From: Frank Vignola [fev@uoregon.edu]
Sent: Thursday, May 25, 2006 3:52 PM
To: Peter West
Cc: Kacia Brockman; John Reynolds
Subject: Long-term view of the regional energy mix

Dear Peter,

I mentioned the necessity to look at the long-term view of the regional energy mix when deciding how to best allocate Energy Trust funds. I am OK with the current pattern, but I see a trend to move away from solar and that is a concern for me.

There can be a day when the region gets all its energy from renewables. No one renewable option will dominate, but a mix of renewables will be necessary. (Of course energy efficiency and conservation will also have to play a big role.) The three big players will be hydro, wind, and solar. Geothermal in the region is not sustainable unless new technology is developed. Wave power has potential, but there are environmental considerations that must be addressed. I do think this is possible.

With solar, I not only see distributed generation, but large scale solar central facilities in Eastern Oregon. California and Nevada can do the preliminary work on this as they do have the better resource. However, in the long-run, large scale solar facilities will run up and down the west coast desert regions. This is one reason why we get funding from BPA.

A megawatt or two from solar is not a lot, but I foresee continued exponential grow in this area for a number of years. Waiting for a decent federal PV tax credit will really spur the industry. Another factor will be the need to address climate change, and sooner or latter this will happen. What the ETO is doing is helping set the foundation for a sound solar electric industry. It is very important to keep this going in a consistent manner. Passive solar, solar water heating, and daylighting are also part of the answer and I am not sure what it will take to get these technologies moving. It looks like the solar water heating industry should start to move rapidly.

Part of the problem is the industry itself. Complete systems that are easy to install are not readily available. Most systems are put together from many sources. This will change as the demand for systems grows. Already we are seeing products out in the market that will help facilitate installation.

To get to the main point: I really like the Portland proposal because it starts to address the complete picture of how to get a shaped load from renewables. I don't know how good a job they are doing with this, but this should be an area that is studied and aided by ETO. This area should be part of the dialogue and eventually methods that more properly shape the delivered energy should be given some priority in the evaluation process. This is a major part of the energy mix that has been overlooked up to now. Getting shaped supplies from renewables is not easy, but it must be done and progress in this area will benefit all renewables.

Best regards,

Frank Vignola

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