



CITY OF SAN MATEO

City Hall
330 W. 20th Avenue
San Mateo CA 94403
www.cityofsanmateo.org

Agenda Report

Agenda Number: 7

Section Name: {{section.name}}

Account Number: 10-1311

File ID: {{item.tracking_number}}

TO: City Council

FROM: Alex Khojikian, City Manager

PREPARED BY: City Manager's Office

MEETING DATE: September 16, 2024

SUBJECT:

Peninsula Clean Energy Solar and Storage on Public Buildings Program - Power Purchase Agreement

RECOMMENDATION:

Approve an agreement with Peninsula Clean Energy (PCE) for a Power Purchase Agreement (PPA) to procure, install, operate and maintain a solar photovoltaic system at the Beresford Park parking lot; and authorize the City Manager to execute the agreement in substantially the form presented and to execute any amendments necessary to implement the solar photovoltaic system.

BACKGROUND:

The City of San Mateo is a longtime leader in sustainability with ambitious Climate Action Plan goals to reduce greenhouse gas emissions by 49% below the 2005 baseline by 2030. The City's most recent greenhouse gas emissions inventory shows that the City reduced emissions 22% below the 2005 baseline in 2019. While this marks great progress in Climate Action Plan implementation, more work is needed to advance the City's climate goals.

Peninsula Clean Energy (PCE) is a joint powers authority developed in 2016 to reduce greenhouse gas emissions by providing electricity from clean energy sources. PCE's Solar and Storage on Public Buildings Program works with jurisdictions across San Mateo County to identify public facilities to install solar through a Power Purchase Agreement (PPA). Through the program, jurisdictions can install solar systems to generate on-site electricity to meet and exceed the energy demand of municipal facilities. While much of San Mateo's electricity already comes from carbon-free sources, increasing the amount of energy in the community from renewable sources not only further reduces greenhouse gas emissions but also has the potential to reduce electricity costs and enhance the local green economy.

The PPA with PCE to install solar carports at Beresford Park was initially scheduled for City Council approval at the March 18, 2024 City Council meeting but was withdrawn by City staff because an in-person site visit, also in March 2024, revealed the need for further site analysis. This report provides an overview of the power purchase agreement, project, impacts, outreach and next steps.

Power Purchase Agreement

Through their Solar and Storage on Public Buildings Program and PPA approach, PCE is offering a group procurement model to local government partners across San Mateo County to increase local renewable generation, help reduce energy costs, and help its jurisdictions achieve sustainability goals.

Key elements of the PPA include:

- Fixed \$/kWh price for energy produced by the system
- 0% escalation over the contract term

- 20-year initial term with option for up to two additional, five-year terms or customer buyout
- PPA rate is projected to provide savings in Year 2
- PCE provides operations and maintenance, which is included in the PPA price

Project Overview and Impacts

The California Public Utilities Commission (CPUC) has updated the tariffs governing solar photovoltaic resources. The next iteration of solar tariffs, known as the Net Billing Tariff (NBT), will be less advantageous for solar projects that do not include battery storage and will negatively affect solar-only project economics. Staff worked with PCE to evaluate and identify City facilities to install solar before 2026, and meet the three-year deadline associated with interconnection applications. In April 2023, PCE submitted interconnection applications on behalf of the City of San Mateo to lock in the tariff structure that is more favorable to solar-only projects before NBT goes into effect.

Because of the 20-year term of the Power Purchase Agreement, City facilities where there are necessary roof replacements or planned major repairs or renovations which could have sitewide impacts were ultimately removed from consideration. Beresford Recreation Center was identified to move forward in the program because it affords the greatest degree of certainty that the City can maintain adherence to the terms of the agreement for the 20-year term. The project team evaluated the Beresford Recreation Center building and all three parking lots at Beresford Park for solar installation.

The Beresford Recreation Center was built in 1967 and the roof is overdue for replacement. The Recreation Center is on a priority list for replacement but funding and timing for the roof replacement has not yet been identified, thus the roof could not be considered for solar installation. The parking lots on Parkside Way and Alameda de Las Pulgas are heavily shaded by existing trees along the perimeter of the parking lots and would require the removal of heritage trees to accommodate the solar carports. Furthermore, in the Alameda de las Pulgas parking lot there was a concern about the potential conflict with the existing light fixtures that provide light to the bus stop on Alameda de Las Pulgas. These lots also required the greatest amount of trenching and traversing paved areas for infrastructure installation, which is more costly, disruptive, and time and labor intensive in terms of project construction. The lot on Parkview Way is the sunniest of the three locations and requires no tree or light standard removals and the least trenching through paved areas. However, the Parkview Way lot is the one that is closest to residences, with three living room windows directly on the other side of Parkview Way and some nearby second story windows having views of where the solar panels will be visible.

