

Electricity Volume 220 February 8, 2011

President Barack Obama's vow to generate 80 percent of U.S. electricity from "clean energy" sources by 2035 faces some big hurdles - reliance on unproven technology and energy sources that may not be as clean as advertised. Add to that another vital consideration: It is unclear whether the nation's power grid can remain reliable as more electricity is generated by solar panels, wind turbines, and other non-traditional sources whose output is more variable than traditional coal- or natural gas-fired electricity plants. A team of experts reporting to the chief U.S. regulator of the grid recently found that the power system could handle anticipated increases in wind power through 2012. But beyond that is an open question. "Careful study, planning, and deliberate actions will be required by each interconnection to ensure the continued reliability of the U.S. electric power system," the experts concluded in their report to the Federal Energy Regulatory Commission, or FERC.

Many renewable energy sources are variable - the wind doesn't always blow, for instance, and the sun doesn't always shine. Integrating this less predictable flow of energy into the grid could affect its reliability, notes the report. Only about 11 percent of U.S. power is now generated by sources other than coal, natural gas and nuclear, according to the U.S. Energy Information Administration. Most of that electricity cannot be stored by the operator and must be plugged into the grid or lost.

In his State of the Union address, Obama called for boosting electricity generation from clean energy sources - including nuclear, natural gas, and "clean coal" - as a way to help the United States become more competitive. He followed up this week by meeting with Democrat Jeff Bingaman, chairman of the Senate Energy and Natural Resources Committee, to discuss how to win bipartisan support for a clean energy standard. The FERC study, while couched in technical language, could have down-to-earth implications not just for the president's renewable energy ambitions but for electricity customers and companies everywhere. If changes render the grid less able to respond to sudden interruptions, customers could see disruptions or blackouts. The report provides a tool for planners who want to make sure that doesn't happen.

The new study, though, stopped short of assessing possible long-term effects on reliability. Instead, researchers established a tool to evaluate reliability and applied it to planned wind power expansion in 2012, concluding that the grid could handle the increase. The study doesn't offer predictions past 2012, nor does it specify what types of energy should be encouraged, FERC Commissioner Marc Spitzer noted. "That's up to the Congress"

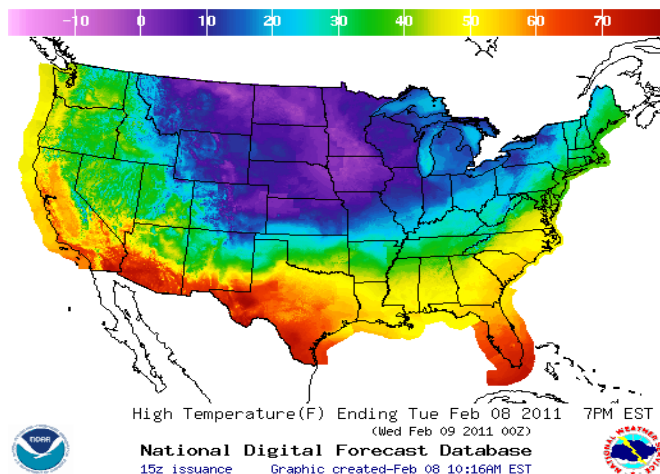
Electricity Pricing Areas - On Peak - Month - Mar 2011

	Feb 8, 2011	Per kWh
Cinergy	Hub Peak Swap Monthly	\$.03604
PJM Hub	Electricity Monthly	\$.04588
PJM	No. Illinois Peak LMP	\$.03510
PJM	Western Peak LMP	\$.04598

ComEd Average Day Ahead LMP Electric Price

Time Period	Average per Kwh
Mar 1 - Mar 31, 2010	\$.03247
Apr 1 - Apr 30	\$.02911
May 1 - May 31	\$.03389
Jun 1 - Jun 30	\$.04184
Jul 1 - Jul 31	\$.04741
Aug 1 - Aug 31	\$.04628
Sep 1 - Sep 30	\$.02934
Oct 1 - Oct 31	\$.02702
Nov 1 - Nov 30	\$.02778
Dec 1 - Dec 31	\$.03545
Jan 1 - Jan 31, 2011	\$.03871
Feb 1 - Feb 7	\$.03913

Weather - Tue: Sunshine and clouds mixed. A few flurries are possible. High 12F. Winds NW at 10 to 20 mph. **Wed:** Sunshine and clouds mixed. Very cold. Wind chills may approach -15F. High 12F. Winds W at 10 to 20 mph. **Thu:** Partly cloudy. Highs in the mid teens with temperatures nearly steady overnight. **Fri:** Times of sun and clouds. Highs in the mid 20s with temperatures nearly steady overnight. **Sat:** Mostly sunny. Highs in the low 30s with temperatures nearly steady overnight.



Extended Temperature Forecast: Chicago Area

Tue	Wed	Thu	Fri	Sat
4 - 12	-1 - 12	14 - 16	24 - 25	32 - 33