

## Biased EIA Report on “Renewable Energy” Policies

Usually, the Energy Information Administration (EIA) is the only organization in the US Department of Energy (DOE) that can be counted on to provide *objective* energy information. EIA has done quite well in *sticking with data and objective analysis* while avoiding promotion of particular energy policies.

Unfortunately, a new report from EIA, “Policies to Promote Non-hydro Renewable Energy in the United States and Selected Countries,”<sup>1</sup> is an exception. Hopefully, it is not a sign of a new direction for EIA that will surely undermine its credibility.

In summary, the report strays from EIA’s usual objectivity in several ways; specifically, it:

- Proceeds from an implied assumption that use of “renewable energy” is beneficial.
- Reflects a preference for renewable *policies* and “political commitment” in Germany and Denmark over those in the US.<sup>2</sup>
- Underplays the role of renewables in the high cost of electricity.
- Overstates the role that wind plays in supplying electricity requirements in Denmark.
- Ignores adverse impacts of wind energy on environmental, ecological, and scenic values.
- Fails to report that electricity from wind turbines has added to grid management burden and requires costly additions to electric transmission capacity.
- Ignores big existing federal and state tax breaks for wind energy in the US when criticizing US renewable energy policies.

In more detail, the report:

1. *Assumes benefits, ignores costs.* The report focuses on policies that “most effectively increase non-hydro renewable generation”<sup>3</sup> in Denmark, Germany, Netherlands and Japan. It proceeds with the implied assumption that those policies produced only benefits when, in fact, those policies – at least in the case of energy from wind -- have had significant adverse environmental, ecological, scenic, energy and economic impacts, have caused problems for electricity grids, and have resulted in higher monthly bills for electric customers.
2. *Largely ignores the impact of heavily subsidized renewables on electricity prices in Denmark and Germany.* The report notes that these countries tend to have higher electricity prices<sup>4</sup> than the US. However, the report fails to note the heavy contribution of “renewable” generation policies to those high prices or that household electricity prices in Denmark and Germany are among the highest in the world. According to the latest data available from EIA, Denmark’s household prices in 2003 were more than double those in the US and in 2002 Germany’s prices were about 50% higher than the US.<sup>5</sup> Prices in Germany apparently have increased significantly since 2002. The new EIA report does not disclose that Denmark has found it necessary to change its high cost subsidy policies or that the German government is under strong pressure to reduce the high cost of its renewable energy policies.
3. *Mischaracterizes the role of wind energy generation in Denmark.* The report notes that “...21 percent of the electricity generated in Denmark was from wind power during 2003,” but fails to note that most of that wind-generated electricity was produced at a time that it

could not be used in Denmark. Apparently, "...about 84% of the wind power was surplus to local demand ...and had to be exported to the much larger power systems of Norway, Sweden and/or Germany, primarily to maintain stability of frequency and voltage in the Danish grid. This implies that over the period of 2003 under 4% of the region's demand for electrical power was directly provided by wind resources, the bulk of requirements being met by carbon-emitting central and local CHP generators, some of which operated sub-optimally as backup for the wind power for much of the time."<sup>6</sup>

4. *Fails to note the impact of wind generation on Denmark's electric system and costs.* Apparently the intermittence and wide fluctuations in output from wind generators, as wind conditions change, has burdened grid system controllers. Further, it appears that the large share of wind generated electricity that was surplus to western Denmark's requirements had to be "dumped" on surrounding grids at very low prices, and electricity had to be purchased from surrounding grids at higher cost when electricity was needed to meet Danish demand.<sup>7</sup> Thus, Danish electric customers bear the cost of Denmark's subsidies for renewable energy and, in addition, the high cost of electricity that must be imported.
5. *Fails to mention added burden on grid management and need for added transmission capacity to accommodate wind generation.* The report fails to acknowledge the impact that intermittent, highly volatile and largely unpredictable output from wind turbines has on electric grid management and on transmission capacity. Further the report fails to note that heavy reliance on wind energy in Denmark and Germany has forced, and is continuing to force, utilities in both countries to spend heavily to increase the availability of reliable generating capacity to backup unreliable wind generation, to increase transmission capacity and adjust to more rigorous grid management responsibilities because of the heavy reliance on wind energy.<sup>8</sup>
6. *When discussing US renewable incentives, fails to mention federal and state accelerated depreciation.* In the US, "wind farm" owners benefit significantly from the use of 5-year double declining balance accelerated depreciation for tax purposes. This tax break permits "wind farm" owners to deduct from otherwise taxable income 20% of capital cost during the tax year in which wind turbines begin production, 32% in the second year and the remaining 48% in the ensuing 4 tax years.<sup>9</sup> The potential reduction in the "wind farm" owner's current year tax liability is equal to the deduction times the company's marginal tax rate (usually 35%). Furthermore, this deduction carries through and reduces state corporate income tax liability in a similar way.

