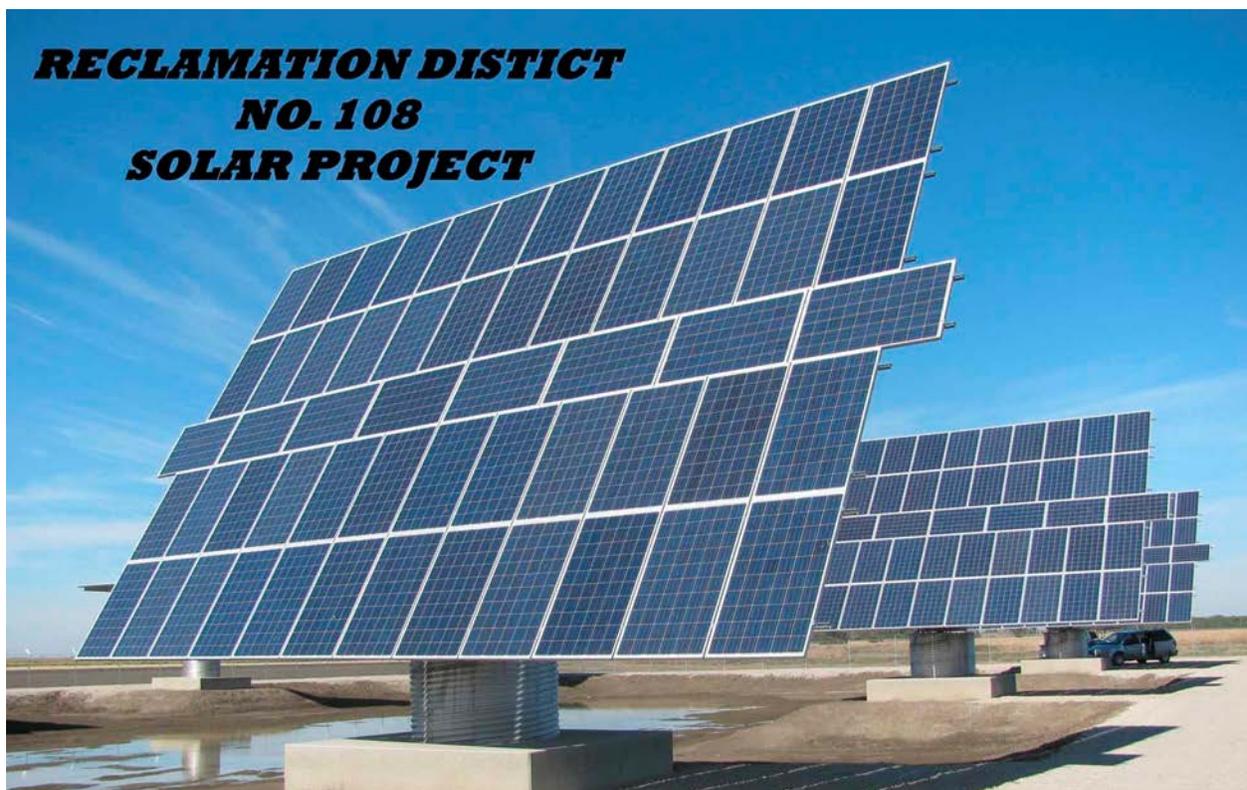


Sycamore Slough Solar Plant Feasibility Study Request for Proposal

Reclamation District No. 108 (RD-108) is inviting firms to propose the attached services to conduct a Feasibility Study of their Sycamore Slough Solar Plant. Proposals should be no longer than 20 pages including all supporting information. They are due no later than 5 PM, May 24th, 2019 to the RD-108 Office at 975 Wilson Bend Road, Grimes, CA 95950. Please make them to the attention of William Vanderwaal if mailing them to the District.

Reclamation District 108 reserves the right to reject any and all proposals, to waive any informality in a proposal, and to make awards as it deems appropriate in its sole discretion.



Background

Reclamation District No. 108 (RD-108) owns and operates a solar facility known as Sycamore Slough Solar Plant (SSSP) which is located approximately 5 miles north of the town of Knight's Landing, CA. The system is rated at 386 kW (DC Capacity) and was constructed in 2009 by Solar Development, Inc. (SDI) and Ascent Builders, Inc. The SSSP is currently operated under a Net Energy Metering (NEM) agreement with PG&E.

