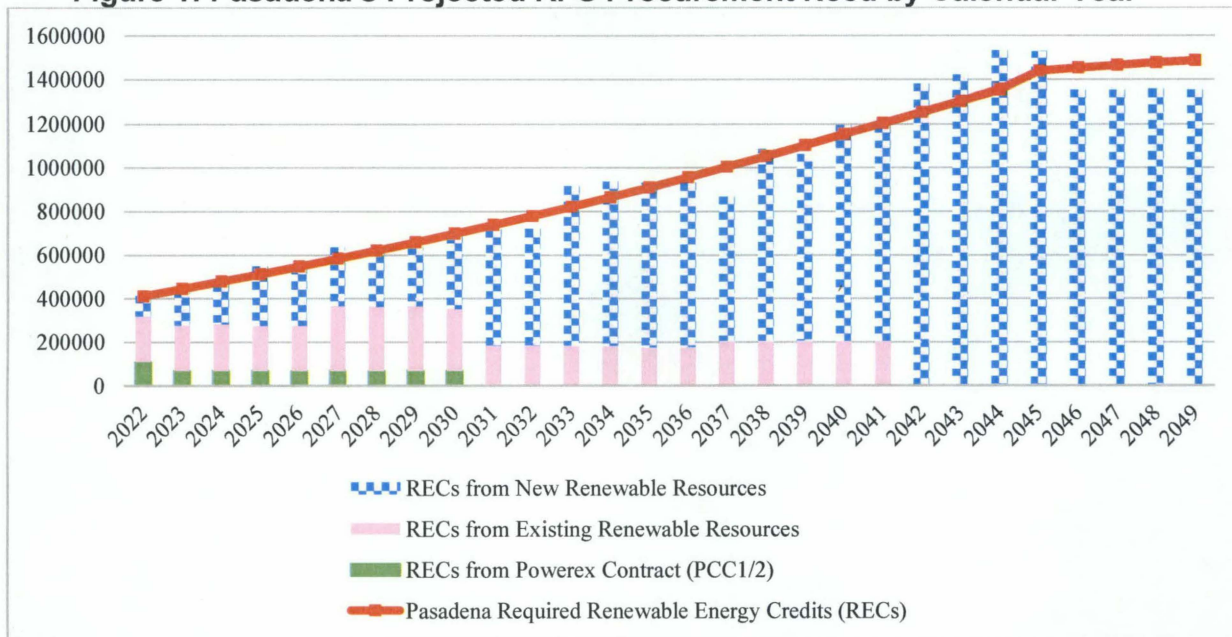
**A current projection of full costs is represented in the Estimated Price. Actual prices could be as low as the Floor Price or as high as the Ceiling Price based on actual development costs.*

It is respectfully requested that a 20-year contract be approved with SCPPA for Pasadena’s share of the Sapphire Project for renewable power starting in 2027 in a final amount that will be determined once full development costs are known.

Projected RPS Impact of the Sapphire Contract on the PWP RPS Energy Portfolio

The Sapphire Project will add approximately 17 percent to PWP’s RPS portfolio beginning in calendar year 2027. Figure 1 depicts PWP’s RPS resources and additional requirements for each calendar year through 2049.

Figure 1: Pasadena’s Projected RPS Procurement Need by Calendar Year



COUNCIL POLICY CONSIDERATION:

The Sapphire Project, which supports an increase in renewable energy resources and reduction in greenhouse gas emissions, is consistent with the City’s Urban Environmental Accords; specifically, Action 1, Renewable Energy; Action 2, Energy Efficiency; and Action 3, Climate Change. The project also supports the City Council-approved IRP.

ENVIRONMENTAL ANALYSIS:

The proposed contract has been determined to be exempt from the California Environmental Quality Act pursuant to State CEQA Guidelines Section 15061 (b)(3), the common sense exemption, that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Since this contract is based on a resource to be built by others and in which Pasadena will have no ownership interest, there is no construction by or for Pasadena, nor is there any other direct physical change in the environment attributable to Pasadena; furthermore, the use of renewable energy would have a beneficial effect on the environment by reducing greenhouse gas emissions and air pollutants. Therefore, as it applies to Pasadena, this contract is exempt from CEQA under the general rule set forth in CEQA Guidelines section 15061(b)(3).

FISCAL IMPACT:

Based upon the projected price ranges, the estimated costs associated with this contract range from \$4.7 million to \$6.6 million annually. The proposed contract will replace energy and costs from the IPP contract which terminates in 2027.

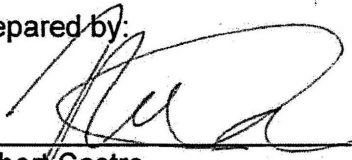
Funding for this action will be addressed in future appropriations to the Power Operating Budget from FY 2027 to FY 2047.

Respectfully submitted,



JEFFREY KIGHTLINGER
Interim General Manager
Water and Power Department

Prepared by:



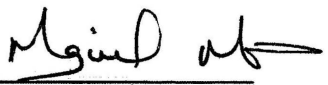
Robert Castro
Power Resource Planning Manager

Concurred by:



For MATTHEW E. HAWKESWORTH
Director of Finance

Approved by:



MIGUEL MÁRQUEZ
City Manager