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Article in Question:

[This is an example of a well-balanced, well-written article]

Hot Air and Wind

A National Renewable Power Requirement.

December 20, 2007

By Robert J. Michaels

The House of Representatives passed an energy-independence bill two weeks ago intended to make America more secure. Last week, the Senate rejected a provision in the bill establishing a “renewable portfolio standard” requiring all investor-owned utilities (but not municipal systems and rural cooperatives) to obtain 2.75 percent of their power from renewable sources by 2010 and 15 percent by 2020.

[This is a simple statement of fact. No embellishments pro or con have been given.]

A renewable portfolio standard is irrelevant to promises of energy independence and security. Over 95 percent of our power comes from domestic or nearby sources: coal (49 percent), gas (20 percent), uranium (20 percent), and water (7 percent). None of these resources is insecure or held hostage by foreign actors.

[Again, this is a simple statement of fact, backed up with the common statistics.]

Nor will the RPS advance “renewable energy” writ large. It will, in effect, be a wind-energy requirement. Wind’s technology is advancing, and it offers investors accelerated depreciation and a 1.9-cent per kilowatt-hour federal tax credit (extended to some other renewables in 2005). By contrast, solar energy remains uneconomic in most applications. Geothermal resources are regionally restricted and large enough to attract complaints from environmentalists in the permitting process. Biomass burners look like fossil-fueled plants, emit the same pollutants, and are sited under the same stringent standards.

[One of the criticisms of nuclear power is that the government subsidizes it. Proponents of wind, solar, and biofuels usually fail to mention that these industries are also heavily subsidized. Proponents of coal and biofuels also usually do not mention that these fuels also emit carbon dioxide, a greenhouse gas.]

Wind's aesthetics and economics have changed. Bucolic images of windmills are fading as noisy newer models top 400 feet, and public resistance keeps states like Massachusetts from meeting their own renewable energy quotas. According to the U.S. Energy Information Administration, wind's costs per kilowatt-hour hit bottom in 2002 and have since increased by 60 percent. In 2004, the levelized cost of a coal-fired kilowatt hour was 3.53 cents, compared to 4.31 cents for nuclear, 5.47 for gas and 5.7 for wind. According to a study by Gilbert Metcalf of Tufts University for the National Bureau of Economic Research, removing subsidies to nuclear and wind power takes the former to 5.94 cents and the latter to 6.64.

[It is interesting to note that many of the same groups that want solar and wind energy to be the principal energy source in the United States are unwilling to have those facilities located in areas where they live.]

Wind's seeming competitiveness does not reflect its dependability. Geothermal and biomass can be dispatched to deliver energy when it is needed, but wind turbines require moving air to produce their power. Avoiding blackouts requires production and demand on an electrical grid be equal every second, so operators need gas-fired "load-following" generators that can adjust instantly. If wind exceeds 10 percent of a system's capacity, the costs of maintaining reliability increase disproportionately and interconnection charges may not cover them. An outage of a conventional generator will most likely be an isolated incident that does not affect the operation of other ones. Wind is more likely to stop blowing without warning over an entire region, so protecting wind turbines requires larger percentages of reserves.

Moreover, wind is least available when it would be most valuable. During the five highest load hours of 2006, California's 2,300 megawatts of wind energy generating capacity produced only 12.2 percent of their nominal capacities. For planning purposes, Texas lists a wind unit's "effective capacity" as 8.7 percent of its nameplate value.

[Here the author discusses the limits of wind energy using facts, not speculation. Proponents often fail to discuss the limitations of wind energy. The following discusses the environmental and other impacts of using renewable energy, something that is typically not discussed by its proponents.]

Renewables may be costly, but RPS advocates see both environmental and industrial benefits. Those benefits, however, come at a higher price than necessary. An RPS reverses decades of improvement in environmental regulation, where cap-and-trade markets have replaced command regimes and regulators set allowable emissions by comparing costs and benefits. Instead, it forces the use of politically favored technologies rather than allowing market participants to choose their own methods of environmental compliance.

Utilities are investing in relatively few renewables because they can better comply with future emissions standards by building conventional generators equipped with newer control technologies. Some experts even believe that a combination of nuclear energy and carbon sequestration (extraction and underground storage of CO₂ from the plant's stack gases) can

control greenhouse gas emissions more cheaply than renewables. The government can set carbon-reduction goals, but the market should determine the best ways of meeting them.

Nor is there any logic for a national RPS, particularly when over half the states already have their own. By any standard, renewables are a viable industry. They trade worldwide and international competition has improved their quality. Renewables have become a popular industry for venture capitalists, and corporate giants like General Electric, Wal-Mart, and Google have joined them.

Nor do renewables “create jobs.” The fact that constructing and operating renewable facilities requires more labor than conventional ones is a reason to prefer conventional technologies over renewables. Most economists would agree that today’s economy comes close to meeting their definition of “full employment.” Workers in the renewable industry are paid with funds that the public cannot spend on other goods.

An RPS impacts both regional power and electric power. Wind-poor (and coal-abundant) regions like the southeast may only be able to comply by purchasing credits from producers in other states. And the bill may disadvantage those buyers, because it has no provisions covering the delivery of sporadically available power that has to travel long distances. A national RPS allows pro-renewable states to raise the costs of doing business in states that prefer conventional power.

Finally, an RPS alters the balance between federal and state government by requiring state regulators to pass on the costs of plants built for federal compliance. Determining prudent investment has hitherto been exclusively a state activity, but the RPS shifts important retail regulatory decisions to Washington. States get nothing in return.

Anyone who supports sound environmental policy and competitive energy markets should applaud the RPS’s temporary demise. A national RPS is largely a transfer of wealth from electricity consumers to an already-subsidized wind power industry. The public at large pays the bill.

It is understandable that renewable-energy interests support a law that requires utilities to buy escalating amounts of power from them regardless of price. The mystery is why anyone else thinks it’s a good idea.

[This is obviously an opinion of the author, but his reasoning is backed up with earlier stated factual statements.]

— *Robert Michaels is a professor of economics at California State University, Fullerton, and an adjunct scholar at the Cato Institute.*