

Comments re PTC for the Energy Tax Reform Working Group

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The technology for generating energy from the wind is generally regarded as mature, with little further improvement expected in either efficiency of production or in cost reduction by manufacture in quantity. This leaves little room for improvement by federal subsidization such as a continued PTC, which would be justified only if it resulted in a net benefit to society. Therefore a hard-headed examination of the cost/benefit ratio of wind power is called for.

As studies of the benefits of generating wind energy for electric grids have gotten more inclusive, the results have become less encouraging. As of now, it would be hard to find an electric utility, anywhere, that would add windmills to its grid without either heavy subsidization (such as a PTC), or coercion—as in the form of an unfunded mandate to accept the wind-produced kilowatt-hours when they are available.

As stewards of the taxpayers' money, it would seem incumbent on the Ways and Means Committee to sponsor a definitive, truly comprehensive, expert study of the economic and environmental effects of adding wind power to electric grids. The all-important number is the *cost per kWe-hr* of the energy as delivered *at the point of use, averaged over a typical year, all things considered.*

Among the often-neglected but important factors that influence the overall cost are the following:

- Averaged over a year, a fleet of wind farms provides only some 20% - 30% of its nameplate capacity. And since the wind is unpredictable there has to be backup by reliable, fast-acting sources of power (such as natural-gas plants) to supply the other 70% - 80% of the energy. For a realistic overall estimate, the cost of the extra capital investment due to the duplication of generating capacity must be included.
- Widespread expansion and upgrade of the transmission network would be needed, giving it the capacity to handle the maximum anticipated load (a capacity that would be seriously under-utilized when the wind is not blowing at its optimal speed). The extra cost of such a system, compared with what would be needed with reliable, more-local energy sources, must be included as well.
- Also important, if hard to quantify, is the cost to society due to environmental intangibles, such as despoliation of landscape, loss of forest or productive farm land, and CO2 emitted in such activities as highway construction and producing the required large amount of concrete per kWe of average capacity.

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