

Kentucky Energy Watch

Department for Energy Development and Independence

A snapshot of state and national energy issues



A deeper law than Moore's? - The energy efficiency of computing is doubling every 18 months

In 1965 Gordon Moore, a co-founder of Intel, first observed that integrated circuits, better known as silicon chips, seemed to conform to a predictable law: since their invention in 1958, the density of components in each chip had doubled each year, and this trend was, he suggested, likely to continue for at least a decade. In 1975 Dr Moore modified his prediction, observing that component density was doubling every two years. In practical terms, the result is that personal-computer performance [energy efficiency] doubles every 18 months, and has done so for decades, a prediction commonly known as Moore's law. (The Economist, Oct. 10, 2011)

Power industry awaits a potential game-changing transition policy decision from DOE

On Energy Secretary Steven Chu's desk is a decision on one of the most significant and controversial moves the Obama administration could make concerning the future of the electric power grid, experts say -- the possible delegation of federal "backstop" authority over transmission siting from DOE to the Federal Energy Regulatory Commission. Whether he will make that move remained a mystery outside the department yesterday. The strategy has divided the electric power industry and triggered sharp protests from the National Association of Regulatory Utility Officials (NARUC) and Sen. Jeff Bingaman (D-N.M.), chairman of the Senate Energy and Natural Resources Committee, a longtime supporter of a stronger federal role on transmission issues. (E&E Publishing, Oct. 11, 2011)

University introduces solar to southern Kentucky

Coal remains king throughout much of the eastern U.S., particularly where it is still heavily mined. Kentucky may not be quite as well known for its coal as the heart of coal country, West Virginia, but the state stands behind only that old stalwart and the newer mining center of Wyoming, according to the U.S. Energy Information Administration. As coal prices and electricity bills continued to rise, one community decided to take a chance on a different approach. The Kentucky Solar Partnerships reports that in 2008, the Western Kentucky University ALIVE Center for Community Partnerships in Bowling Green decided to add its own rooftop solar installation as a demonstration for the rest of the community. (Getsolar.com, Oct. 12, 2011)

Clean energy falls short so far

Recently PayPal cofounder Peter Thiel made headlines when he declared that "Clean tech is an increasingly large disaster that people in Silicon Valley aren't even talking about anymore." The sector doesn't have enough original ideas, Mr. Thiel said, and many clean energy technology companies are being run by idealists who are short on business savvy. Those comments drew a sharp rebuke from fellow venture capitalist Vinod Khosla: "I challenge anyone to claim that clean tech done right is a disaster." (The Christian Science Monitor, Oct. 12, 2011)

25 states ask federal court to delay EPA utility MACT rule

Twenty-five states and the U.S. Territory of Guam on Monday filed an amicus brief and urged a federal court to force the Environmental Protection Agency (EPA) to delay its proposed Utility Maximum Achievable Control Technology (Utility MACT) rule by one year, until at least Nov. 16, 2012. The EPA has said it is on track to finalize the rule this November. The EPA's proposed Utility MACT rule would create a new federal regulation to address the emissions of "hazardous air pollutants" from coal- and oil-fired power plants. The proposed rule may require the installation of new expensive control technologies to meet the new limits mandated by the EPA. (PowerMag.com, Oct. 12, 2011)

Honda's natural gas Civics set for Indiana assembly

Honda Motor Co. has begun assembling its new natural gas-powered Civic automobile with plans to step up production at its Indiana plant, the company said Wednesday. The 2012 Civic is being made at Honda's plant in Greensburg, Ind., which opened in 2008. The plant is taking on assembly of Civics that once were put together in East Liberty, about 30 miles northwest of Columbus. The four-cylinder motors for the natural gas Civic are being made in Anna, just north of Dayton. The Honda engine plant in Anna employs 2,400 people and is the largest manufacturer in the Dayton region. (Dayton Business Journal, Oct. 12, 2011)

U.S. military to invest \$10 billion annually in renewable energy by 2030, according to Pike Research

In September the U.S. Army announced that it has formed a new Energy Initiatives Task Force that will assess renewable energy projects, vet potential suppliers, and develop new technologies to support the Army's growing commitment to powering its bases and its missions with renewable energy. The Task Force is part of a Pentagon-wide effort to reduce its dependence on fossil fuels and embrace renewable energy sources as the military confronts the issues of energy costs, energy security for remote bases and operations, and the effects of energy on strategic goals. According to a recent report from Pike Research, annual spending on renewable energy by the Department of Defense (DOD) will reach \$10 billion by 2030. (Business Wire, Oct. 13, 2011)

Water and renewables: what are the options?

While recent technological and policy developments in the U.S. and collaborations with arid nations will offer many benefits, each project will have different goals and present different challenges in addressing water availability issues in respect of renewable energy project development. Scientists continue to raise concerns about water shortages due to climate change, with receding glaciers, droughts and diminishing mountain snow packs just some of the consequences. Meanwhile, the world's population continues to expand. One approach to reducing greenhouse gases has been more reliance on renewable energy. (RenewableEnergyWorld.com, Oct. 10, 2011)

Kentucky Retail Fuel Prices (Dollars per gallon)

Product	10/13/2011	10/7/2011	9/30/2011	9/23/2011	Year Ago
Gasoline (State avg.)	3.398	3.249	3.315	3.438	2.788
Ashland	3.24	3.23	3.282	3.434	2.856
Covington	3.423	3.285	3.379	3.52	2.856
Lexington	3.438	3.244	3.291	3.417	2.811
Louisville	3.403	3.18	3.264	3.309	2.778
Owensboro	3.329	3.187	3.267	3.352	2.738
Diesel (State avg.)	3.737	3.737	3.775	3.82	3.04
Ashland	3.76	3.75	3.798	3.849	3.051
Covington	3.703	3.71	3.762	3.767	3.046
Lexington	3.737	3.741	3.772	3.813	3.066
Louisville	3.731	3.731	3.758	3.807	3.029
Owensboro	3.76	3.753	3.754	3.802	3.036

Note: The record high average price for gasoline in Kentucky is \$4.089, reported on July 10, 2008.
 Source: Gasoline (unleaded regular) & Diesel: National AAA,

Wholesale Fuel Prices

Spot Prices	10/14/2011	10/7/2011	9/30/2011	9/23/2011	Year Ago
Crude Oil (Dollars per barrel) <i>West Texas Intermediate, fob</i>	84.23	82.59	82.14	80.51	82.69
Natural Gas (Dollars per MMBtu) <i>Henry-Hub</i>	3.455	3.49	3.77	3.734	3.565

Source: The Wall Street Journal

Futures		11-Nov	11-Dec	12-Jan
Crude Oil (Dollars per barrel) <i>Light Sweet Crude Oil</i>	10/13/2011	84.23	84.45	84.63
	10/6/2011	82.59	82.80	82.93
	9/30/2011	*	82.14	82.34
Natural Gas (Dollars per MMBtu) <i>Henry-Hub</i>	10/13/2011	3.531	3.814	3.971
	10/6/2011	3.598	3.916	4.091
	9/30/2011	3.759	3.747	4.015
Propane (Dollars per gallon) <i>Mt Belvieu (OPIS)</i>	10/13/2011	1.501	1.501	1.505
	10/6/2011	1.458	1.457	1.457
	9/30/2011	1.524	1.524	1.524
Coal (Dollars per ton) <i>Central Appalachian</i>	10/13/2011	73.84	73.73	73.9
	10/6/2011	73.16	73.13	73.25
	9/30/2011	74.48	74.37	74.37

Source: CME Group



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