Almost certainly, these exceedingly generous accelerated depreciation tax benefits were a major factor in the FPL Group's (parent of Florida Power & Light Co. and FPL Energy, the largest US owner of wind generating capacity) ability to pay NO federal corporate income tax in 2002 or 2003 on net income exceeding \$2 billion.<sup>10</sup> According to Citizens for Tax Justice, FPL Group enjoyed accelerated depreciation of \$1.276 billion in 2002 and 2003.<sup>11</sup>

7. *Fails to note recent information indicating that renewables are not effective in meeting Kyoto targets.* While citing the German and Danish objectives of reducing carbon dioxide emissions, the report fails to note that recent data question the effectiveness of renewables in this objective. For example, a recent report by the Oxford Institute for Energy Studies

indicates that, in Europe, “Renewables, even on the most optimistic assumptions, have only a minor impact despite their prominence in the public debate.”<sup>12</sup>

8. *Greatly understates the growing opposition to “renewables,” particularly “wind energy.”* The report devotes four short paragraphs to the “Opposition” to governments’ renewable energy policies. In fact, opposition to “wind farms” has grown substantially during the past 2 years. Some 200 citizen-led opposition groups have sprung up in countries around the world where “wind farms” have been built or proposed. The “main stream” media are only now beginning to catch up with the fact that there are valid and strong reasons for opposition to wind energy and other renewables.

The opposition to wind energy goes beyond the high cost and adverse economic impacts. For example, among the adverse environmental and ecological impacts causing complaints and growing citizen opposition include bird kills; interference with bird migration patterns; disruption of natural areas, terrestrial habitat and wildlife; noise; scarred mountain ridges, shadow flicker or “strobing” effect of rotating blades; reflected light (blade glint); “light pollution” from aircraft warning lights on turbines, towers and, possibly, blades; scenic impairment, and reduced property values for neighbors. Even when dealing with California, the EIA report fails to mention the controversy and current lawsuit over bird kills in the Altamont Pass.

9. *Unbalanced information sources.* The authors of the report make extensive references to documents from wind energy advocates but have ignored the growing body of literature dealing with the problems and damage caused by wind energy.

Despite the disclaimer<sup>13</sup> in the report that it “...should not be construed as advocating or reflecting any policy of the Department of Energy or any other organization,” the report appears clearly to advocate adoption in the US of policies like those prevailing in California,<sup>14</sup> Germany and Denmark.

Officials at the US DOE and EIA need to reconsider the desirability of EIA reports that explicitly or implicitly promote particular energy policies and to renew EIA’s commitment to and focus on objective data collection and analysis and information dissemination.

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#### Endnotes:

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<sup>1</sup> US Energy Information Administration (EIA), *Policies to Promote Non-hydro Renewable Energy in the United States and Selected Countries*, February 2005. This 30-page report can be found on EIA’s web site at [http://www.eia.doe.gov/cneaf/solar.renewables/page/non\\_hydro/nonhydrorenewablespaper\\_final.pdf#page=1](http://www.eia.doe.gov/cneaf/solar.renewables/page/non_hydro/nonhydrorenewablespaper_final.pdf#page=1)

<sup>2</sup> *Ibid.*, p. 26

<sup>3</sup> *Ibid.*, p. 4.

<sup>4</sup> *Ibid.*, p. 4.

<sup>5</sup> EIA, Electricity Prices for Households, <http://www.eia.doe.gov/emeu/international/elecprih.html>

<sup>6</sup> Mason, V.C., “West Danish wind power – lessons for the UK,” November 2004.  
<http://www.countryguardian.net/vmason.htm>

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<sup>7</sup> Ibid.

<sup>8</sup> See, for example: (1) Nordel's Grid Group, *Non Dispatchable Production in the Nordel System*, May 2000, and (2) E.ON Netz, *Wind Report 2004*. [http://www.eon-netz.com/frameset\\_reloader\\_homepage.phtml?top=Ressources/frame\\_head\\_eng.jsp&bottom=frameset\\_english/energy\\_eng/ene\\_windenergy\\_eng/ene\\_windenergy\\_eng.jsp](http://www.eon-netz.com/frameset_reloader_homepage.phtml?top=Ressources/frame_head_eng.jsp&bottom=frameset_english/energy_eng/ene_windenergy_eng/ene_windenergy_eng.jsp)

<sup>9</sup> IRS Publication 946. Accelerated depreciation for tax purposes is generally referred to by the IRS as Modified Accelerated Cost Recovery System or MACRS.

<sup>10</sup> Citizens for Tax Justice, "Bush Policies Drive Surge in Corporate Tax Freeloading; 82 Big U.S. Corporations Paid No Tax in One or More Bush Years," September 22, 2004, 68 pages.. <http://www.ctj.org/corpfed04an.pdf>.

<sup>11</sup> Ibid., p. 54.

<sup>12</sup> Oxford Institute for Energy Studies, Oxford Energy Comment, February 2005, "CO2 emissions Reduction: Time for a Reality Check," p.3.

<sup>13</sup> "This report was prepared by the Energy Information Administration, the independent statistical and analytical agency within the United States Department of Energy. The information contained herein should be attributed to the Energy Information Administration and should not be construed as advocating or reflecting any policy of the Department of Energy or any other organization."

<sup>14</sup> Electricity prices in California are among the highest in the US.