Posted on Fri, Aug. 20, 2004

Solar initiative has a dark side

IT'S EXPENSIVE AND UNFAIR TO NON-USERS

By Severin Borenstein

Can a self-respecting environmentalist oppose the new initiative to spread solar power across California? Sure, once you realize that power from solar photovoltaic cells is far more expensive than other renewable energy sources and that this initiative will cost much more than the sponsors have suggested.

If it goes into effect, the California Environmental Protection Agency's ``Million Solar Homes Initiative'' -- which proposes to subsidize installation of solar panels mostly on new homes -- will become the far-right's poster child for wasteful government mandates and subsidies that do little to benefit the environment.

Solar power is a great idea, but it remains an extremely expensive technology. It is three to five times more costly than conventional electricity, and also wind power.

The most cost-effective ``renewable power" is still energy efficiency, reducing electricity use while getting the same comfort, lighting or other services by, for instance, improving insulation, increasing air-conditioner efficiency, or getting the same light output from lower wattage bulbs. California still has plenty of cost-effective energy efficiency left to capture.

The initiative's subsidy for solar photovoltaic would be much greater than the direct payments of \$1 billion over 10 years. If the plan is passed, it will allow owners of solar homes to evade their share of the multibillion-dollar costs left over from the 2000-2001 electricity crisis, shifting those costs to customers who don't install the panels.

This cost shift will occur because the majority of the retail bill we pay these days does not reflect the current cost of power generation. The residual costs of the electricity crisis are being collected through retail electricity prices that are well above the cost of generating and delivering power. All of those costs have to be paid, so if one customer doesn't pay, another has to.

Solar photovoltaic, by reducing consumption from the grid, gives these customers not only a justifiable savings from reducing power costs, but also a savings from shirking their share of the power crisis costs.

Worse yet, as the result of a program called net metering, when solar PV customers generate more power than they consume, they can sell back to the grid at the full retail rate. In other words, other customers have to pay to the netmetered solar PV owner a price that is way above the true cost of power, a price that was set that high in order to recover the costs of the power crisis.

Unfortunately, some of the initiative's supporters are not just ignoring the cost shifting, but are claiming these as ``savings' from solar photovoltaic. Forcing me to pay my neighbor's share of the power crisis costs is not a savings.

And no one is claiming that these subsidies are going to benefit low-income households or renters. The wealthy and upper middle-class will be buying the new double-subsidized solar homes.

Renewable power and energy efficiency must play a major role in the state's energy plan. But in these times of tight government and household budgets, controlling costs has to be a high priority too. Solar PV is the least cost-effective form of renewable power.

It is a great technology in theory, and we should be investing in research and development to get it to the point that it is practical. But the *current* technology is nowhere close to being cost competitive.

This initiative would shift the costs of the electricity crisis to other customers while subsidizing a technology that isn't ready to be rolled out on a commercial scale.

SEVERIN BORENSTEIN is a professor at UC-Berkeley's Haas School of Business and director of the UC Energy Institute, a

non-partisan, publicly funded research institute. He wrote this column for the Mercury News.

The Million Solar Homes Initiative is part of Senate Bill 1652 sponsored by Sen. Kevin Murray, D-Culver City. For the full text, go to www.sen.ca.gov on the Web, go to Legislation and type in the bill number.