The SSSP solar photovoltaic (PV) electric generating system comprises 30 each MECA MS Tracker 10 dual-axis trackers. Each tracker has 56 each Trina TSM POS polycrystalline high efficiency PV modules, for a total of 1,680 PV modules. The system is rated at 386.4 kW DC at Standard Test Conditions. The DC output from the trackers is converted to 480V, three phase AC power by an Advanced Energy Industries Solaron 333kW bipolar inverter, with a system CEC rating of 330.876 kW AC.

The PV system is monitored at the string level with a Draker Laboratories Sentalis web based monitoring system. Draker Laboratories (and/or the companies who have bought them out) performs the function of the official independent third party entity responsible for monitoring and reporting system performance in accordance with the California Solar Initiative (CSI).

As the system is located within the designated 100-year floodplain, the trackers were placed on a three-foot berm and the two-foot high ballasted foundations were extended by four-foot high reinforced concrete columns to place the tracker modules, when in a stowed horizontal position, and essential electrical equipment above the 100-year flood elevation, or 14-feet above ground level. The inverter and associated DC disconnect switches, monitoring data logger and communication equipment, PV meter, and station service breaker panels are located on a steel platform, also located above the 100-year flood elevation. The inverter AC output is transmitted via a pole line to the adjacent pump house, where an AC disconnect switch and the final interconnection to the line side of the main service panel disconnect are located.

All PV system output that is not consumed by the RD-108 pumps are fed into the grid via a bi-directional meter which allows net metering credit to RD-108 for excess generation.

Since the project has been placed into service, the Operations and Maintenance has been done under contract by Energy Systems Development, Inc. (ESD and formerly SDI). That contract ends in October of 2019 and the RFP is seeking a new contract to begin upon its completion.

Project Description

The following Tasks are required:

Required Tasks

Task 1 – Propose Alternative Configuration for Inverter(s).

1. In 2018 RD-108 experienced significant down times in energy production due to the existing configuration of just one inverter for the whole SSSP system. RD-108 is seeking proposals for reconfiguring the system in a manner that will enable more reliable energy production than the existing single inverter system.
2. This task should include a proposed configuration and cost estimate to do the following:
 - a. Complete the design of the configuration change, including specifications and plans a constructor could use to complete the project,
 - b. Final detailed cost estimate for the construction.

3. This task also includes a preliminary cost estimate for the construction of the proposed reconfiguration and a discussion on the merits of the proposed configuration versus other potential configurations.

Deliverable	Due Date
Proposal for an Alternative Configuration of Inverter that includes: Preliminary Cost Estimate to Construct reconfiguration, Cost Estimate to finish the design for construction, including a detailed cost estimate for construction and specifications and plans.	Within one year of execution of this Task.

Task 2 – Conduct Feasibility Analysis for Expansion of Sycamore Slough Solar Plant.

RD-108 is investigating the expansion of the SSSP to include more energy production and possibly incorporate energy storage into the facility. RD-108 is a member of the Power and Water Resources Pooling Authority (PWRPA) and the facility could be conformed into a distributed generation site under the PWRPA blanket authority. This task will comprise the following facets:

1. Analyze the feasibility of connecting loads at Sycamore Slough Pumping Plant, El Dorado Pumping Plant and Rough and Ready Pumping Plant.
2. Analyze the feasibility of expanding the Sycamore Slough Solar Plant.
3. Analyze the feasibility of adding energy storage to the Sycamore Slough Solar Plant.
4. Prepare a report including the information obtained above including preliminary cost estimates to construct the modifications, operate the systems if reconfigured as proposed, and the Benefit to Cost Analysis.

Deliverable	Due Date
Feasibility Analysis Report that includes feasibility of, including Benefit to Cost Ratio, and preliminary Cost Estimate to: Connecting nearby loads under one meter, Expand SSSP for more power generation, And, addition of energy storage to the SSSP.	The Feasibility Analysis Report will be due within one year of the execution of the Task.

Evaluation of Proposal

The Proposals will be evaluated only on the following categories: Cost, Technical Method & Completeness, and Preparers Experience. They are defined as follows:

Cost – the overall proposal cost.

Technical Method & Completeness – Description of how the consultant will conduct the work, what elements will be included in the tasks and deliverables resulting from the task work, and the completeness of the proposal.

Preparers Experience – the resumes and experience of the staff who will directly be executing the work and review of deliverables.

Duration

The Contract shall be a duration of 1 year or less including all report review time.

Sycamore Slough Solar Plant

