



**Welcome to the
Newsletter of the
Kentucky chapter of
the American Solar
Energy Society**

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- Jeff Auxier, Chair
- Jack Barnett, Vice-chair
- Norb Baunach, Treasurer
- Josh Bills
- Brad Morton
- Matt Partymiller
- Siobhan Pritchard

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KySES

www.kyses.org

Forth Quarter 2013

KU and LG&E Announce 10MW Solar Installation

In October, Kentucky Utilities (KU) and Louisville Gas and Electric (LG&E), both a part of PPL Corporation, announced a plan to spend \$25 million to install approximately 10 megawatts (MW) of solar generation in Kentucky, probably at an existing power plant, pending final site selection and approval by the Kentucky PSC.



They intend to file the necessary paperwork by the end of the year, and would likely complete the installation by 2016. This is in addition to constructing a second natural gas combined cycle (NGCC) plant to produce about 700MW, and targeted to cost \$700 million. This plant would be located in an existing site in Muhlenberg County and would likely be completed in 2018. Both of these investments, plus a previously announced 640MW new NGCC plant at Cane Run, are replacing the approximate 800MW of coal-burning plants previously announced by the companies to be retired over the next several years. If approved and completed, LG&E and KU's generation capacity will then be roughly 59% coal-fired, 40% natural gas-fired and just 1% renewable.

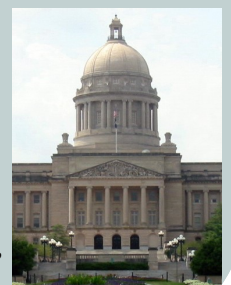


This commitment by the state's largest investor owned utilities should put to rest any further claims that 'solar won't work' in Kentucky. Or that's it not economical. Once completed, the electricity produced from the sun will require no fuel, have no toxic or climate damaging waste products, and have near zero annual operating cost over its 25+ year expected lifetime. Plus it will provide peak power generation during the same hours of the day when Kentucky's air conditioning demand is highest, which is also when wholesale electricity prices are highest. Congratulations to KU and LG&E for this small initial step, and we're glad you're seeing the light!

KySES will be in Frankfort on February 5th

The Kentucky Solar Energy Society is excited to participate in the Kentucky Sustainable Energy Alliance (KySEA, <http://www.kysea.org>) with its 2014 Clean Energy Lobby Day to be held Wednesday, February 5th in Frankfort. KySES members interested should meet in Room 111 of the Capital Annex around 9am. We and other advocate organizations will be discussing the importance of solar energy in a number of meetings with our elected House and Senate members and their staff. The focus of the day will be the new 2014 Clean Energy Opportunity Act, as well as related legislation that promotes expanded Kentucky net-metering, Power Purchase Agreements, and solar system leasing.

For more details, contact Matt Partymiller (matt@solar-energy-solutions.com)



KY Capital building



KySES



Kentucky Solar Installations:

In Edgewood, KY the Turkey Foot Middle School has two solar PV systems installed for the Kenton County School District. The rooftop system is 384kW and consists of both crystalline and thin film modules. The second system is 58kW and is on the top of the newly constructed bus canopy (not shown above). The solar electric systems generated 473,539 kWh from July 1, 2012 to June 30, 2013. This represents 56% of the total building usage.

Kentucky Solar Energy Society Annual Memberships are very affordable, just

- \$20 for Individuals
- \$10 for Students
- \$100, \$250 or \$500 for varying business partnership levels

Visit: <http://kyses.org>

Berea Utility to Further Expand Solar Farm

The Berea Municipal Utility (BMU) has begun efforts to expand its highly successful Solar Farm in 2014. Negotiations with vendors are still being finalized, so marketing efforts have not yet started. But the plan includes two additional phases with 132 photovoltaic modules to be available for “sale” to BMU customers at \$750 each. The expected equipment to be installed include Sharp Solar 240-watt PV modules and Fronius IG Plus 3-phase 12.0-3 WYE 277Vac inverters. These inverters will have enough capacity to potentially expand the installation to 180 modules for future growth.



Berea Municipal Utility's Phase I and II Solar Farm

Phase III and IV will be located adjacent to the existing Phase I and II installation at the BMU building off of Harrison Street in Berea. The existing BMU Solar Farm (with 120 Sharp 235-W modules) has been fully leased since March of 2012. Although other utilities have been considering it, to date BMU's Solar Farm is the only community-type solar system in Kentucky. Community solar farms allow interested utility customers to pay upfront for a 25-year lease on a PV module in exchange for a monthly credit on future bills for the amount of electricity produced by the module. Kentucky's statutes do not require electric utilities to offer “virtual” net-metering, as its called in other states. But in 2011 BMU decided to offer this less costly method of investing in solar, so that even its customers without good solar access (e.g., apartment dwellers, those with shaded roofs, etc.) could benefit from solar, reduce their monthly electric bills and have a lower carbon footprint.

