

WHY SOLAR ?

An Overview of the Benefits and Options of a
Solar Project for the
Bear Valley Community Services District



PURPOSE OF PRESENTATION

- Explain the advantages of a solar project
- Overview of the project history
- Discuss considerations and options
- This is intended to be an informational presentation, with no formal action other than direction and clarification to staff



WHY SOLAR?

- The District currently pays Southern California Edison (SCE) over \$500,000 per year in electric costs to power its facilities, wells, boosters and treatment plant
- A Solar Project Conceptually Will:
 - Reduce the amount the District pays each year for electricity
 - Resulting savings can be applied to other District needs
 - Provide a hedge against rising power rates
 - The District's rates increased ~10.5 % in FY 2012/13 and ~18.5% in FY 2013/14 and a total of ~37% since 2011



A Solar Project Will Not:

- Make the District a utility company
 - Would not be selling power to other users
 - All power generated to be used by the District
- Require building power transmission lines
 - The District would continue to use SCE's distribution system for the delivery of the power to our facilities



Considerations

- The project should pay for itself
 - There should be a bill reduction after debt servicing, maintenance and operational costs, and various other expenses
- The project must comply with all applicable laws and regulations
 - California Environmental Quality Act (CEQA)
 - Placement, visual impacts
 - Kern County Planning & Zoning requirements
 - California Public Utility Commission



History

A staff report detailing all Board and Committee discussions and actions is available. The following is generalized history:

- The District has been contemplating a solar project for a number of years
 - Initially obtained proposal from SunPower
- Sent out a Request for Qualifications (RFQ) for an independent solar consultant to prepare an analysis of District needs
- At the February 13, 2014 Regular Board Meeting, the Board tabled an Agenda item to hire a consultant to provide independent analysis



History

- At the same Board Meeting, staff was directed to solicit proposals from vendors/turn-key providers
 - Heliopower, RecSolar, Borrego Solar and SunPower
- At the June 10, 2014 Special Board Meeting, the Board heard presentations from providers
 - Staff was directed to negotiate with SunPower to reduce their price from \$3.1 million to \$2.8 million
 - SunPower counteroffers with a \$161,933 reduction.

