# CALIFORNIA ENERGY COMMISSION

**DOCKET:**

**02-REN-1038**

# EXISTING RENEWABLE FACILITIES PROGRAM

**COMMENTS OF**

**SUNRAY ENERGY, INC.**

**JUNE 16, 2008**


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California Energy Commission
Dockets Office, MS-4
Re: Docket No. 02-REN-1038
1516 Ninth Street
Sacramento, CA 95814-5512

Dear Commissioners:

Sunray Energy, Inc. ("Sunray") is the owner and operator of two Solar Electric Generating Systems ("SEGS") located in Daggett, California, and provides 44 megawatts of parabolic trough solar thermal electric capacity to the California market. The SEGS I and II facilities have provided reliable and environmentally beneficial electric generation to Southern California residents for over two decades. Building and maintaining solar facilities that represent the gold standard in solar technology is extremely expensive - the SEGS I and II plants cost over $150 million to construct in 1985/86 and would cost substantially more today. As a consequence, the incentive payments provided by the Commission play an important role in keeping these two facilities on-line and providing contributions to the State's energy needs.

Sunray participated in the June 12, 2008 workshop and various teleconferences prior to that date related to the proposed guideline revisions for the Existing Renewable Facilities Program. Staff put together an excellent summary of the four (4) options that are currently being considered. During the staff workshop on June 12th, the California Biomass Energy Alliance ("CBEA") proposed a modification to Option 2 and the modification was subsequently called Option 5. Option 5 is the same as Option 2; however, the participants would agree that payments to the orphan facilities (the biomass orphans and Sunray) would not be curtailed/reduced if the program was running low on funds. The exact methodology of how this would work will be provided in written comments from the California Biomass Energy Alliance ("CBEA").

During the workshop, Sunray stated that it supported Option 1 and that it was willing to support Option 5 as long as Option 5 was modified so that the SEGS I and II facilities would receive a 2 cents/kWh cap. As stated in the workshop, the CBEA supports Option 5 being modified so that the SEGS I and II facilities receive a 2 cents/kWh production incentive cap.

1. Need for Continued Incentive Payments for Existing Renewable Facilities

Continued incentive payments are of critical importance to existing facilities such as SEGS I and II. Existing facilities such as SEGS are far more threatened today than when the State's renewable energy laws were enacted. This is because the company's contract prices have remained relatively unchanged while all other costs have greatly increased. Thus, the CEC incentive payments that were helpful in prior years are essential today.

One of the reasons that the incentives are so essential is that Sunray's costs of operating have increased by more than 50 percent in just 4 years. In fact, this is the case with many long-term power purchase contracts, where costs increase over time but the energy payments remain the same or decrease. However, in Sunray's case the problem is far more severe because its energy payments are extremely low. Sunray's current time-period weighted average electricity rate of approximately 3 cents/kWh is far below market and far below the energy price received by most other projects. This low energy price makes it very difficult for Sunray to pay for needed repairs, fuel, labor, employee costs, insurance, and the other ongoing costs of maintaining an aging physical plant.

The incentive payment received by Sunray under this program each year is a lifeline. These payments provide the only significant source of funds available to make long-term plant improvements and essential repairs to the SEGS I and II facilities.

Many existing contracts for renewable energy facilities in the State do not encourage maximum electricity production. The contracts may have relatively high capacity payments, which acted to encourage the initial development of the projects, but have very low energy rates and other punitive provisions that actually discourage electricity production above required levels. As a consequence of this unfortunate anomaly, the most beneficial role that the CEC program for existing renewable resources can play, and has played in the past, is to provide incentive payments to existing renewable facilities that have low energy price contracts. These payments provide existing renewable facilities with an economic incentive and ability to increase electricity production, make upgrades and maximize the efficiency of their facilities through technological innovations and improvements. This is certainly true in the case of Sunray, where the Commission's awards have provided the only significant source of funds available to make facility improvements that have directly led to additional generation and enhanced reliability at its two solar facilities. The last thing the CEC should do is discourage electricity production from existing renewable facilities that are already contributing to the State's energy resource base, have existing transmission facilities and interconnections, and are providing important environmental benefits to the State. In fact, using incentive payments to preserve and enhance electricity production from existing and proven renewable energy projects constitutes the State's "low hanging fruit" and should most certainly be given a high priority. In most cases these renewable resources are among the lowest priced renewable resources available to consumers and have a proven record of reliability.

