



# County of Monterey

## Item No.6

### Board Report

Board of Supervisors  
Chambers  
168 W. Alisal St., 1st Floor  
Salinas, CA 93901

Legistar File Number: BC 24-129

November 25, 2024

**Introduced:** 11/20/2024

**Current Status:** Agenda Ready

**Version:** 1

**Matter Type:** Budget Committee

- a. Receive a presentation from staff on potential solar projects at Natividad Medical Center at 1441 Constitution Blvd., the ITD building at 1590 Moffett Street, and the County Administrative buildings at 168 W. Alisal Street and 142 W. Alisal Street and options to move forward;
- b. Designate \$9,865,032 from unassigned fund balance (BSA 001-3101) for the energy efficiency and solar project (404-3200-PFP057-8564) at 168 W Alisal and 1590 Moffett Street, increasing appropriations in 001-1050-8038 and operating transfer out and appropriations and operating transfer into the Capital Projects Fund (404-3200-PFP057-8564);
- c. Recommend that the Board of Supervisors direct staff to initiate a Request for Proposals for financing with the County's fiscal advisors to fund the solar energy project at Natividad Medical Center for a project cost of \$21,061,995; and,
- d. Recommend that this item be considered by the Board of Supervisors.

#### RECOMMENDATION:

It is recommended that the Budget Committee:

- a. Receive a presentation from staff on potential solar projects at Natividad Medical Center at 1441 Constitution Blvd., the ITD building at 1590 Moffett Street, and the County Administrative buildings at 168 W. Alisal Street and 142 W. Alisal Street and options to move forward;
- b. Designate \$9,865,032 from unassigned fund balance (BSA 001-3101) for the energy efficiency and solar project (404-3200-PFP057-8564) at 168 W Alisal and 1590 Moffett Street, increasing appropriations in 001-1050-8038 and operating transfer out and appropriations and operating transfer into the Capital Projects Fund (404-3200-PFP057-8564);
- c. Recommend that the Board of Supervisors direct staff to initiate a Request for Proposals for financing with the County's fiscal advisors to fund the solar energy project at Natividad Medical Center for a project cost of \$21,061,995; and,
- d. Recommend that this item be considered by the Board of Supervisors.

#### SUMMARY:

On August 13, 2024, the Board of Supervisors directed staff to work with ENGIE Inc., to prepare solar energy projects for the Board to consider at Natividad Medical Center (NMC) at 1441 Constitution Blvd., the Information Technology Department (ITD) building at 1590 Moffett Street, and the County Administrative buildings at 168 W. Alisal and 142 W. Alisal Street (Government Center). As discussed during that meeting, the County aims to have the projects operational by April 15, 2026, to benefit under the Net Energy Metering 2.0 solar pricing scheme. Staff has continued to develop these projects with ENGIE Inc., KNN Public Finance (KNN), ARC Alternatives, and various County stakeholders.

Staff are returning to the Budget Committee to present an update on the finances of the proposed project. Summaries of the financial scenarios provided by KNN are attached to this report for each project site. The projects costs as determined by ENGIE are \$18,134,700 for NMC, \$5,242,600 for the Government Center, and \$3,297,100 for ITD. If all three projects were to be financed under the same scenario, the most beneficial debt structure is a 25-year term public sale with level debt service. Depending on how much the price of electricity will increase, or the escalation rate, over 30 years the cumulative net-present value (NPV) for this project is between \$2,739,000 to \$8,701,000 with gross energy savings between \$9,744,000 to \$23,289,000.

The physical solar layouts can be seen in the attached document Solar Layouts 11/7/2024. Across all three sites, these projects will provide 3.7MW of solar power, twenty-six dual port level 2 electric vehicle charging stations (EVCS), 2 dual port Level 3 EVCS, and 48 electric vehicle (EV) capable charging stations at Natividad Medical Center. This number of EVCS was decided to meet code requirements, prepare for County-wide EV adoption, and to take advantage of the economic efficiencies of installing EVCS while necessary concrete and electrical work is taking place for the solar carports.

