

Solar Update

Board of Supervisors
12/3/2024

Agenda

- Background
 - NEM 2.0 & NEM 3.0
 - Board Recommendation

4217 Reminder

Infrastructure Overview

Financing

KNN Discussion

Conclusion

Background: NEM Transition

California Public Utilities Commission transitioned state from Net Energy Metering 2.0 (NEM 2.0) to the Net Billing Tariff (NEM 3.0) on April 14, 2023.

Under NEM 3.0, excess solar exported back to the grid is much less valuable.

Solar projects with interconnection agreements filed before April 2023 deadline are locked in to NEM 2.0 for 20 years.

In February 2023, ENGIE Inc. volunteered to partner with the County to submit the interconnection agreements for four sites so the projects could benefit from NEM 2.0 knowing they may not be the final contractor.

Sites: ITD Building at 1590 Moffett St, Natividad Medical Center at 1441 Constitution Blvd, & 168 & 142 W. Alisal St Campus

Board Recommendation

The Board directed staff to work with ENGIE Inc. to continue to develop these projects on 8/13/2024.

Staff returned to committees:

CIC 11/13- Physical infrastructure concerns; Recommended to proceed to Board

AEE 11/15- Energy and greenhouse gas benefits; Memo to bypass

DAC 11/21-Financial analysis; provided feedback and recommended to proceed to Board

BC 11/25- Financial analysis; provided feedback and recommend to proceed to Board

Board meeting 12/3 - Approval of ENGIE contract and financing RFP

Gov. Code Sec. 4217.12

(a)[...] a public agency may enter into an energy service contract and any necessarily related facility ground lease on terms that its governing body determines are in the best interests of the public agency if the determination is made at a regularly scheduled public hearing, public notice of which is given at least two weeks in advance, and if the governing body finds:

(1) That the anticipated cost to the public agency for thermal or electrical energy or conservation services provided by the energy conservation facility under the contract will be less than the anticipated marginal cost to the public agency of thermal, electrical, or other energy that would have been consumed by the public agency in the absence of those purchases.

(2) That the difference, if any, between the fair rental value for the real property subject to the facility ground lease and the agreed rent, is anticipated to be offset by below market energy purchases or other benefits provided under the energy service contract.

Infrastructure overview

168 & 142 W. Alisal: 543 kW of solar, 8 dual port EVCS, 2 level 3 dual port EVCS

1590 Moffett St.: 448 kW of solar, 6 level 2 dual port chargers

Natividad Medical Center: 2,721 kW of solar, 12 dual port level 2 EVCS, 48 EV
Capable spots

KNN Financial Analysis:

Direct Purchase

Ascending & Level Debt

Energy Escalation rates of 5.2%: Energy Tool Base white paper analysis using historical data from PG&E territory from 2014-2023.

Energy Savings: Provided by ARC Alternatives

EV Charger Revenue: Provided by ENGIE Inc., includes cost of electricity and O&M fees

168 & 142 W. Alisal Financing:

Unassigned fund balance \$5,600,100

NPV: \$2,478,000 Gross Savings: \$7,159,000

ENGIE Contract Costs: \$5,242,600

Testing & Special Inspections: \$24,700

ADA Upgrades: \$50,000

Third-party monitoring: \$15,700

PWFP Time: \$5,000

5% contingency: \$262,100

ITD Building Financing:

Unassigned fund balance: \$3,527,200

NPV: \$680,400 Gross Savings: \$2,393,000

ENGIE Contract Costs: \$3,297,100

Testing & Special Inspections: \$20,400

ADA Upgrades: \$30,000

Third-party monitoring: \$9,900

PWFP Time: \$5,000

5% contingency: \$164,900

County Project Totals

ENGIE has volunteered to contribute \$320,706 to County's contingency budget, see Section 5.04b of ITD & W. Alisal Energy Services Contract.

(Government Center + ITD) - ENGIE Contingency= Total County Costs

$$(\$5,600,100 + \$3,527,200) - \$320,706 = \$8,806,635$$

County of Monterey
 Engie Project for County Civic Center
 Summary of Scenarios

Scenario:	1	2
Method of Sale:	Direct Purchase	
Debt Structure:	Level FY Payments	Ascending (3% per yr)
Energy Escalation:	5.2%	5.2%
Financing Term:	Solar Project: 20 yrs. EV Chargers: 10 yrs.	Solar Project: 20 yrs. EV Chargers: 10 yrs.
Gross Savings: ¹	\$7,271,486	\$7,158,774
PV Savings: ^{1,2}	\$2,411,611	\$2,477,818
Borrowing Cost:	4.35%	4.35%
Principal:	\$5,937,780	\$5,842,780
Interest:	\$2,039,498	\$2,247,210
Total Debt Service:	\$7,977,278	\$8,089,990

¹ Savings calculated over 30 years.

