TOWN OF SAN ANSELMO
TOWN COUNCIL STAFF MEETING

For the meeting of June 24, 08

DATE: 6-20-08

TO: Mayor and Council Members

FROM: Rabi Elias, Public Works Director

SUBJECT: Award the contract for the installation of photovoltaic system at Fire Station 19 to Borrego Solar Systems Inc. in the amount of $80,806.99.

Recommendation:

Award the contract to Borrego Solar Systems Inc. in the amount of $80,806.99.

Discussion:

Soliciting of proposals was done in accordance of Section 4217.10-4217.18 of the California Government Code.
Three requests for proposals were received on 6-3-08.
I asked the Marin Energy Management Team to review them and put the results in the form of a comparison matrix that I can analyze.

Fiscal Impact:

Funding will be through the Emergency Projects Fund.
We are still investigating CREBS loan.
The project will pay for itself in fifteen years from the savings in the energy costs.

Attachments:

California Government Code Section 4217.10-4217.18
Comparison matrix.

ATTACHMENT C
CALIFORNIA GOVERNMENT CODE
SECTION 4217.10 – 4217.18

4217.10. To help implement the policy set forth in Section 25008 of the Public Resources Code, and to extend that policy to facilities of local governments, public agencies may develop energy conservation, cogeneration, and alternate energy supply sources at the facilities of public agencies in accordance with this chapter.

4217.11. The following terms, whenever used in this chapter, have the meanings given in this section, except where the context clearly indicates otherwise:

(a) "Alternate energy equipment" means equipment for the production or conversion of energy from alternate sources as its primary fuel source, such as solar, biomass, wind, geothermal, hydroelectricity under 30 megawatts, remote natural gas of less than one billion cubic feet estimated reserves per mile from an existing gas gathering line, natural gas containing 850 or fewer British Thermal Units per standard cubic foot, or any other source of energy, the efficient use of which will reduce the use of fossil or nuclear fuels.

(b) "Cogeneration equipment" means equipment for cogeneration, as defined in Section 218.5 of the Public Utilities Code.

(c) "Conservation measures" means equipment, maintenance, load management techniques and equipment, or other measures to reduce energy use or make for a more efficient use of energy.

(d) "Conservation services" means the electrical, thermal, or other energy savings resulting from conservation measures, which shall be treated as a supply of such energy.

(e) "Energy conservation facility" means alternate energy equipment, cogeneration equipment, or conservation measures located in public buildings or on land owned by public agencies.

(f) "Energy service contract" means a contract entered into by a public agency with any person, pursuant to which the person will provide electrical or thermal energy or conservation services to a public agency from an energy conservation facility.

(g) "Facility financing contract" means a contract entered into by a public agency with any person whereby the person provides financing for an energy conservation facility in exchange for repayment of the financing and all costs and expenses related thereto by the public agency. A facility financing contract may provide for the person with whom the public agency contracts to provide any combination of feasibility studies for, and design and construction of, all or part of the energy conservation facility in addition to the financing and other related services, and may provide for an installment sale purchase, another form of purchase, or amortized lease of the energy conservation facility by the public agency.

(h) "Facility ground lease" means a lease of all, or any portion of, land or a public building owned by, or under lease to, a public agency to a person in conjunction with an energy service contract or a facility financing contract. A facility ground lease may include, in addition to the land on which energy conservation facilities will be located, easements, rights-of-way, licenses, and rights of access, for the construction, use, or ownership by the person of the facility and all related utility lines not owned or controlled by the interconnecting utility, and offsite improvements related thereto. A facility ground lease may also include the addition or improvement of utility lines and equipment owned by the interconnecting utility which are necessary to permit interconnection between that utility and an energy conservation facility.

(i) "Person" means, but is not limited to, any individual, company, corporation, partnership, limited liability company, public agency, association, proprietorship, trust, joint venture, or other entity or group of entities.

(j) "Public agency" means the state, a county, city and county, city, district, community college district, school district, joint powers authority or other entity designated or created by a political subdivision relating to energy development projects, and any other political subdivision or public corporation in the state.

(k) "Public building" includes any structure, building, facility, or work which a public agency is authorized to construct or use, and automobile parking lots, landscaping, and other facilities, including furnishings and equipment, incidental to the use of any structure, building, facility, or work, and also includes the site thereof, and any easements, rights-of-way appurtenant thereto, or necessary for its full use.

4217.12. (a) Notwithstanding any other provision of law, 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.

(b) State agency heads may make these findings without holding a public hearing.

4217.13. Notwithstanding any other provision of law, a public agency may enter into a facility financing contract and a facility ground lease on terms that its governing body determines are in the best interest 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 that funds for the repayment of the financing or the cost of design, construction, and operation of the energy conservation facility, or both, as required by the contract, are projected to be available from revenues resulting from sales of electricity or thermal energy from the facility or from funding that otherwise would have been used for purchase of electrical, thermal, or other energy required by the public agency in the absence of the energy conservation facility, or both. State agency heads may make these findings without holding a public hearing.

4217.14. Notwithstanding any other provision of law, the public agency may enter into contracts for the sale of electricity, electrical generating capacity, or thermal energy produced by the energy conservation facility at such rates and on such terms as are approved by its governing body. Any such contract may provide for a commitment of firm electrical capacity.

