## THE ENERGY BOX

## SIERRA CLUB IS ADVOCATING IMPORTED LNG

hey do not say it that way, of course. It is one of those irksome and unintended outcomes. For sure, the Serra Club, as one of the leading environmental activist organizations, has done many positive things for the environment. But, maybe they are too

sured by the delay in coal-fired power plant construction. DOE graphic summarizes the current trend, or lack of one, in capacity additions of coal-fired power plants (Figure 1):

At the same time, the North American Electric Reliability Corporation (NERC)

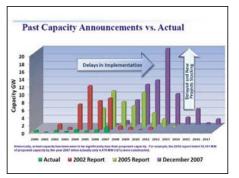
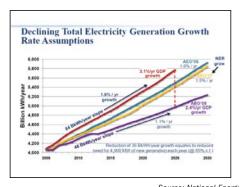


Figure 1: Past capacity announcements vs. actual



Source: National Energy Technology Laboratory

Figure 3: Declining growth in long-term electricity demand and U.S. GDP

busy to notice or cannot put two and two together because they are too busy breaking their arms, patting themselves on the back for "thwarting the coal rush" or "poking holes in coal," and otherwise beating up on "dirty coal." Their efforts are pushing the U.S. toward yet another imported fossil fuel addiction — Liquified Natural Gas (LNG).

It is working. The U.S. Department of Energy (DOE) published its updated "Tracking New Coal-Fired Power Plant" report on February 18, 2008 that supports the Sierra Club's success, as mea-

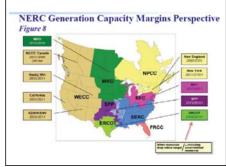


Figure 2: 135 GW increase in summer peak capacity required by 2016

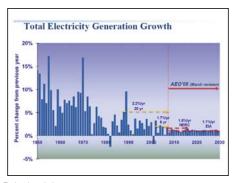


Figure 4: Forecast for generation growth is well below recent averages

has published its forecast of reserve margins that indicate New England, Texas and all of the West Coast will fall below their reserve requirements by 2009 (Figure 2). 2009 is next year!

Embedded in these projections is a demand growth forecast, where a significant disagreement exists between the NERC forecast and that of the 2008 Annual Energy Outlook. We are currently building to support the lower forecast at 1.1%/year GDP growth. Figure 3 indicates a number of different forecasts made over time, including the 2008

Annual Energy Outlook. This results in a 4,900 MW per year reduction in new capacity addition or 10 fewer 500-MW power plants per year.

The growth in new generation has also fallen below recent averages (Figure 4), raising concerns over the potential for a significant under-forecasting of future demand.

There are differences of opinion on whether the lower demand forecast is real or imagined, but the demand forecast uncertainty adds to the ongoing regulatory uncertainty created by climate change, the continuing escalation in construction costs, and the greater lead time required to add capacity. It takes seven to eight years to build a new coal-fired power plant, and we are not building hydro or nuclear plants.

When, not if, but when we run short of generating capacity, the only option will be to increase the use of natural gas-fired capacity to fill incremental demand. This will put additional demands on the declining North American gas resource and inevitably lead us to significant increased requirement for imported LNG.

Of course, we are not really building LNG terminals either. This could create an entirely different scenario, where the U.S. is seen as lacking a reliable energy infrastructure and the inevitable economic decline that would follow.

It is still all about the fuel, stupid! If we are going to commit to LNG, by choice or by default, we need to build the infrastructure to support that commitment. We cannot sustain our economy in a competitive world if we are against everything.

## Author

Peter Baldwin is an industry consultant (www.base-e.net) and former executive of Ingersoll-Rand Company's Northern Research and Engineering Corp. (NREC) subsidiary. Reach him at pete\_baldwin@base-e.net.

