

Another book for the shelf

Posted by Heading Out on December 12, 2005 - 2:39pm

Topic: Alternative energy

Tags: jeremy leggett, new england [list all tags]

You may not have noticed, but different classes of people have different levels of worth to our society, and to those who seek to influence policy. I think that this was brought home to me anew by reading Jeremy Leggett's new book The Empty Tank - Oil, Gas, Hot Air and The Coming Global Financial Catastrophe. In seeking to create a sense of the coming crisis he writes (page 62)

In Finland, a somewhat colder country than Britain, the toll of people freezing to death in their own homes in a typical year is precisely zero. The annual toll from hypothermia deaths in British homes, on average, approaches 50,000. Tens of thousands of grans and granddads dying who wouldn't have died if they lived in the land of Father Christmas with a little insulation in their homes!

Now I am not sure where he got that number, a quick Google search led me to a <u>site</u> that gives the total hypothermia deaths in the USA in 1999 as 598, with it being a contributing cause in 1,139. These numbers are considered, however, to be considerably <u>under-reported</u>. In either case it raises a level of concern. There is a long article in <u>US News and World Report</u> that brings this situation home to the United States. There has been an increasing trend to fuel new construction of power stations with oil and natural gas. However, as the article points out, there is no mandate that a company use that fuel to generate power.

Deregulated natural-gas-fired power generators, under no legal obligation to serve customers as the old monopoly electric companies were, can simply stop generating power. Some plants will be interruptible customers with no backup fuel source. But in other cases, power plants that have firm natural gas contracts will stop generating electricity anyway and sell their fuel at enormous profit. That is precisely what happened during the three-day January 2004 cold snap, when more than 25 percent of New England's generating capacity went off line and the reserve margin was near zero.

In other words you install electric heating, thinking this is more reliable than gas, but the company that supplies you with electricity uses natural gas to generate the current. When the winter gets cold, they shut the plant and sell the gas, and lo! No power! And no level of social concern with the result. But actually it may not be up to the power company

While the Big Chill will hit low-income households the hardest, no one may be immune if the weather turns foul. New England and perhaps all of the Northeast, including New York City, are a special worry. Gas companies grant big price breaks to customers year-round if they agree to have their service cut when supplies are short. Chances are great

these discount customers will be shut down this winter, and they include manufacturers, some schools and hospitals, and, ominously, about 77 percent of New England's gas-fired electric power generation, which requires large quantities of fuel.

In discussing this problem at the Denver World Oil Conference, it was pointed out that the normal method of dealing with the cost of winter fuel, is for federal & state agencies and municipalities to provide a series of grants to those who could not otherwise afford heat. But given the increasing levels of support that will be required, as fuel costs increase, an alternate solution needs to be found. It becomes potentially much more cost efficient to put more of an effort into refurbishing homes with greater insulation, to reduce the heating bill, and to look at permanent solutions to resolving the costs of higher fuel bills, other than the band-aid of giving grants that, increasingly, will not cover even the increase in fuel costs for a season, let along the total cost.

My opening sentence was not, however, meant to apply just to this situation, serious enough though that is. But I wanted to expand that thought further into looking at how, in the future, supplies of energy will help resolve some of these issues. And this is where I have a concern with those who follow Dr. Leggett's thinking. (He is a top campaigner for Greenpeace International and espouses photovoltaic solutions to the growing energy crisis - pointing out that such technology could replace, for example, the current power supplied by nuclear energy in the UK). There is a coming critical need that a significant part of the world will face if it is to feed and warm itself during the years to come. Regardless of where the final sustainable energy supply comes from, there is a transition period between now and then of likely at least 20 years.

Those who would dismantle existing power generation systems, particularly nuclear, should, if they wish to be considered other than heartless barbarians, suggest a much more realistic transition than I found in "The Empty Tank." The first half of the book cogently describes how we got to where we are today. And for that reason it will stay in the reachable part of the bookshelf. However I found the second half, dealing with solving the problem, much less persuasive or realistic in addressing the overall needs that must be addressed, particularly in regard to the size of the problem that must be answered. Much though Dr Leggett would, understandably wish to see the photo-voltaic industry portion grow, the risks of hypothermia in winter suggest a more comprehensive view of supply needs to be provided.

Finland, incidentally gets its natural gas from <u>Western Siberia</u> does a considerable amount of cogeneration and relies on district heating more than most countries.

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