The BMU Solar Farm won 2013 Kentucky Environmental Quality Commission Public Service Award and has been written up in both the local and national press. For more information, you can also visit:

- <http://www.homepower.com/articles/solar-electricity/project-profiles/berea-solar-farm>
- http://www.bereautilities.com/?page_id=811
- <http://www.maced.org/E3/berea-solar.htm>

University of Kentucky's Solar Car Team

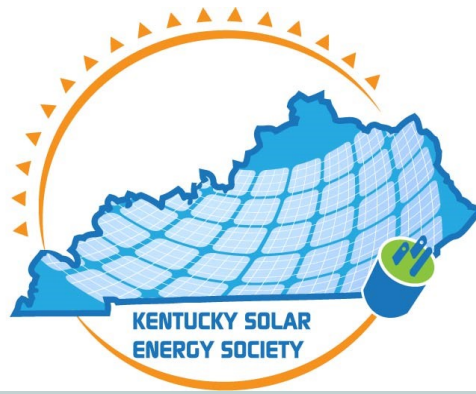
Recently Jack and Norb got to visit with the University of Kentucky's Solar Car Team and see its latest iteration under construction. The team is a student-led organization on UK's Lexington campus that seeks to finance, design, and build solar powered vehicles. Since its formation in 1999, they have raced multiple solar vehicles across the country.

They also seek to educate the communities of Kentucky about solar energy and to provide excellent hands-on student-learning opportunities. The vehicles are almost entirely built and designed by students, with very little professor involvement. Currently they are building the *Gato Del Sol V* and plan to race it from Austin, Texas to St. Paul, MN in July 2014. For more information on the team and their car, visit <http://www.engr.uky.edu/solarcar/>.



UK's Gato Del Sol IV in action.

And stay in touch with KySES for more opportunities to see this great project and team in action!



KySES

Dates to Remember:

- **January 16, 7pm EST** - Next KySES Board Meeting via conference call; email kysestreasurer@gmail.com at least a day in advance to join
- **February 3** - KySEA webinar on the proposed Clean Energy Opportunity Act at 7pm EST
- **February 5** - Clean Energy Lobby Day at 9am EST, and KySEA meeting at 2:30-5pm
- **February 20** - KySES Board conference call, & newsletter deadline
- **March 20** - KySES Board conference call
- **April or early May 2014** - KySES Annual Membership Meeting, location TBA

New Website and Membership Platform Launched

KySES implemented a new website in August using a different webhost provider with an integrated membership database and email distribution services. Wild Apricot provides us with improved membership/contact management and capabilities for distributing information, including this newsletter.



KySES.org has been updated and is now hosted by Wild Apricot.

The new site allows anyone to securely donate to KySES or to register for KySES events. Previously, new memberships and renewals could only be made on paper and paid only by check or cash. Now members can join or renew online and pay by credit card or using a PayPal account. Or, an invoice can be printed and mailed with a check to the KySES treasurer. Members will now have a secure login and password to the website for renewals or for future possible additions, such as commenting on posted materials or providing feedback to your board of directors. Now that the membership side of the site has been rolled-out, our focus will be shifting to updating and adding new web content. Please check-out the KySES home page frequently.

Words from the Departing Chair

[Ed: Jeff has moved out of state and resigned from the KySES Board]

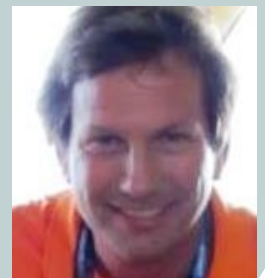
Lots of changes at KySES! New leadership, new website software, and more membership outreach. Thanks to Norb Baunach, Jack Barnett and, as always, Matt Partymiller for loads of hard work, talent and leadership. Thanks to all KySES members, too, for supporting KySES's mission of promoting efficiency, conservation and renewables in Kentucky. Please keep it up!

It's been a privilege to work with everybody. I've learned so much from the folks I've shared time with, wonderful people from not only KySES but also Sierra Club, KFTC, MACED and others. I thank all for their gifts of experience, wisdom and effort. I carry many with me forever.

Big changes in solar the last five or six years. The market does what persuasion and reason could not, which leads us to the new threat.

Corporations exist to grow earnings. Investor-owned utilities (IOUs) long considered highly safe investments, face a future where they are less producers and more about distribution. In that future, the IOUs can't as easily grow earnings as the "centralized power generation" chunk of their business grows smaller, and as consumers get more efficient.

Yet many IOUs try, by raising the flat monthly rate and lowering the unit price of energy. However they label it, that's what many IOUs want to do – raise the flat monthly rate and lower the unit price. Please beware this trend. The IOUs will carry it too far.



Jeff Auxier, Chair
Salida, Colorado

Thank you, and I wish everybody all the best! I'll miss you all.



Kentucky Solar Energy Society

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KySES is a chapter of the American Solar Energy Society (www.ases.org), promoting efficiency, conservation and renewables in Kentucky.

Thanks to our 2013 Sustaining Partners:



Solar Energy Solutions

If you'd like to see your company's logo here, please join us via our online membership application:
<http://www.kyses.org>

