



Legislation Text

File #: 22-0149, **Version:** 1

TO:

Honorable Mayor and Members of the City Council

THROUGH:

Bruce Moe, City Manager

FROM:

Carrie Tai, AICP, Community Development Director
Erick Lee, Public Works Director
Dana Murray, Environmental Sustainability Manager

SUBJECT:

Consideration of a Resolution Approving a Memorandum Of Understanding with Clean Power Alliance for the Power Ready Program to Install Solar and Energy Storage at the Joslyn Community Center Parking Lot as a Critical Community Facility (Community Development Director Tai and Public Works Director Lee).

(Estimated Time: 45 Min.)

ADOPT RESOLUTION NO. 22-0070

RECOMMENDATION:

Staff recommends that the City Council consider adopting a resolution to approve a Memorandum of Understanding (MOU) with Clean Power Alliance (CPA) to participate in the Power Ready program to install solar and energy storage at a critical community facility.

FISCAL IMPLICATIONS:

CPA's Power Ready program is offered as a community benefit to the City at no additional cost. As part of the City's participation in CPA, staff time is used for programs and activities associated with CPA. The City spent approximately \$2,000 on newspaper advertisements and \$1,500 to print and mail the City Council-requested public notifications to all addresses within 1,000 feet of the Joslyn Community Center.

BACKGROUND:

The City of Manhattan Beach has been a member of CPA since 2017 in order to bring clean power, local control, and local benefits to the City. As a member agency, the City has representation on CPA's board.

In response to the increasing risk of weather and disaster related electricity outages, including Public Safety Power Shutoffs and grid emergency events, CPA's board authorized CPA staff in January 2020 to conduct a Request for Information (RFI) with member agencies. The purpose of this RFI was to gauge interest in a program that would provide a solar-paired battery energy storage system or standalone energy storage system to an essential facility in each of CPA's 32 member jurisdictions.

City staff provided information on critical City buildings and any existing solar power facilities in response to the RFI. After receiving the results of the RFI from all jurisdictions in CPA, CPA staff designed the Power Ready program to meet member agency needs for resiliency.

The Power Ready program provides a no-cost method for member agencies to install solar and power storage systems at select public buildings that serve a critical community purpose so that there is an emissions-free back-up source of energy during power outages and enhanced local grid resilience to help prevent grid emergencies. CPA would execute a Power Purchase Agreement with a solar contractor to own, construct, operate, and maintain an “islanded” solar storage system for 20 years. Islanded solar storage is an internally generated power supply and storage large enough to continuously energize a critical facility during a power outage. Once the system is installed, member agencies have an energy-resilient facility with no cash outlays for use when the grid is down. When the grid is up, CPA feeds the excess solar energy and stored energy back into the grid to power generation savings that are used to pay for the system’s cost. CPA charges participating sites at a special rate that is equal to or less than what the member would have paid without the system.

Staff was offered the opportunity to nominate up to five sites for the program and indicate a preferred site. Public Works, Fire Department, and Community Development staff identified the Police-Fire facility, City Hall, Public Works Yard, and Joslyn Community Center as potential sites for consideration. Sites were selected and evaluated for consideration based on public benefit, age of the building and roof, power load, space for solar and batteries, and other factors. The Joslyn Community Center was selected as the best public facility candidate for Manhattan Beach. It is centrally located in the community, next to Live Oak Park. The facility hosts frequent programming and is especially popular among seniors. The facility does not have a generator on site but does have an Automatic Transfer Switch for a portable generator. Preliminary designs originally considered solar panels on the Joslyn Center roof. However, because the roofing is over 22 years old and will need extensive renovation before the end of the 20-year lease term, Joslyn’s roof was ruled out due to age as well as equipment obstructions.

A 2016 Energy Audit and Solar Analysis completed by Newcomb, Anderson, and McCormick (NAM) was presented to City Council in January 2017 and recommended the City pursue energy conservation and renewable energy. Of the existing City facilities in 2016, NAM identified the Public Safety facility as the City’s most economically-viable solar PV project, with a payback less than 25 years. However, the Public Safety building was not ultimately selected as the best option for the Power Ready program due to the facility’s power load size being too large for the scope of this project, plus the nature of the building’s operations during emergencies that might include power outages. The Public Safety building’s rooftop would be able to host about 80 kW of solar, which generates an amount of energy that is less than 8% of the annual load. This supports a smaller battery size and there was concern that it would not deliver the minimum amount of four-hour back up for emergency loads. Given that the Public Safety building already has generator backup in place, the Joslyn Center was recommended as the Power Ready site to move forward. By bundling this proposed Power Ready project at Joslyn Center with similar projects in other cities and borrowing against future clean power revenue, the overall cost and payback become economically viable.