² Present value discount rate of 4.0%.

County of Monterey
 Engie Project for IT Department
 Summary of Scenarios

Scenario:	1	2
Method of Sale:	Direct Purchase	
Debt Structure:	Level FY Payments	Ascending (3% per yr)
Energy Escalation:	5.2%	5.2%
Financing Term:	Solar Project: 20 yrs. EV Chargers: 10 yrs.	Solar Project: 20 yrs. EV Chargers: 10 yrs.
Gross Savings: ¹	\$2,444,754	\$2,393,391
PV Savings: ^{1,2}	\$614,405	\$680,426
Borrowing Cost:	4.35%	4.35%
Principal:	\$3,689,130	\$3,624,130
Interest:	\$1,316,528	\$1,432,890
Total Debt Service:	\$5,005,658	\$5,057,020

¹ Savings calculated over 30 years.

² Present value discount rate of 4.0%.

NMC Financing:

NMC: RFP for Financing of \$18,487,700

NPV: \$2,361,000 Gross Savings: \$11,459,000

ENGIE Contract Costs: \$18,134,700

Testing & Special Inspections: \$123,600

ADA Upgrades: \$175,000

Consultant monitoring: \$54,400

*Does not include 5% contingency: \$906,735

County of Monterey
 Engie Project for Natividad Medical Center
 Summary of Financing Scenarios

Scenario:	1	2
Method of Sale:	Direct Purchase	
Debt Structure:	Level FY Payments	Ascending (3% per yr)
Energy Escalation:	5.2%	5.2%
Financing Term:	Solar Project: 20 yrs. EV Chargers: 10 yrs.	Solar Project: 20 yrs. EV Chargers: 10 yrs.
Gross Savings: ¹	\$11,874,793	\$11,458,776
Present Value Savings: ^{1,2}	\$2,095,382	\$2,360,723
Borrowing Cost:	4.35%	4.35%
Principal Amount:	\$19,379,452	\$19,064,452
Interest Cost:	\$7,280,378	\$8,011,395
Total Debt Service:	\$26,659,830	\$27,075,847

¹ Savings calculated over 30 years.

² Present value discount rate of 4.0%.

KNN Financial Analysis:

Direct Purchase

Ascending & Level Debt

Energy Escalation rates of 5.2%: Energy Tool Base white paper analysis using historical data from PG&E territory from 2014-2023.

Energy Savings: Provided by ARC Alternatives

EV Charger Revenue: Provided by ENGIE Inc., includes cost of electricity and O&M fees

Staff Direction

- a. Receive a presentation from staff on potential solar projects at Natividad Medical Center at 1441 Constitution Blvd., the ITD building at 1590 Moffett St., and the County Administrative buildings at 168 W. Alisal St. and 142 W. Alisal St. and options to move forward; and,
- b. Adopt a Resolution making certain findings in accordance with California Government Code Sections 4217.10 et seq. and authorize the Contracts Purchasing Officer, or designee, to enter into an Energy Services Contract with ENGIE Services U.S. Inc. to implement the solar projects at the ITD building at 1590 Moffett St., and the County Administrative buildings at 168 W. Alisal St. and 142 W. Alisal St. for a cost not to exceed \$8,806,635 and complete the proposed energy-related improvements to County facilities; and,
- c. Adopt a Resolution making certain findings in accordance with California Government Code Sections 4217.10 et seq. and authorize the Chief Executive Officer of Natividad Medical Center, or designee, to enter into an Energy Services Contract with ENGIE Services U.S. Inc. to implement the solar project at Natividad Medical Center at 1441 Constitution Blvd., for a cost not to exceed \$19,394,418, and complete the proposed energy-related improvements to County facilities; and,
- d. Authorize non-standard indemnification and insurance provisions in those documents; and,
- e. Designate \$8,806,635 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); and,
- f. 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 financed amount of \$18,487,683; and,
- g. Provide direction to staff.

Next Steps: Execution of Energy Service Contracts. KNN will begin RFP process for NMC financing.

Feedback Questions & Direction:

The County does not have a policy regarding charging departments, employees, and residents for EV charging.

Thank you
