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Setting the Record Straight on Renewable Energy Subsidies

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A recent cold front moving through the state propelled Texas to a new record for wind power, according to the Electric Reliability Council of Texas (ERCOT).

Wind-generated electricity provided 9,481 MW on Feb. 9, close to 28 percent of the power generated in ERCOT at that time. This surpassed the previous record of 8,667 MW set only two weeks earlier.

Lest we get too excited about this recent surge in renewable energy, we must remember that these records are being set in large part because of renewable energy subsidies. These subsidies are harmful on multiple levels: taxpayers, consumers, and businesses (that do not receive the subsidies) are all harmed, as we showed in our November paper on the federal production tax credit and Texas-based renewable energy subsidies.

Here are some key points to keep in mind when thinking about renewable energy and related subsidies:

- Before the wind started blowing heavily on Feb. 9, the electricity that was soon to be replaced by wind power was being supplied mainly by gas turbines.
- Once the wind began blowing, the gas turbines had to stop generating electricity to accommodate the electricity from wind turbines. An electrical grid cannot handle at any one moment more generation than is needed to meet demand.
- Owners and operators of gas turbines that were forced off the grid by wind lost money from the sales they would have otherwise made. Wind turbine owners and operators, then, gained much of the money they earned at the expense of owners and operators of gas turbines. Owners and operators of coal-and nuclear-fired generation were likely also harmed, perhaps not because they were displaced on the grid, but because the wind likely drove down prices on much of the grid.
- The reason the wind turbines can force the gas turbines off of the grid is because the wind operators get subsidies from taxpayers. Therefore, they can offer electricity at a lower price than the gas operators. This is not a case of the free market at work. In fact, because of the subsidies, wind operators can actually pay companies to take wind from them and still make a marginal profit—nothing free market about that.
- However, some gas turbines have to keep running on idle to be ready for when the wind stops blowing. Because when wind-generated electricity goes away, the gas generators have to start producing or there will not be enough electricity. The gas turbines do not run for free—somebody has to pay for the gas turbines held in reserve.
- Buyers of electricity generated from wind on Feb. 9 may well have paid less for it than they would have, had they continued to purchase from gas turbine operators—though most consumers who are on fixed contracts would not have noticed any difference. But the wind-generated electricity was not cheaper. In fact, it is almost certain that the wind-generated electricity cost more when

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Key Points

- Renewable energy subsidies harm the reliability of the Texas electrical grid.
- Renewable energy subsidies are a transfer of wealth from consumers to businesses.
- Texas' renewable energy subsidies through the renewable energy credit program should be eliminated.

the consumer payments, taxpayer subsidies, and the cost of the backup gas generation are added together. There is no doubt that it cost significantly more to generate electricity from wind than from natural gas.

- Renewable energy subsidies are a transfer of wealth. They are a transfer of wealth from one set of consumers/taxpayers to another set of consumers/taxpayers. They are a transfer of wealth from people generally south and east of Abilene to people generally north and west of Abilene because landowners, cities, counties, taxing districts, and others get more revenue where wind turbines are built. They are a transfer of wealth from generators using gas, coal, and nuclear fuel to owners using wind and other "renewable" fuels eligible for the subsidy.

- Renewable energy subsidies also have harmed the reliability of the Texas electricity markets. As prices are pushed artificially low, investors and generators (who are receiving less revenue) put less money into new generation from conventional fuels, and thus future supplies are lower than they would be otherwise. While our free market electricity system can still provide enough electricity in spite of the subsidies, the electricity will be more expensive that it otherwise would be over time because of higher demand in the face of lower supplies.

- Not everyone is convinced our free market system will provide enough electricity in the future in the face of the renewable energy subsidies, so renewable energy subsidies may actually play are larger role in forcing Texans to pay billions of dollars in subsidies to generators using conventional fuels through a capacity market.

Let me recap: In the past, because wind (and other renewable sources) is a pollution-free but new way of generating electricity, policymakers decided it should receive subsidies so that it can one day displace electricity from pollution-generating fuels. Now, because of renewable energy subsidies, 1) we have to keep turbines using pollution-generating fuels sitting on idle in case the wind stops blowing—or the sun stops shining, etc., and 2) we may have to spend billions of dollars in additional subsidies to ensure that the owners of plants using pollution-generating fuels build enough new plants to supply us with enough electricity to keep the lights on. Going forward, even though wind power is setting new records for use and breaking all the goals for it set by the state, it is still not a "mature" technology—despite the fact that it has been in use for thousands of years—and so it must continue to receive subsidies that may in turn mean more subsidies for conventional fuels.

The big losers here? Consumers.

I was recently quoted in a *New York Times* story discussing the prospects of renewable energy subsidies in the 83rd Texas Legislature. The article points out that at least two bills have been filed to extend/increase renewable energy subsidies. HB 621 would extend property tax credits for renewable energy that are set to expire next year. HB 723 would add new subsidies for electricity generated by solar power. Heading in the other direction, there will also likely be legislation filed that will eliminate the current renewable energy credits mandated under Texas' renewable portfolio standards. These credits will cost consumers about $70 million this year, with a 10-year price tag of more than $500 million since 2006.

There has never been a better time than now to end renewable energy subsidies. ✯