DISCUSSION:

The planned solar systems will consist of solar carport and rooftop arrays of the following sizes in direct current power: 543kw at the Government Center at 168 and 142 W. Alisal offsetting approximately 26% of annual electricity consumption, 448 kW at the ITD building at 1590 Moffett St. offsetting approximately 72% of annual electricity consumption, and 2,721 kW at Natividad Medical Center offsetting approximately 33% of annual electricity consumption. This electricity offset would reduce County greenhouse gas emissions by 632 metric tons of carbon dioxide equivalent over the project's first year of operation. The systems must also include the installation of EVCS to comply with code requirements. The EVCS would require payment to use. This revenue is included in KNN Public Finance's (KNN) financial analyses attached to this report.

EVCS code requirements are split between the number of parking spaces with installed EVCS and "EV capable" parking spaces. "EV capable" is a readiness provision wherein electrical raceways, panel space, and conduit are provided to make future EVCS installation easier. In general, it is much more cost effective to install EVCS during a solar carport project because much of the underground infrastructure work needs to be done as part of the carport project, and so the EVCS installation is only a marginal cost increase compared to a stand-alone project. To assist departments to comply with the County's adopted Clean Vehicle Purchasing Policy, (Legistar ID 22-823), and to meet County greenhouse gas reduction goals in the upcoming Municipal Climate Action Plan, the Government Center and ITD building are designed to provide installed EVCS for the full amount of required parking spaces. Foregoing the "EV capable" space option will provide 8 dual port level 2 EVCS at the Government Center and 6 level 2 EVCS at the ITD building. These chargers at the Government Center will provide a key first step in enabling County staff to adopt EVs. Extra conduit will be provided in the southern parking lot arrays to allow for future EVCS installation under the carport arrays. The EVCS at the ITD building are sufficient for ITD to fully transition all department vehicles domiciled at that location to electric vehicles.

Staff have also worked with ENGIE to install two dual port level 3 fast charger EVCS at the

Government Center that have been procured as part of the Rural Electric Vehicle grant program in 2023 through a grant with FreeWire Inc as the lead applicant. These chargers were intended to be installed at the Monterey County Free Libraries in Castroville and San Lucas. Unfortunately, FreeWire Inc. declared bankruptcy before these projects could be completed. Staff identified the solar project at the government center as an opportunity to cover unfunded installation costs for these chargers in a larger project that generates savings and provide the County with necessary electric vehicle fast charging. These chargers are intended to be available to the public to generate revenue, public access could be restricted in the future to best meet County fleet needs.

Natividad Medical Center staff have opted to meet code minimum requirements of 12 installed level 2 dual port EVCS and 48 EV capable parking spots due to the sheer number of parking spots affected. Staff have coordinated to site these chargers to be the most advantageous to hospital staff and visitors.

#### Financial Discussion:

KNN performed a financial analysis of these projects based upon the energy savings analysis by ARC Alternatives and the data provided by ENGIE Inc. This analysis examined options for both a direct purchase and a public sale with ascending and level debt service. All scenarios used a discount rate of 4% consistent with the other KNN analysis recently seen by the Board of Supervisors on November 12, 2024. ARC Alternatives recommends using an energy escalation rate of 3.7% as a conservative basis for determining the value of energy savings when considering projects of a 30-year lifespan, which is in line with California Public Utility Commission estimates for electricity escalation from 2020-2030. Looking backwards, an Energy Tool Base whitepaper found that from 2014-2023, PG&E commercial rates increased by a compound annual growth rate of 5.2%. While commercial energy prices have spiked in PG&E territory over the last decade, as much as 65% cumulatively or a compound annual growth rate of 5.2%, due to wildfire and bankruptcy costs, the current PG&E rate case before the California Public Utility Commission and potential flattening of this escalation over a 30-year time horizon suggest the need for a conservative baseline for analysis. According to PG&E staff, this flattening is a work in progress with a goal to keep rate increases at 5% or lower over the next three years. To show a range of possibilities, this report will show a range of value using an escalation rate of 3.7% to 5.2%.

