Taking the Temperature of the Governor's Conference on Energy and the Environment

By Kris O'Daniel

You got cold feet literally, sitting two days at frigid temperatures at the Lexington Convention Center listening to this administration’s narrow focus on coal as the only savior of economy, jobs and environment. You would think it was taken from the past, but no, this was the future going backwards not forward.

This year more than last years’ Kentucky Governor's Conference on Energy and the Environment, was a Trump-fixated belief, a presentation of the Governors one-sided and dividing attitude towards anything else but coal. What he wants is what everybody else needs. With no regard for what’s going on around him.

The Conference should have been representing a brief on latest within all energy sectors, in particular on renewables where the demand is. In stead it had a partisan agenda, charged with defensive, and hollow postulations against renewables (see elsewhere comments on Governors speech).
The republican tribal constantly scream that renewables only exist because of subsidies. Renewables are doomed as subsidies are unacceptable. Yet, coal and natural gas over the years are the ones that took advantage of huge sums in direct subsidies as well as in a variety of tax incentive.

Of course, that’s all in the name of jobs! The sad fact is that everything in relation to coal comes at a huge cost that coal has never fully paid for.

Extracting coal makes people sick. If coal miners are lucky to get health insurance, that cost is never included when the price of coal-generated electricity is set.

The coal mining companies not only extracted coal from Kentucky, but a major part of the profits were extracted out of the state, leaving behind abandoned mine land (AML). This land and its water ways were never equally maintained proportionate to the profits taken, neither their contributions to funds like the AML funds. The result is deteriorated land and water reservoirs, still needing some $6 billion and until it’s fixed will impose serious threads to water supplies, and quality of life in the local communities.

On job creation, jobs in coal barely compares to what renewables bring to the table, it’s a hoax.

As we know, most companies and industries in KY and for sure the rest of the world believe global warming is evident and is already bringing climatic changes. There’s a collective view, that act we must, the sooner the better. Transformation towards renewables has started, is in progress in the rest of the world, in the US some - yet not fast enough.

**Louisville Introduces a Resolution for 100% Renewable Energy**

By Wallace McMullen, KySES Chair, Solar Over Louisville Chair
During the “Rise for Climate, Jobs, and Justice” rally held in Louisville on September 8th, the organizers presented to Louisville’s Metro Council President David James a “Resolution For 100% Clean Energy for Metro Louisville.” President James has formally introduced the resolution, and he is sponsoring the resolution. We were gratified by his support. It is now scheduled to be considered by the Metro Council’s Parks and Sustainability Committee twice: first on Thursday November 29, and then more fully on December 13.

The members of that committee are three Democrats and two Republicans so we don’t know quite what reception it will get. We do know that Louisville Gas and Electric (LGE) and the Metro Office of Sustainability are scheduled to speak about it immediately after the Resolution is brought up in committee.

Originally, when David James introduced the resolution, it was going to be fully discussed on October 25. We don’t know why its consideration was delayed to November 29th, though things do get rescheduled all the time.

The resolution sets a goal of Louisville operating on 100% renewable energy by 2030. We regard this as a good and desirable aspirational goal. Interestingly, none of the Council Members we have met with have questioned the 2030 date so far.

The Resolution is pretty inspirational. Here are some excerpts:

Whereas overwhelming scientific evidence affirms the existence of climate change and that the primary cause of climate change is human combustion of fossil fuels;

Whereas there is no credible path to a safe climate that includes continued long-term combustion of fossil fuels;

Whereas Louisville wishes to take full advantage of the new 21st century energy economy;

Whereas a just transition to 100% renewable energy will create family-sustaining jobs;

Be it resolved that Louisville Metro government will support a goal of 100% renewable energy by the year 2030 for the operations of Metro government.

And be it further resolved that Louisville Metro government will establish an inclusive Climate Action Planning process within the next year and will incorporate solar photo-voltaic systems into all new construction of city-owned property henceforth.

We hope that if this Resolution is passed, it will incentivize a lot of solar system installations in Louisville, and serious examination of importing wind-generated electricity from Illinois and Indiana.

