False claims that "wind farms" provide large economic and job benefits

One would think that by now Obama Administration officials would admit that "wind farms" do not provide large economic and job benefits. However, recent Administration statements suggest the delusion continues and, perhaps, that officials do not understand why their expectations are unrealistic.

False expectations may be due to the infamous "JEDI" model (Jobs and Economic Development Impact model) developed for DOE's National Renewable Energy "Laboratory" (NREL) by a wind industry consultant-lobbyist. Unfortunately, this "model" (paid for with our tax dollars) has been widely promoted by NREL and DOE and outputs from the model are used by "wind farm" developers to mislead the public, media, and government officials.

Economic models often produce false or misleading outputs because (a) the model itself is faulty, and/or (b) unrealistic assumptions are "fed into" to model, with the result that the models overstate national, state, and/or local job and other economic benefits. In the case of wind energy models, basic flaws and faulty assumptions often include one or more of the following:

- 1. Ignoring the fact that much of the capital cost of "wind farms" is for equipment purchased elsewhere, often imported from other countries. Some wind energy advocates claim that wind turbines are "manufactured" in the US when, in fact, they are merely assembled in the US using imported parts and components. About 75% of the capital cost of "wind farms" is for turbines, turbine parts and components, towers and blades so a large share of the "wind farm" cost is for imports. These add to the outflow of wealth from the US and provide no economic or job benefits in the US.
- 2. Assuming that employment during project construction results in new jobs for local workers -- when most "wind farm" construction jobs are short term (6 months or less) and the overwhelming share of them are filled by specialized workers who are brought in temporarily.
- 3. Assuming that the very few permanent "wind farm" jobs are new jobs filled by local workers when, in fact, these few permanent jobs are often filled by people brought in for short periods. Some "wind farm" owners contracts with suppliers of wind turbines and other equipment for maintenance work with the result that no "new" jobs for local workers are added.
- 4. Assuming that temporary workers who are brought in for short periods live and spend their pay checks -- and pay taxes -- locally when, in fact, these workers spend most of their wages where they and their families have permanent residences -- where the workers spend most of their weekends and where they pay nearly all of their taxes.
- 5. Assuming that the *full purchase price* of the goods and services purchased locally (often minimal in any case) has a local economic benefit. In fact, only the local *value added* may have a local economic benefit. This truth is illustrated by the purchase of a gallon of gasoline -- let's say for \$3.00. Only the wages of the service station employees, the dealer's margin, and the taxes paid locally or to the state mayl have a local or state economic benefit. Economic benefits associated with the share of the \$3.00 that pays for the crude oil (much of it imported), refining, wholesaling, and transportation generally flows elsewhere.
- 6. Assuming that land rental payments to land owners for allowing wind turbines all have local economic benefit. In fact, these payments will have little or no local economic benefit when the payments are to

- absentee landowners OR if the money is *spent* or *invested* elsewhere or is used to pay income taxes that flow to Washington DC or state capitals.
- 7. Using "input-output" models that spit out "indirect" job and other economic benefits that, in effect, magnify (a) all of the overestimates identified above, and (b) use unproven formula and data to calculate alleged "multiplier" effects.
- 8. Ignoring the environmental and economic COSTS imposed by "wind farm" development, which include (a) environmental, ecological, and economic costs associated with the production of the equipment, and constructing and operating the "wind farm" (e.g., site and road clearing, (b) wildlife habitat destruction, noise, bird and bat kills and interference with migration and refuges, (c) scenic impairment, (d) neighboring property value impairment, and (e) infrastructure costs.
- 9. Ignoring the fact that electricity produced from wind turbines, has less real value than electricity from reliable generating units -- because that output is intermittent, volatile and unreliable. Also, the electricity is most likely to be produced at night in colder months, not on hot weekday late afternoons in July and August when demand is high and the economic value of electricity is high.
- 10. Ignoring the "backup power" costs; i.e., the added cost resulting from having to keep reliable generating units immediately available (often running at less than peak efficiency) to keep electric grids in balance when those grids have to accept intermittent, volatile and unreliable output from "wind farms."
- 11. Ignoring the fact that electricity from "wind farms" in remote areas generally results in high unit costs of transmission due to (a) the need to add transmission capacity, (b) the environmental, scenic and property value costs associated with transmission lines, (c) the electric transmission "line losses" (i.e., electricity produced by generating units but lost during transmission and never reaches customers or serves a useful purpose), and (d) inefficient use of transmission capacity because "wind farms" output is intermittent and unpredictable and seldom at the capacity of the transmission line that must be built to serve the "wind farm."
- 12. Ignoring the fact that the higher true cost of the electricity from wind is passed along to ordinary electric customers and taxpayers via electric bills and tax bills which means that people who bear the costs have less money to spend on other needs (food, clothing, shelter, education, medical care -- or hundreds of other things normally purchased in local stores), thus *reducing* the jobs associated with that spending and undermining local economies that would benefit from supplying these needs.
- 13. Perhaps most important, ignoring the fact that the investment dollars going to "renewable" energy sources would otherwise be available for investment for other purposes that would produce greater economic benefits. "Wind farms" have very high capital costs and relatively low operating costs compared to generating units using traditional energy sources. They also create far fewer jobs, particularly long-term jobs, and far fewer local economic benefits. "Wind farms" are simply a poor choice if the goals are to create jobs, add local economic benefits, or hold down electric bills.

Glenn R. Schleede 18220 Turnberry Drive Round Hill, VA 20141-2574 540-338-9958