

# BOB DOPPELT: Utilities are wise to prepare for effects of climate change

By Bob Doppelt

For The Register-Guard

Appeared in print: **Sunday**, Nov 22, 2009

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Opinion: Editorials & Letters: Story

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The power in our neighborhood was shut off for repairs a few weeks ago. It happened late at night, and other than having to reset the clocks we suffered no discomfort. But the event reminded me of how dependent we are on electricity. This is a concern because a new report says that global warming poses significant risks to power systems worldwide, though few utilities are doing much about it. I wondered if our local utilities were preparing for global warming, so I asked them. Their responses were enlightening.

First, a little background. The study, by the British company Acclimatise and IBM, analyzed 219 utilities' responses to the Carbon Disclosure Project. The CDP annually collects and distributes information to investors, governments and corporations describing the greenhouse gas emissions and global warming strategies of more than 2,000 companies in 66 nations.

More than 90 percent of the utilities acknowledged that they faced risks from global warming due to reduced water availability, increased power outages, higher costs and rising energy demand from the growing use of electric vehicles and summer air conditioning. Fewer than a third of them, however, said they had analyzed their physical or financial exposure to these risks.

The local utilities I queried mirrored these findings. Only a few are doing anything special to prepare for global warming.

The Eugene Water & Electric Board is one of the exceptions. The EWEB board ratified a climate change policy in 2007 that was updated a year ago. It recognizes the need to reduce carbon emissions and to prepare to adapt to the effects of global warming.

General Manager Randy Berggren and his staff told me the policy came about, in part, due to the benefits the utility experienced by including global warming in its deliberations during a "perfect storm" a few years back that threatened EWEB's financial viability. The tempest came in 2004-05 when a multiyear drought occurred just as the Enron debacle dramatically increased the price of electricity. Revenues were falling short of projections.

Although many issues were debated, Berggren said the discussion of future climate risks served as a "tipping point" that led the utility to decide to alter its assumptions and practices. Because stream flows, and thus hydropower, are likely to diminish as it warms while summer power demand rises, EWEB adopted more conservative revenue projections. The utility also chose to develop new forecasting tools. The result was a multimillion dollar surplus that helped the utility build a substantial reserve fund. The reserve provides "tremendous flexibility," allowing EWEB to endure several dry years while also helping low-income and unemployed residents pay their utility bills.

Among other positive outcomes prompted by the consideration of global warming is a study of how surface and groundwater availability, and thus the municipal water supply and hydropower generation, might be affected in the McKenzie River basin.

Emerald People's Utility District also takes global warming seriously. The board formally engaged in the issue two years ago by passing a resolution acknowledging that "climate change is a serious problem." The next step, EPUD General Manager Frank Lambe told me, was to determine how the utility would manage its carbon footprint. The board ultimately decided that future power purchases exceeding those in 2007 would be acquired through conservation, renewable energy or carbon offsets.

EPUD is now assessing the likely consequences of climate change for its customers. For example, the utility is acquiring more solar, wind and other renewables as a hedge against the likelihood of reduced stream flows and summer hydropower in the future. Lambe also is grappling with how to respond to a rapid increase in electric vehicles that he believes "will be a huge threat to our electric system."

In contrast, preparation for global warming does not appear to be an explicit element of the decision-making process at Lane Electric Coop, Springfield Utility Board or Blachly-Lane Coop. Although they have green power and energy efficiency programs, none of these utilities has an official global warming

policy, and all say their existing systems improvements or risk management plans can handle potential impacts. They may be right.

The authors of the CDP study, however, suggest more is needed. Acclimatise CEO John Firth said in a news release, “The successful electricity companies of the future ... will have a fully integrated approach to the challenges of the energy revolution, reducing emissions and adapting to inevitable climatic change.”

EWEB’s Berggren agreed. He told me, “Through hook or crook all utilities will be forced to deal with global warming. They must begin to get more renewables into their portfolio, to reduce their carbon footprint, and all utilities should adapt more conservative assumptions about revenue. These and other steps will help them avoid problems down the road.”

This seems like the type of prudent risk management that electricity consumers should expect from their utilities.

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