The projects costs as determined by ENGIE Inc. are \$18,134,700 for NMC, \$5,242,600 for the Government Center, and \$3,297,100 for ITD. ARC Alternatives provided an analysis of the energy savings that the proposed equipment would produce using hourly load profiles of historic County utility usage, which accounts for variances in average weather patterns. This energy savings analysis was used by KNN in the financial analyses for each site attached to this report. The most beneficial debt structure is a 25-year term public sale with level debt service, which estimates gross savings of \$9,744,000 to \$23,289,000 over the project's lifetime and a NPV of \$2,739,000 to \$8,701,000 using the 3.7-5.2% escalation rate discussed above. Under the most conservative 3.7% escalation rate, the Government Center and ITD projects have positive NPVs of \$2,804,000 and \$75,200, respectively. While the NMC project's NPV is \$-140,000, viewed together the other projects mitigate the risk of overall financial loss. Under the higher 5.2% escalation rate, all NPVs are positive with the government Center NPV of \$4,259,500, the ITD NPV at \$783,600, and NMC's NPV at \$3,658,000.

To provide the County a less upfront capital cost option, the Board of Supervisors requested that

ENGIE Inc. provide power purchase agreement prices for the three sites. The level PPA rate is \$.3328/kwh at NMC, \$.3338/kwh at the Government Center, and \$.3080/kwh at ITD. ARC Alternatives performed an energy savings analysis and found that using the 3.7%-5.2% escalation rate, the range of cumulative gross savings is between \$-6,685,000 to \$6,785,000 and the range of NPVs is \$-6,297,000 to \$-389,100. With the systems and PPA costs proposed by ENGIE Inc. staff can only recommend the County proceed with a PPA for the Government Center, which has estimated gross savings between \$3,293,000 to \$6,630,000 and the range of NPVs between \$1,294,000 to \$2,747,000. It should be noted that the cost of code required EVCS would need to be funded separately from the PPA. The estimated EVCS cost is \$2,002,000 at NMC, \$1,101,000 at the Government Center, and \$505,400 at ITD.

OTHER AGENCY INVOLVEMENT:

Staff have collaborated with Public Works, Facilities, and Parks, Natividad Medical Center, the District Attorney's Office, Monterey County Free Libraries, and the Information Technology Department, and Contracts Purchasing on this project. County Counsel has reviewed and approved as to form. On August 13, 2024, the Board of Supervisors directed staff to continue to develop this project for consideration with ENGIE Inc. On November 13, 2024, the Capital Improvement Committee received a presentation on the physical and facility aspects of the project and recommended that the item be considered by the Board of Supervisors. Staff went to the Debt Advisory Committee on November 21, 2024, to consider budgetary and financial implications of this project.

FINANCING:

The project costs provided by ENGIE Inc. for each site are \$18,134,700 for NMC, \$5,242,600 for the Government Center, and \$3,297,100 for ITD. Using an energy escalation rate range of 3.7-5.2%, these projects are estimated to yield \$9,744,000 to \$23,289,000 in gross savings and estimate a NPV of \$2,739,000 to \$8,701,000. To implement this project, staff recommend that the County work with KNN Public Finance to issue a Request For Proposals for financing of the NMC solar system as discussed in this report. Staff recommends that the solar projects for the Government Center and ITD Building be paid using \$9,865,032 unassigned fund balance. This project is eligible to receive \$6,964,382 from the Inflation Reduction Act Investment Tax Credit Direct Pay process. It should be noted that accessibility upgrades to County parking lots are currently excluded from the ENGIE Inc. provided project costs used in KNN's analyses. ENGIE Inc. estimates that the ADA upgrades will cost between \$225,000 to \$331,500 across all three sites if code exemptions discussed in the Capital Improvements Committee are granted, but these costs will not be known until the final engineering and permit stage of the project. Additional items that need to be considered include a project contingency of 10%, inspection fees, and third-party review fees that total \$4,253,000 or 15.94% of total project costs. This brings the total project costs to \$30,927,000 for all sites or \$9,865,000 excluding NMC.

Prepared by: Cora Panturad, Interim Sustainability Program Manager ext. 5338

Approved by: Deborah Paolinelli, Assistant County Administrative Officer ext. 5309

Attachments:

Solar Layouts 11/7/2024

KNN Analysis Government Center  
KNN Analysis ITD  
KNN Analysis NMC  
ARC Alternatives Power Purchase Agreement Analysis