City Council considered the MOU at the February 15, 2022, City Council meeting, where staff and CPA answered Council questions. No public comments were received at this meeting. Council directed staff to notify all addresses within 1,000 feet of the Joslyn Center of the potential project.

On Monday, April 4, 2022, CPA and City staff held a public information session on the proposed project at the Joslyn Community Center, which included a map and project mock-up. Over 1,000 postcard notices about the project and public information session were mailed to addresses within 1,000 feet of the Joslyn Center. The session was held in hybrid-format (in-person and synchronously via Zoom), in order to maximize public attendance. Three members of the public attended in person and three attended on Zoom. Questions from the public centered on interest in residents installing solar and energy storage at their own homes to increase their household resiliency, indicating that the potential Power Ready project could serve as a demonstration site for residents and businesses to do the same. The CPA Power Ready information session recording was made available to the public on the City's website. Additionally, staff sent out a second round of 1,000+ notices in June to all addresses within 1,000 feet of the Joslyn Center notifying neighbors of the item coming before City Council on June 21.

DISCUSSION:

The need for backup power systems is growing as power outages become more frequent due to increased wildfires, frequent Public Safety Power Shut-offs (PSPS), unanticipated outages, and increased summer high-heat grid emergencies.

CPA is proposing a carport-style solar structure in the parking lot adjacent to the Joslyn Center with approximately 133 kW of solar photovoltaic (PV) power generation, and a 133 kW/ 533 kWh battery energy storage system located directly west of the existing electrical service on the north side of the facility (see attached MOU exhibit). The 133 kW solar array is projected to generate approximately 214,800 kWh / year, which accounts for approximately 55% of the facility's annual use of 393,505 kWh (2019 interval data). The existing portable generator capability will be preserved in the event that a prolonged power outage exhausts the battery storage.

CPA has asked all participating member agencies to execute an MOU to signify the member agencies' intent to participate in the Power Ready program, which enables CPA to solicit bids through a Request for Offer (RFO) process for all sites together to leverage economies of scale and reduce costs associated with this program. At any time prior to CPA's issuance of the RFO, either Party may terminate the MOU for convenience and without liability to the other Party upon giving ninety days prior written notice.

After a solar contractor is selected from the RFO process, the City will negotiate a zero-cost site lease agreement directly with the solar contractor, and CPA will negotiate a Power Purchase Agreement with the solar contractor. If the City is not able to reasonably negotiate a site lease agreement, then the MOU can be terminated without liability. Details on the design and construction of the proposed solar photovoltaic carport and the energy storage system will be developed during the site agreement negotiation process. The project will be subject to applicable entitlement and permitting processes, and any disruption or displacement of parking due to installation will be addressed in the site lease agreement that is negotiated with the contractor. When the site lease agreement is executed, it replaces the MOU, and the solar contractor will work directly with the City to construct the project. A tentative project timeline is attached to this report.

Please see attachments for the full Power Ready MOU, with main points included below:

- *MOU Term:* Five years after the effective date, but can be extended.

- *Termination:* Either party can terminate the MOU prior to issuance of the RFO.
- *Solar+Storage System and Its Operation:*
 - *Construction:* CPA will select a Developer to construct, install, operate, and maintain the system at Developer's sole cost and expense.
 - *Financing:* Construction, operation, and maintenance of the Solar+Storage System will be financed by a Power Purchase Agreement ("PPA") between CPA and the Developer.
 - *Ownership:* The Developer will own the Solar+Storage System; however, the City will have the opportunity to purchase the system at the end of the lease.
 - *Maintenance:* The Developer will be responsible for the maintenance of the Solar+Storage System.
 - *Normal Operations.* Except when in Power Outage Operations, the Solar+Storage System will be managed to meet CPA's needs for demand-side management
 - *Power Outage Operations:* The Solar+Storage System will have the ability to generate solar energy and charge the Solar+Storage System during power outages that occur during daylight hours. The Solar+Storage System will be managed to provide power, to the extent reasonably practicable, for certain critical loads at the Site during power outages. The Solar+Storage System will be managed to provide sufficient power to the Site for at least four (4) hours during Power Outage Operations based on the Site's power needs identified at the time the Solar+Storage System is designed.
- *City's Obligations:*
 - *Ownership:* The City has the power to grant permission for use of the Site as part of the Power Ready Program, to continue until at least 2045.
 - *Project Development:* The City agrees to allow CPA's selected Developer to construct the Solar+Storage System at the Site, subject to Developer entering a Site Lease Agreement with Member Agency and subject to Developer receiving all necessary permits and approvals.
 - *Site Function:* The City agrees that the Site will continue to serve a critical community function for the Term of the MOU.
 - *Site Lease:* The City agrees to enter into a Solar+Storage Site Lease Agreement with the Developer for up to 20 years. The City will negotiate in good faith to come to reasonable terms with the Developer.
 - *Cooperation:* The City will cooperate with the Developer to secure necessary approvals to develop the Solar+Storage System at the Site; however, nothing in the MOU constitutes approval of development of the Solar+Storage System.
 - *Billing:* The City will pay CPA as billed for electric service at the Site under CPA's future Power Ready Rate Structure, which will be developed prior to the City's execution of the Site Lease. The future Power Ready Rate Structure will be equal to or less than the amount charged to the City annually under the rate structure that would have otherwise been in place if the City did not participate in the Power Ready Program.