4217.15. The public agency may, but is not required to, base the findings required under Sections 4217.12 and 4217.13 on projections for electrical and thermal energy rates from the following sources:

(a) The public utility which provides thermal or electrical energy to the public agency.
(b) The Public Utilities Commission.
(c) The State Energy Resources Conservation and Development Commission.
(d) The projections used by the Department of General Services for evaluating the feasibility of energy conservation facilities at state facilities located within the same public utility service area as the public agency.

4217.16. Prior to awarding or entering into an agreement or lease, the public agency may request proposals from qualified persons. After evaluating the proposals, the public agency may award the contract on the basis of the experience of the contractor, the type of technology employed by the contractor, the cost to the local agency, and any other relevant considerations. The public agency may utilize the pool of qualified energy service companies established pursuant to Section 388 of the Public Utilities Code and the procedures contained in that section in awarding the contract.

4217.17. This chapter does not limit the authority of any public agency to construct energy conservation projects or to enter into other leases or contracts relating to the financing construction, operation, or use of alternate energy type facilities in any manner authorized under existing law. This chapter shall not be construed to abrogate Section 14671.6.

4217.18. The provisions of this chapter shall be construed to provide the greatest possible flexibility to public agencies in structuring agreements entered into hereunder so that economic benefits may be maximized and financing and other costs associated with the design and construction of alternate energy projects may be minimized. To this end, public agencies and the entities with whom they contract under this chapter should have great latitude in characterizing components of energy conservation facilities as personal or real property and in granting security interests in leasehold interests and components of the alternate energy facilities to project lenders

Ross Valley Fire Station 19

Contractor Name:	Borrego Solar	Real Goods	SolarCraft
Pricing Information			
Gross Installed Cost:	$ 112,405	$ 125,649	$ 172,053
Est $/watt EPBB Rebate	$ 2.23	$ 2.12	$ 2.29
Estimated EPBB Rebate Amt (Total)	$ 31,598	$ 29,989	$ 43,106
Net Cost	$ 80,807	$ 95,660	$ 128,947
Is Contractor willing to accept incentive as part of cost	Y - but if you are willing to wait for rebate yourself you can get a $1,550 discount on total price	Y	Y
Cost per watt AC (quoted in bid)			$ 9.12
Cost per watt AC (calculated)	$ 7.92	$ 8.85	$ 9.15
Permit Fees Included?	Unclear	Y	N

Post-it® Fax Note 7671	Date 6/19/08	# of pages ▸ 3
To RABI ELIAS	From DANA ARMANINO	
Co./Dept. SAN ANSELMO	Co. MARIN EMT	
Phone #	Phone # 499-3292	
Fax # 454-4683	Fax #	

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Contractor Name:	Borrego Solar	Real Goods	SolarCraft
Equipment Information			
DC Size kW (quoted)	16.8	16.8	21.3
Number of Modules	75	99	99
Nameplate Module Wattage	224	170	215
Total Nameplate System Wattage (calc	16,800	16,830	21,285
Sq. Footage of Collectors	1,480	1,550	1,325
Module Brand/Model:	Sharp Solar ND-224U1F	Sharp Solar NE-170U1	SunPower SPR-215-WHT-U
Module Efficiency	13.74%	13.10%	17.30%
Number of Inverters:	2	3	3
Inverter Brand/Model:	nny Boy SMA - SB7000US (20	Sunny Boy SMA - SB5000US (208V	Sunny Boy SMA - SB7000US (208V)
Inverter Efficiency	97.1%	96.8%	97.0%
DAS Brand/Model:	Fat Spaniel	Fat Spaniel	SolarCraft Proprietary
Raw data in Excel format and real time	Real time = Y Excel = ?	Real time = Y Excel = ?	Real time = Y Excel = N
AC Size	14.2	14.2	18.8
Design Information			
Orientation	SW		SW
Inclination	12 degrees		15
Warranty Information			
Module Warranty Duration (yrs):	25	25	25
Inverter Warranty Duration (yrs):	10	10	10
Installer Warranty Duration (yrs):	10	You might want to ask about this	10

Contractor Name:	Borrego Solar	Real Goods	SolarCraft
Production Estimate Information			
Sun hours used in bid	1,729	1,523	1,778
Est. Annual kWh Production (quoted)	24,547	21,632	33,431
Est. Annual kWh (EPBB calculator)	23,293	23,335	29,891
Estimated % of Usage Offset (quoted)	33%	33%	43%
Cashflow Comparisons			
Value of Energy Produced (EPBB used	$ 4,377	$ 4,385	$ 5,617
Cummulative Savings at year 25	$ 9,222	$ 34,917	$ 38,316
Simple Payback (yrs) including 4% esc	15	16	17
NPV (5% discount rate)	$ (4,347.00)	$ (18,360.00)	$ (29,624.00)
IRR	4.4%	2.8%	2.3%
Other Qualifications/Comments			
Green Business (Y/N)	Y	Y	Y
NABCEP (Y/N)	Y	Y	Y
Marin Based?	N	Y	Y
Questions/Comments:	Spaniel monitoring system is included but on the actual price page (PG 3), the monitoring system is not called out. You might want to double check that it is indeed included in the offered price	You should ask about their installation warranty. Do they offer one? Is it included? How many years does it cover?	
	Not sure if permit fees are included in cost		

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