Mall Owner Doubles Down on Solar with Louisville Install #2

By Steve Ricketts, Solar Energy Solutions General Manager and Owner
Brookfield Properties, national owner of over 160 mall and retail locations is working with Solar Energy Solutions (SES) to install 477 kW (DC) of PV on the roofs of the Mall of St. Matthews in Louisville. This is after SES completed 800 kW (DC) on the sister Oxmoor Mall early in 2018. Brookfield already has solar at nearly 50 locations, putting them at #7 nationally of all companies for deployed PV capacity. Since 2004 their large-scale build of solar together with numerous linked energy conservation initiatives has decreased energy consumption (and linked CO2 emissions) across their estate by a quite staggering 51%. Similar progress has been made in waste recycling and water usage reduction.

When we look around and perhaps get downcast at how slow our state and region is to face up to the ongoing climate crisis and take appropriate action corporate activities are thankfully getting more and more impactful. Kentucky has seen L’Oréal, GM, Diageo, Linak, Sekisui to name a few install millions of watts of solar and I have a firm feeling this is but the tip of an approaching iceberg.

The St. Matthews install, which will come on-line in December, is comprised of 1404 340W Hanwha Q Cells panels and 12 Huawei inverters feeding to three separate interconnection points across three separate roof areas. On completion Brookfield will extend their lead as the largest solar operator in Louisville and Jefferson County with over 1.25 MW (DC) of arrays.

SES was honored to be chosen again by Brookfield to deliver this project and to work with a national organisation that not only has a bold national environmental vision but shows how to translate that vision into a reality that supports the fight against climate change we all so passionately believe in.
IPCC Report is Global Wake-up Call for Immediate Transformational Climate Action

By Nancy Givens

The Intergovernmental Panel on Climate Change (IPCC) released its Special Report on 1.5 Degrees on Oct. 8, 2018, in Incheon, South Korea. The report outlines the likelihoods and impacts of 1.5- and 2-degree warming scenarios and calls for a rapid and unequivocal transformation to achieve the 1.5 degree target.

Under the Paris Climate Agreement, nation signers have committed to limiting global warming to no more than 2 degrees above pre-industrial levels, with the intention to remain well below this target. Yet scientists and communities have concerns that the climate impacts from 2 degrees warming will be intolerable, with many communities already experiencing significant climate change impacts and findings showing this will only intensify.

The report emphasizes that if global emissions continue along current trends, the planet will warm above 1.5 degrees as early 2030. Even in a 1.5-degree scenario, there will be disastrous global impacts, e.g., a 70 to 90 percent loss of coral reefs, up to 69 million people will be exposed to flooding, and 15 percent of the world’s population will be exposed to severe heat. These numbers increase markedly in the 2-degree scenario, e.g., species lost will increase at least twofold and coral reefs will essentially be gone.

To limit warming to 1.5 degrees, global greenhouse gas emissions need to be cut by 45 percent by 2030, from 2010 levels, and global emissions would need to reach net zero by 2050. To achieve this, a full societal reorientation to a fully decarbonized economy is required. Integrated action across all levels of government and economic sectors in every country is needed to develop robust frameworks to strengthen climate action to align with a 1.5-degree scenario.

A full reorientation to a fully decarbonized economy will require major and rapid changes. Supporting all forms of carbon-free renewable energy will be needed, including expediting as much solar generation as possible. This report can be interpreted as a clarion call for more solar.

The Cities/PCC Conference in March, 2018 emphasized the critical role cities can play in achieving the 1.5-degree pathway. Local and regional governments must accelerate the transition to 100 percent renewable energy by divesting from fossil fuels, making renewable energy and efficiency investments, and offsetting any remaining emissions, in order to achieve climate neutral government operations before mid-century.

We need to change the narrative. Instead of a call-to-arms, we need a doctrine of “mutually assured survival” — a doctrine in which all commit to the goal of 100% renewable energy.”
Citizen groups in Louisville have taken heed and introduced a 100% Clean Energy Resolution to Louisville Metro Council that is being sponsored by President David James and actively promoted to Council members and the community. We hope other Kentucky cities will follow suit. Read more about this initiative elsewhere in this issue.

Owensboro Utility Signs 20 Year Solar Contract

REPRINTED from the Messenger- Inquire

Written by Austin Ramsey of The Messenger-Inquirer

The City Utility Commission on Thursday signed an agreement that will supplement Owensboro Municipal Utilities' energy portfolio with solar power for the first time in its history.

According to a purchase power agreement OMU signed with Texas-based Open Road Renewables, about 5 percent of the city's local energy will come from an 800-acre, 86-megawatt solar farm planned for development in Lyon County, just north of the Land Between the Lakes National Recreation Area, in 2022. That solar array, from which the Kentucky Municipal Energy Agency has also reserved about 50 megawatts of electricity, is slated to be the largest such solar project in the state, surpassing Kentucky Utilities' 10-megawatt Harrodsburg facility almost nine-fold.

