Monterey County Office of Education

Leadership, Support, and Service to Prepare All Students for Success

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TO: Chief Business Officials

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SUBJECT: What a School District Should Consider When Evaluating a Solar Energy Project

The Monterey County Office of Education has just gone through the process of research, selection, and contracting for a solar energy project. Based on our experiences, we developed this document that indicates the areas of concentration or analysis that you need to be aware of should you pursue a solar energy project.

Things to Consider

- Location of solar array for maximum production—engineering of best location may lead to discussions, plus impact on neighbors
- Determine what financial structure is best for your district:
    - PPA (Power Purchase Agreement) - There is no capital investment by the Local Education Authority (LEA). The LEA contracts with a third party power supply company to design, construct, and maintain a solar power plant for the sole purpose of power generation. In return, the LEA pays that third party provider a rate per kilowatt hour that is designed to be lower than the Public Utility (PG & E). The LEA does not own the system and does not receive any subsidies on the system. The LEA simply uses a third party as an alternative to PG & E for power regeneration. The system is maintained by third party, and the LEA can buy out at the end of the PPA term.
    - LPA (Lease Purchase Agreement) – The LEA gets financing to construct the solar project. LEA is locked into a lease structure that will pay off the system in a specified amount of time. Lease payments are generally

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lower than perceived Public Utility rates. Although solar panel power is technically free, you have a set lease payment that rises 3% to 4% a year. This is typically less than the 5% rate increases by your electric company. At the end of the specified lease term the LEA owns the system and can generate power at a grid neutral state.

- Financial implications—solar projects are not always able to achieve grid neutral status, thereby leaving some residual PG&E needs
- Financial savings and/or Environmental concerns—If the financial analysis does not achieve as much savings as you want, there are the positives of reducing reliance on PG&E and the district's carbon footprint
- A two-prong approach of (1) energy efficiency upgrades and (2) solar array installation would achieve the most long-term energy use declines. This would cost more initially, but save the most in the long-term.

System Production

- Look at the amount of Kilowatt-Hours (kWh) the system will produce to determine whether or not it will be grid neutral
- Will it make the PG&E bill be zero?
- For example, if PG&E is $200K per year, and savings on the system are an energy amount equivalent to $150K per year, the agency is still paying PG&E $50K per year so the system would not be grid neutral

Assumptions

- Assumptions should include that kWh price will increase every year
- Look at how this percentage increase is calculated – does it use State or Regional figures?
- Understand that these are estimates and can fluctuate with the energy market

Contract Guarantees

- Contract should guarantee a minimum level of kWh production
- Contract should include remedies if these levels are not met

Expectations

- Take care with and fully understand all expectations associated with project
- Is agency asked to implement additional cost savings measures?
- Is contribution from agency Deferred Maintenance Plan required?
- The Solar Project cost-benefit analysis should be "stand-alone" – with as few as possible other cost savings measures attached to the overall analysis

Lease Payments

- Clear understanding of terms and impact on agency
- Is more than one contract or vendor involved?
- Negotiate lowest interest on contracts – push and don't settle for initial numbers

Net Benefit

- Look closely at actual net benefit
- If looking for true savings look at options for financing (general obligation, COP, paying outright)
- First year of payment may not yield a net savings
- Any fluctuation in estimated costs could push over the line from savings to paying for system
- Don't accept their numbers, have a third party evaluate
- Have your attorney review contract early on, this will avoid delays
- **Clearly convey the *Goals and Objectives* of the system / project to stakeholders**
- **careful of using word "savings" – look at "benefit"**

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