

MINUTES OF A MEETING OF THE
ENGINEERING/EQUIPMENT COMMITTEE
OF THE VALLECITOS WATER DISTRICT
THURSDAY, SEPTEMBER 6, 2018 AT 2:00 P.M.
AT THE DISTRICT OFFICE, 201 VALLECITOS DE ORO,
SAN MARCOS, CALIFORNIA

Director Hernandez called the meeting to order at the hour of 2:00 p.m.

Present: Director Hernandez
Director Elitharp
General Manager Pruiam
District Engineer Gumpel
Capital Facilities Senior Engineer Hubbard
Development Services Senior Engineer Scholl
Purchasing/Warehouse Supervisor Bowman
Administrative Secretary Johnson

ITEM(S) FOR DISCUSSION

SOLAR INVERTER REPLACEMENT PROJECT

Staff clarified this discussion was regarding the solar inverter replacement project at the District administrative facility, not the District-wide solar project. The two existing central inverters of the 360kW Solar Photovoltaic System which convert solar panel DC current to AC current are no longer working. The system was installed in 2006.

Capital Facilities Senior Engineer Hubbard provided background on the project, approved by the Board on June 20, 2018. After execution of the contract with Baker Electric to perform the work, it was discovered that replacement inverters are no longer available as inverters used today start at 500kW. Baker Electric proposed replacing the central inverters with string inverters which are the most cost-effective inverter option on the market today. There are two string inverter options: Kehua (9 groups) or Chint (18 groups) which would increase the contract by \$34,313 and \$129,589 respectively.

Capital Facilities Senior Engineer Hubbard provided pros and cons of the two options. The Kehua string inverters are more cost effective and more efficient; however, Kehau (distributed by Satcon) is a newer company whose focus has been on solar battery technology. The Chint string inverters are more expensive and have a stronger track record; however, it is unknown if they will continue to be available as they do not meet the new SDG&E requirements in California. Both manufacturers offer a ten-year warranty.

Staff recommended the Kehua string converters as anticipated energy savings would result in an approximate two to three-year payoff of the entire project. The \$34,313 change order will require Board approval per Ordinance No. 146.

General discussion took place. Director Hernandez requested confirmation of where the ten-year warranty comes from, Kehua or Satcon. General Manager Pruim noted that the string inverters would not tie the District to a particular type of solar panel. Purchasing/Warehouse Supervisor Bowman stated no existing solar panels have been replaced due to failure except for those damaged by rocks thrown from the adjacent ball field.

The Committee concurred with staff's recommendation to proceed with the Kehua string inverters and to recommend the Board approve the change order to Baker Electric.

VWD GROUNDWATER BASIN STUDY

District Engineer Gumpel distributed Woodard & Curran's fee estimate for evaluation of the San Marcos groundwater basin supply options. He stated the purpose of the discussion at this meeting was to confirm the scope of the study and determine any adjustments necessary before bringing this back to the Board for approval.

District Engineer Gumpel further stated this is a table top groundwater study. No modeling, drilling of wells, mapping, or calculation of potential yield of the basin will be performed. The focus of the scope is on what can be potentially done as a water resource with the groundwater basin based on existing table top information. Options include using the groundwater for recycled non-potable use, indirect potable use as recharge, or integrating it with Encina Wastewater Authority's system for treatment and potable use. A funding source needs to be identified for each of the options along with additional steps, legal hurdles, and costs. Modeling a groundwater system, drilling and evaluating test wells, obtaining hard data on well pumping, yield, and recharge would take place in the next phase of the study.

General discussion took place regarding the budget for the study and optional items. Director Elitharp recommended the optional components be included in the scope: additional meetings and legal review. Director Hernandez concurred.

The Committee directed staff to proceed with the study scope as discussed including the additional meetings and legal review options. Staff anticipates presenting this item to the Board at the first Board meeting in October.

Mike Hunsaker, member of the public, expressed his concerns about compensation to customers with existing aquifers that have been in use and the method by which water would be introduced back into the aquifer. District Engineer Gumpel stated the second phase of the groundwater basin study, should the Board decide to go forward with it, would address his concerns.

OTHER BUSINESS

Director Hernandez requested an update on the District-wide solar project as he was unable to attend the July 23 Committee meeting at which the project was discussed. District Engineer Gumpel stated the project will be placed on the September 19 Board agenda and provided a brief update. The Committee had directed staff to move forward on the design of three projects.

PUBLIC COMMENT

Mike Hunsaker, member of the public, expressed his opinion that the District should consider solar battery storage with any type of solar project and his concerns about energy rate increases. He inquired about the status of his request for a copy of the draft Master Plan. Staff anticipates it will be available in October at the same time as the draft Environmental Impact Report.

ADJOURNMENT

There being no further business to discuss, the meeting was adjourned at the hour of 2:55 p.m.