



California Energy Commission
Docket No. 07-SB-1
October 9, 2007

Dear Sir/Madam,

Regarding Docket No. 07-SB-1,

We understand that the broad goals of SB 1 and similar programs are to displace the need for conventional generating assets (e.g. natural gas plants, hydro, coal) by providing incentives to solar technologies. An ancillary goal has been to reduce the peak demand on the utility grid by displacing the requirement for peaking generators and infrastructure upgrades.

If this is true, then the proposed modifications to SB 1 which focus on 'generation' as opposed to 'offset' or 'displacement' are not in alignment with the primary goals of SB 1 or similar programs.

SB 1 should not differentiate between solar production of kWh on the consumer side of the meter and solar offset of kWh on the consumer side of the meter (i.e. where a solar water or space heater augments an electric heating system). ***From the vantage of the utility/infrastructure benefit they are both received as demand reduction measures and are indistinguishable, the benefit is identical.***

The argument may be made that, in the case of Solar Water Heating (SWH), the demand reduction may not be perfectly coincident with utility peak. However, a coincident peak reduction of 0.5 kW has been reliably demonstrated for residential SWH systems (Solar Ratings & Certification Corporation – October 2001). Further, both kWh and Time-Of-Use components can be characterized by an EPBB or PBI method in program implementation to account for this.

In the case of emerging technologies, Solar Thermal systems are even better aligned with demand than PV systems (e.g. they follow peak load at 2-3 PM and not solar peak at noon).

They can be directly coupled with thermal cooling systems (Absorption or Desiccant) to provide cooling capacity to structures which directly offsets peak AC loads. Since California is primarily an AC driven peak, these technologies offer the highest benefit of all solar technologies. Furthermore, such thermal cooling systems may be coupled with a storage component so that they are 'dispatchable' on peak.

In conclusion, we believe that since solar thermal technologies provide a similar or even enhanced benefit to the grid in relation to solar technologies with a direct generating component, they should not be excluded as participating measures in SB 1.

Thank you for the opportunity to comment,

Gordon Handelsman