For OMU, which is in the process of exiting the power generation marketplace, Thursday's announcement represented a momentous step in the public utility's century-old history. Owensboro's electricity has been primarily coal-fired since its founding. Although the utility signed a similar agreement to buy the majority of its power from coal-based Big Rivers Electric Corp. in June, it left open room for low-risk, cost-competitive options like solar.

"Right now we have all our eggs in the coal basket, and we've been committed since 1960 to the (local) Elmer Smith Station," said interim OMU General Manager Kevin Frizzell. "So, this is the kind of diversity that we need as our business has changed."

Diversity has become all the more attractive in a once coal-dominated energy production environment now cast in a shadow by the growth of low-cost natural gas resources and renewables. According to a Burns & McDonnell analysis of OMU's future needs, utility-scale wind and solar options could serve as a good complement to fossil fuel-fired resources with operational flexibility.

OMU cooperatively issued a 30-36 megawatt renewable proposal request with KyMEA last year and evaluated a number of solar, wind and hydro bids based on price, resource characteristics,
transmission costs, timeframe, creditworthiness and location. ORR's 86-megawatt plan was cheaper than similar options on the open market and other smaller-scale solar farms.

In fact, Frizzell said, the price based on availability is projected to fall in line with the agreement OMU had already signed with Big Rivers, indicating, for the first time, solar power's ability to compete with existing resources in a coal-rich state like Kentucky.

The plan has no fixed payments, but the price will be determined by a set amount multiplied by the energy available each month. OMU and KyMEA are ORR's only customers, and they are obligated to purchase the power on a 40-by-60 ratio margin for a 20-year term. But the agreement does include language that would award OMU damages, should power not be made available by 2022. According to the terms of OMU's Big Rivers agreement, any gap in that 5 percent energy margin could easily be recovered by existing coal-fired resources.

"There's almost no risk to OMU or KyMEA," Frizzell said. "They either hold up their end of the deal or they don't, but we don't have anything to lose."

Although ORR's project will be included in a transmission study OMU is preparing to study the Big Rivers plan, the project is slated to connect to the LGE/KU system, of which OMU is already a part. That means there would be virtually no cost to OMU or its members to tap into the sun's energy in Lyon County once the new solar farm is complete.

"I'm really glad we're doing this, but I think what makes this work is the flexibility that we've written into this agreement," said utility commissioner Tony Cecil on Thursday.

In a prepared media statement, Open Road Renewables Vice President Mike Volpe said construction could result in upward of 400 western Kentucky jobs and provide a cost-competitive energy alternative to fossil fuels.

"This project should be seen as a win-win as it will provide both local economic development benefits to Western Kentucky along with affordable power for KyMEA members," he said. "We are pleased to see in-state, utility-scale solar selected by KyMEA as part of their least-cost supply portfolio."

Welcome New Members

Since our previous newsletter, the following have joined KySES:

- Jayme Haslam

Thanks so much to these fine folks and to our renewing members as well! Our membership is very inexpensive and important to help educate and promote solar energy in Kentucky!

You can join both KySES and ASES, including a subscription to *Solar Today* magazine, for just $60 annually. Click here for this special offer, and pick Kentucky as your chapter in the check-out process.

Board of Directors

The following individuals are KySES board members. Feel free to contact any of us with suggestions and feedback.

- Wallace McMullen, Chair
- Kathryn Mullen, Co-Chair
- Barbara Szubinska, Co-Chair
- John Cotten
- Thad Druffel
- Jamie Clark
- Shari Mullen
Upcoming Events
(For details, go to Events)

**Wednesday, November 7:** Kentucky Voices 2018: A Celebration of Ky Authors and Artists in Frankfort.

Support Solar with a License Plate!

As a solar advocate, would you like to show your support with a solar themed license plate? We need your help to make this available to everyone. We have gathered over 300 signatures and need just 600 more to be able to petition for our very own Kentucky solar plate! Sign up [here](#)!

Find us on Facebook
Contact email: kysesinfo@gmail.com

KySES Memberships are very affordable! $20 for individuals or $10 for students. Business memberships are $100 to $500. Visit [www.kyses.org](http://www.kyses.org) for details!

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