

## **Ferguson: Energy Matters**

April 20, 2007

### **Market Forces Don't Make Decisions – People Do**

Governor Schwarzenegger has been touring the country as a global warming advocate. Meanwhile, I've been in Sacramento attempting to translate the rhetoric into meaningful actions.

AB 32—the state's global warming reduction law—sets the challenging goal to lower greenhouse gas emissions from the electricity industry to 1990 levels by 2020. To accomplish this goal, California's electric energy resources must change from a predominantly fossil-fueled system today to a mostly nonfossil system in a mere 13-plus years. The immensity of such a change in essential infrastructure can be mind-boggling.

Such changes don't happen with the stroke of a pen. To connect large amounts of new nonfossil energy resources to the grid will require hundreds of miles of new high-voltage transmission lines. Planning and construction of these power lines will take at least a decade. If these are to be functional by 2020, we have to get started immediately. The question is—where should they go?

The answer is that new power lines must connect the new nonfossil resources on which we will rely to substations on the existing grid. If we're going to meet the AB 32 deadline, we need to decide quickly what energy resources we will be using in 2020. How will this decision be made and by whom?

This is not a decision to be made by politicians. Nobody in the Legislature or the governor's office understands energy issues at this level of detail. Nor do they want to get into the business of "picking winners and losers." They prefer to leave that decision to "market forces."

However, market forces don't make such decisions—people do. In the case of electricity, these people are the ones running the utilities, both public and investor-owned. The decisions must be approved by the various regulatory bodies, but in the absence of new legislation, utilities make the calls.

Utilities must begin the energy resource decision-making process immediately. If decisions on energy resources to be on line by 2020 are not made within the next year or so, there simply will not be enough time to plan, permit, and construct the necessary transmission lines.

Judging from the current utility plans, utilities are not eager to begin this process. On my cynical days, it appears that the utilities would prefer *not* to expand transmission infrastructure in order to have an excuse to continue fossil business as usual. Let's hope this is not the case—if it is, AB 32 is doomed.

The commercially available nonfossil electric energy resources that can be developed in time to meet the AB 32 goals are solar, wind, geothermal, and perhaps biomass. Nuclear and hydroelectricity also avoid greenhouse gas emissions; they cannot possibly be expanded in the next decade or so. So the decisions boil down to which of the available resources will be developed, where that development should occur, in what amounts, and what is required to connect them to the grid.

Utilities cannot make these decisions in a vacuum. Solar power development in the eastern Mojave Desert, for example, will rely on new transmission in Southern California Edison service territory. But utilities all over the state have a vital interest in seeing this development proceed.

The decision on electric energy resources and transmission infrastructure must be made within the next 12 months or so if the AB 32 goals are to be met. There is no time for utilities or state agencies to go off and do their own things, as is their wont.

AB 32 is as close to a consensus policy on global warming as we can hope to have. The hard part is quickly translating the goals into action. This requires an unprecedented degree of collaboration between organizations sometimes better known for their prowess in turf wars than their ability to collaborate.

We all know that dealing with global warming requires significant changes—developing a collaborative approach to problem solving may be the most important one of all.

—*Dr. Rich Ferguson, Research Director, CEERT, rich@ceert.org.*