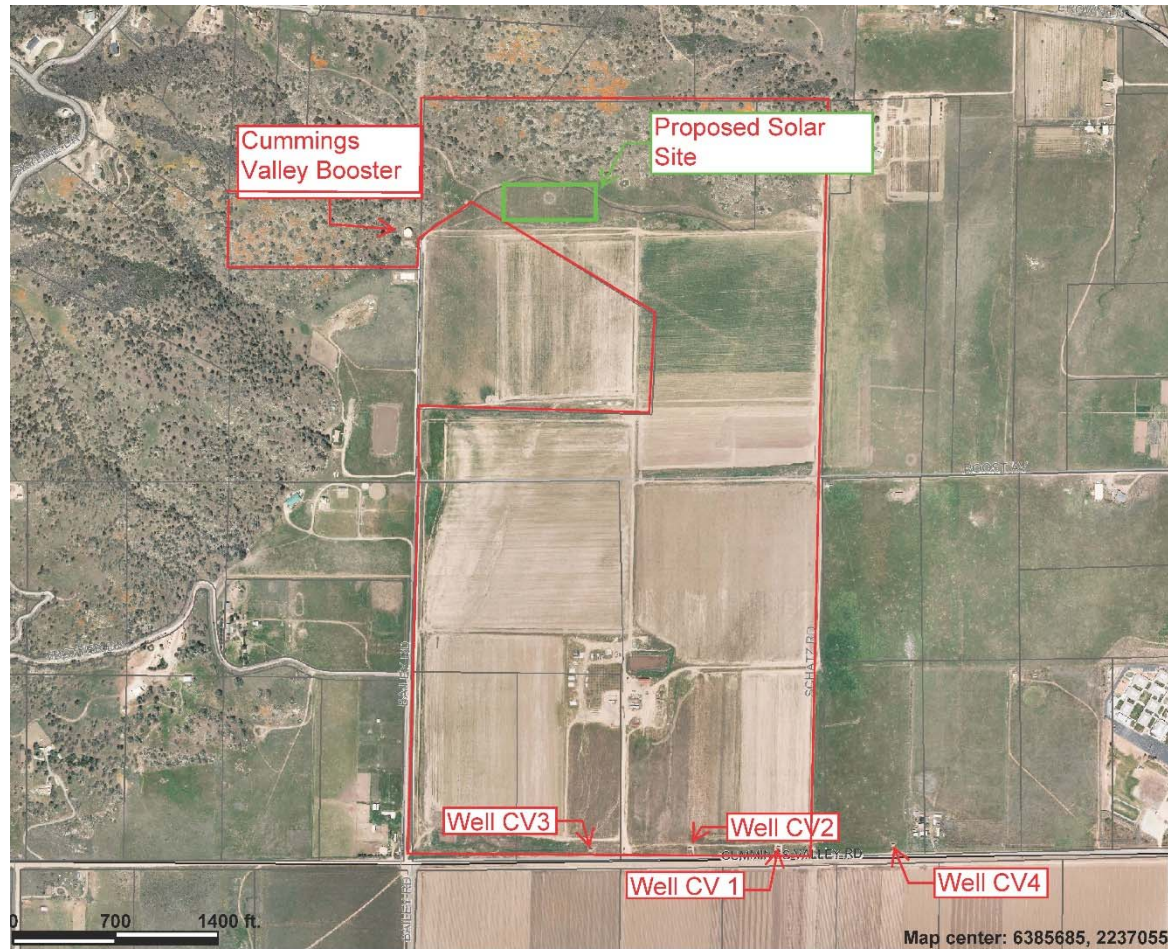


SunPower Project Concept

- 1,009.2 kW fixed tilt (non-moving) plant adjacent to the Cummings Valley Booster Station
 - Approximately 5 acres in size, north of Tehachapi Turf on land currently not being farmed, at the extreme edge of the usable land (map on next slide)
- Renewable Energy Self-generation Bill Credit Transfer program (RESBCT). This program allows local government agencies to generate electricity at one meter location and transfer any excess bill credits to another account owned by the same local agency



Sun Power Project Concept



SunPower Project Concept

- The project could be financed with a 20 year loan with an interest rate of approximately 4%.
- Due to debt servicing and cash flow fluctuations such as rates, rebates, and maintenance costs, the project will have varied return (bill reduction)
- SunPower estimates the project will provide SCE bill reduction of:
 - \$62,000 to \$101,000 per year for the first 10 years
 - \$33,000 to \$179,000 in years 11– 20
 - \$390,000 to \$500,000 in years 20 – 30 after loan is paid



Options

Unfortunately, the vendor/turn-key approach resulted in proposals too diverse for an ‘apples-to-apples’ comparison of projects and potential cost savings benefits.

- Continue with the SunPower project concept via the Letter of Agreement authorized by the Board on July 10, 2014
- Choose a different project concept and/or proposal
- Hire an independent consultant
 - Not a solar vendor
 - Impartial analysis



Independent Consultant

- As previously mentioned, the Board tabled an Agenda item to hire an independent consultant.
- A formal solicitation process has already been completed
 - Top firms recommended to the Board by Infrastructure Committee
 - AECOM
 - Helio Power
 - REC Solar
- AECOM has a dedicated solar consulting division, is the only firm not a vendor/installer, therefore can impartially provide:
 - Analysis of the District's solar needs
 - Analysis of our power consumption
 - Preliminary design and potential site location(s)
 - Financial analysis and potential cost savings
 - Assistance with project management



Staff Recommendation

- Staff recommends an independent solar consultant be hired
- Direct staff to negotiate with the number one ranked firm from the Request for Qualifications process (AECOM)
- Pending above direction, the Board will be presented a contract for formal consideration at a future date (public process)
- No formal action is requested tonight, only consensus as to direction

