

Sunday, June 28, 2009 (file cac223)

To: Dan Breedon

Fr: Ed Miller

Subj: Water Consciousness, Carbon Legislation, Solar thermal, Windpower, Biofuels & Survival

Ref A: T. Lohan editor of essays, Water Consciousness, How we all have to change to protect our most critical resource, Independent Media 2008 (www.watershedmedia.org)

Ref B: Editorial, Perspectives on carbon legislation, SolarToday July/Aug 09, p 8

Ref C: World's largest geothermal tower system, SolarToday July/Aug 09, P16

Ref D: M. Zagrillo, Zoning for wind power systems, SolarToday July/Aug 09, p 40

Ref E: S. Masia, Solar tracking, SolarToday July/Aug 09, p 48

Ref F: C. Werner, Resolving the Biofuels Dilemma, SolarToday July/Aug 09, pp38-42

Ref G: B. Angier, How to stay alive in the woods, Black Dog and Leventhal Pub 84

Highlights and comments:

1. Ref A examines per capita community water budgets and technology solutions. The Lloyd's Crossing area of Portland is a good case study that we may want to emulate in Butte County.
2. The ASES policy position on carbon legislation that is a hot topic currently in Washington needs to be reviewed per Ref B.
 - a. A price/charge needs to be collected from all carbon sources
 - b. Collection should occur upstream where carbon enters the economy.
 - c. Carbon charges should generate 100% revenue (No free allocations for current polluters). E.g. carbon capture that adds to the cost of a resource and creates no new jobs or wealth would not be a high priority.
3. Ref C examines the Spanish 20 Mw solar thermal installation consisting of 1255 heliostats. It would be of interest to compare costs and impacts for this system in contrast to parabolic/Fresnel solar, concentrated PV and other renewable energy sources in Butte County sharing electrical transmission line right of ways or similar minimal cost installations.
4. Ref D should calm the fears of bird lovers by noting small bird losses from wind generators relative to fixed structures.
5. Ref E continues the examination of single axis control PV arrays that I had previously reviewed for the Manteca installation.
6. Ref F examines the potential for biofuels that effects Butte County generation of fuels from biomass.
7. Ref G examines the approaches to survival that are unique to a given area.