The parking lot on Parkview Way next to the basketball court and community garden was identified as the project site. The project team estimates the installation of two carport structures with 76 kW of solar. The system is expected to generate 118,033 kWh in the first year and will power the Beresford Recreation Center. Through the PPA, there are no upfront costs to the City and savings are expected in the second year of solar generation. The fixed PPA rate is anticipated to result in cost savings since electricity rates are expected to increase over time. Attachment 3 shows the site map and solar carport project renderings. The project team anticipates trimming trees and removing bushes to accommodate the carport structures; however, the project will not result in the removal of trees or the loss of parking. The project team is evaluating the costs of boring and hand trenching for conduit and will aim for minimal disturbance to the park. A subsurface soil scan and existing underground utilities will inform the project team's design for wiring and interconnection to Beresford Recreation Center. The solar carports will include motion-activated lighting. Lighting will be shielded and directed downwards to illuminate the parking lot without providing glare to the adjacent residences.

PCE estimates project construction to begin in Spring 2025, with construction lasting about six to eight weeks. Most of the heavy construction, excavating foundations and erecting the carport structures, will be completed in about two weeks. Construction staging is anticipated to be limited to the project site. Construction will include drilling piers into the ground and the use of a scissor lift to lift materials up to the carports. During heavy construction, the parking lot will be closed, however, the north side of the parking lot next to the picnic shelter will remain open to the public. Other construction activities include wiring, trenching, and interconnection. Temporary impacts during construction will likely include noise, minor vibrations, temporary parking removal and construction vehicle traffic.

Project Outreach

Staff provided an informational presentation about the project to the Park and Recreation Commission at the September

4, 2024 meeting. Adjacent residences on Parkview Way, 27th Avenue, and 28th Avenue were notified of the project and the Commission meeting via in-person visits and mailers as the new solar carports will be visible from adjacent residences. Mailers were also sent to residents extending to the ends of the surrounding blocks and notices were posted on-site to ensure those who could be impacted by project construction are aware of it. Additionally, Community Garden users were notified of the project and the meeting by email. Feedback from the community has been mixed, with some supportive of the project while others were opposed because of the aesthetics of the solar carports. There were three public commenters present at the meeting who expressed concerns about project aesthetics and location. The speakers were heard and informed they could submit further comments in writing and verbally at the City Council meeting. After a brief round of questions to staff, the Commission indicated support of the project.

Next Steps

In Fall 2023, PCE ran a competitive Request for Proposals (RFP) process and selected McMillan and Intermountain Electric (IME) to be the engineering, procurement and construction providers for the program. PCE's program includes solar installations in jurisdictions across San Mateo County including Daly City, Menlo Park, and Redwood City. Once the PPA is approved by City Council, PCE's team will work closely with City staff to install the solar carports with construction estimated for Spring 2025.

The project will generate local renewable energy in alignment with the City's Climate Action Plan and provide shade to the parked cars. Through the PPA with PCE, there are no upfront costs to the City and the City will benefit from reduced electricity costs for the lifetime of the project. Furthermore, PCE will lead the procurement, construction management, and operations and maintenance of the solar panels. Based on the information provided above, staff recommends the City Council approve the PPA and authorize the City Manager to execute the agreement.

BUDGET IMPACT:

There is no fiscal impact for entering the Power Purchase Agreement with Peninsula Clean Energy. There is no upfront cost to the City for entering into the Agreement. The solar photovoltaic system is anticipated to provide utility cost savings over the life of the project beginning in Year 2. The estimated 20-year NPV at 3% discount rate is \$185,900.

ENVIRONMENTAL DETERMINATION:

This agreement is exempt from CEQA as an "existing facility," because it consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use. (CEQA Guidelines Section 15301.)

NOTICE PROVIDED

All meeting noticing requirements were met. All meeting noticing requirements were met. Staff notified residences located adjacent to the project site on Parkview Way, 27th Avenue and 28th Avenue of this meeting through in-person visits and a mailer. Mailers were also sent to residents extending to the ends of the surrounding blocks and notices were posted on-site to ensure those who could be impacted by project construction are aware of it. Additionally, Community Garden users were notified of the project and this meeting by email.

ATTACHMENTS

Att 1 – Public Comment
Att 2 – Power Purchase Agreement
Att 3 – Site Maps and Project Renderings

STAFF CONTACT

Andrea Chow, Sustainability Analyst
achow@cityofsanmateo.org
(650) 522-7007