## **Energy - Docket Optical System**

From: Sent: To: Cc: Subject: Francis Brandt [f.brandt@att.net] Tuesday, October 15, 2013 5:23 PM Korosec, Suzanne@Energy Green, Lynette@Energy 2013 Draft IERP



Dear MS Korocek,

I have skimmed the draft of 2013 IERP that was on the CEC website.. I am sure that you and all the many contributors are content with it.

Then I look at the words in the CEC document 2013 Integrated Energy Policy Report Scoping Order and I wonder if new IERP meets its scope. I think about all the workshop transcripts that I have waded through and wonder if the writers have taken note of what was being said.

Reliable energy: Speaker after speaker at the workshops point out that solar and wind are unreliable energy sources and that they will cause trouble when used to generate electricity for the grid. It is the policy of the state to use solar and wind to the maximum and back them up with gas fired generation. Is this good policy?

Solar is discussed in terms of watts. Unfortunately solar can generate the nameplate rating for about an hour a day. In a 24 hour period they can generate about 25% of the watt hours implied in their rating. A fossil fired unit of the same rating will deliver 4 times as much electricity to the grid. On a daily basis the grid must have sufficient capacity to meet peak loads at any time reliably and enough reliable generators must be available at all time to avoid blackouts. In a typical day the gas units will take all the grid load at sunrise and gradually will have to be shut down as the solar units start to function. At noon time the solar units might take all the load and then the gas units will gradually have to pick up the load until sunset when they take all the load. From an economic viewpoint the solar will earn about 25% of its keep and the gas units will be forced to give up a portion of their keep proportional to the state mandated ratio of solar to gas. Nowhere does the IERP explain this fact to its readers.

This will force up electric generating costs and in a normal situation all ratepayers would have their bills go up. As pointed out by workshop speakers CA has mandated rate structures so the large electricity users have to pay the higher rates but small users pay none. As pointed out this is an intolerable situation and the IERP should address it.

As I have pointed out over the years nuclear energy is the only practical way to generate reliable electricity without producing CO2. Instead of promoting this fact the IERP insists on finding ways to shut down the only plant operating.

The marvelous 6 significant figures the IERP prints for estimated electric and gas usage should be revised to a more reasonable 3. The crystal ball simply cannot predict usage to 6 figures.. This might seem like quibbling but it casts doubts on all predictions made by the CEC. I realize these are numbers provided by the utilities but someone should question this practice.

Somewhere in the scope it mentions the public should have input to the IERP. I realize that the workshops are open to all but in practice this does not happen.

Sincerely, Frank Brandt