By participating in the Power Ready program, the Joslyn Center can remain continuously open and functional as a community center with essential lighting and plug loads powered in the event of a grid or power outage. The auditorium/multi-purpose room inside the Joslyn Center would be the logical place to set up tables and/or cots during a prolonged power outage or local emergency.

The benefits of the Power Ready program are:

- Back-up power system that provides power during outages (including Public Safety Power Shutoffs, natural disasters, rolling black outs)

- No up-front cost and no increase to annual energy bills for participants
- Reduced harmful emissions associated with back-up diesel generators
- The solar contractor handles all operations and maintenance
- Enhanced grid resilience that helps to prevent grid emergencies
- CPA may use the solar and battery combination to reduce peak energy demand and help prevent outages during grid emergencies
- Locally-generated energy and battery storage can reduce energy generation costs and help keep rates stable

Potential drawbacks of the Power Ready program are:

- While the facility will be powered by renewable energy, the City does not own the microgrid, or the renewable-energy credits (RECs)
- The City controls the cycling of the battery only during grid outages, not during normal operations
- Terms of the MOU require the City to provide CPA with a no-cost lease for 20 years, which could limit the City's use of the property
- Construction would need to be timed to avoid any conflicts with the Scout House project

Of note, the City of Manhattan Beach has not yet pursued or implemented any municipal solar projects on City facilities or carports. While Public Works is proposing an ongoing project to consider solar installations at City facilities in the Fiscal Year (FY) 2022-2023 through FY 2026-2027 Capital Improvement Plan (CIP), funding for these types of projects would not commence until FY 2023-2024. Therefore, the proposed Power Ready program would be the first City solar and battery storage on public property and could serve as a demonstration site for future municipal and community solar and battery storage projects.

POLICY ALTERNATIVES:

1. No action means the City would not participate in the Power Ready program.
2. Adopt a resolution approving an MOU for a CPA-owned islanded solar and battery storage system to generate solar energy throughout the year, and to provide the Joslyn Community Center with uninterrupted power during power outages. Following MOU approval, CPA would begin the RFO process to select a contractor. The contractor would then initiate a site lease agreement process with the City, notwithstanding that the City would be able to withdraw if issues cannot be resolved during the site lease agreement process.

CONCLUSION:

Participating in the CPA Power Ready program will enable the Joslyn Community Center to operate as a critical community facility during an outage, reducing peak energy demand and helping prevent outages during grid emergencies, with no cash outlays to the City.

LEGAL REVIEW:

The City Attorney has reviewed this report and approved the agreement as to form.

PUBLIC OUTREACH:

CPA and City staff held a public information session on the potential solar panel and energy storage project and the CPA Power Ready program at the Joslyn Community Center on April 4, 2022. Over

1,000 postcards were mailed to addresses within 1,000 feet of the Joslyn Center per City Council's request in late March notifying the public about the information session. Ads were also placed in the local papers. The session was held in a hybrid-format (in-person and synchronously via Zoom), in order to maximize public attendance. The CPA Power Ready information session recording was also made available to the public to view on the City's website. In advance of this City Council meeting, staff mailed a second round of 1,000+ postcards in June 2022 to all addresses within 1,000 feet of the Joslyn Center to notifying that the item would be considered by the City Council on June 21.

ATTACHMENTS:

1. Resolution No. 22-0070
2. Memorandum of Understanding - Clean Power Alliance (Power Ready)
3. PowerPoint Presentation