2. Use of Incentive Payments

Sunray has used the incentive payments it receives from the CEC to make efficiency and reliability improvements at its two solar facilities. These improvements would not be economically feasible or financially possible absent these payments.

Sunray believes the equipment purchases and improvements it has made at its two solar facilities due to the CEC program have directly contributed to the goals of the CEC program, namely, to enhance the environmental value and reliability of the electrical system. Although SB 1250 speaks in terms of providing incentive awards to facilities providing environmental benefits <u>or</u> reliability benefits, the Sunray facilities provide both. Sunray's 44 MWs of installed solar thermal capacity not only helps improve the air quality of Southern California, by displacing fossil fuels, but also serves to provide reliable peak period electrical generation that is needed by Southern California consumers.

As a result of the CEC incentive payments, Sunray has been able to complete turbine overhauls, make vacuum pump repairs to help improve power block efficiency, make cooling tower and boiler repairs to improve efficiency, purchase computers and new software to control solar fields, purchase additional heat transfer fluid to help reduce solar field freezing in the winter, develop and purchase a mirror support system to reduce mirror breakage in the field, purchase test monitoring equipment to improve the solar field performance, and purchase a reverse osmosis unit to reduce water and chemical use. In 2006 and 2007, Sunray purchased mirrors and heat collection tubes for the first time in twenty years. Clearly, these CEC payments have been extremely helpful in keeping Sunray operational and in assuring that these facilities remain in operation.

3. The Target Price Cap Should be at Least 2 cents/kWh for the SEGS I and II Facilities

Option 1 assigns production incentive caps based upon contract type. Sunray supports this methodology and the proposed 2 cents/kWh cap for Tier 1 faculties. As discussed in the workshop, Sunray also supports a modified Option 5 program whereby the cap for solar thermal facilities is increased from 1.5 cents/kWh to 2 cents/kWh. Sunray believes that increasing the solar thermal production incentive cap from 1.5 cents/kWh to 2 cents/kWh will only impact the SEGS I and II facilities. As stated in the June 12, 2008 workshop, the CBEA supports the SEGS I and II facilities receiving a 2 cents/kWh production incentive cap. Sunray's current time-period weighted average electricity rate of approximately 3 cents per KWh is far below market and far below the energy price received by most other projects. This energy price is more than 50 percent less than the energy payments that are already recognized to be below market. Thus, an increase in the cap is fully warranted. With a 2 cents/kWh cap, the SEGS I and II facilities would still be well below the target price and below what most other, if not all, participants receive from the IOU *without* SB 1250 funds. Despite the fact that Sunray's energy payment is the lowest (or close to the lowest) of all participating existing facilities in this program, the SEGS I and II facilities have only received approximately 1 percent of all funds distributed to existing Tier 1 facilities (since inception of the program). Sunray believes the 2 cents/kWh cap is consistent with the intent of SB 1038, SB 1250 and the goals of the Energy Commission.

4. Sunray Endorses the CBEA Comments

Sunray also endorses the comments advanced by the CBEA and the biomass industry. It is essential that the CEC continue to support these existing renewable resources. Along with solar, these biomass facilities are cost-effective, reliable, have contributed to the State's energy base and environmental goals for many years. They also represent proven technologies, and make up a large share of the peak period renewable generating capacity in the State.

5. <u>Conclusion</u>

Sunray Energy has been a reliable supplier of solar power to the California energy market for the past twenty years. Several recent developments to the energy markets have provided challenges for SEGS I and II, but Sunray expects to meet those challenges and continue to supply renewable energy for years to come. Sunray is very appreciated of the support the CEC has provided throughout the years. We ask that the Commission provide the SEGS I and II facilities with a 2 cents/kWh production incentive cap.

Respectfully submitted,

Eric Wills
President
Sunray Energy