

INTERIM JOINT COMMITTEE ON NATURAL RESOURCES AND ENERGY

Minutes of the 6th Meeting of the 2023 Interim

November 16, 2023

Call to Order and Roll Call

The 6th meeting of the Interim Joint Committee on Natural Resources and Energy was held on November 16, 2023, at 3:00 PM in Room 154 of the Capitol Annex. Senator Brandon Smith, Chair, called the meeting to order, and the secretary called the roll.

Present were:

Members: Representative Jim Gooch Jr. Co-Chair; Senator Brandon Smith Co-Chair; Senators Cassie Chambers Armstrong, Robby Mills, John Schickel, Adrienne Southworth, Johnnie Turner, Robin L. Webb, and Gex Williams; Representatives Jared Bauman, John Blanton, Adam Bowling, Randy Bridges, Lindsey Burke, Beverly Chester-Burton, Myron Dossett, Ryan Dotson, Patrick Flannery, Chris Fugate, Daniel Grossberg, DJ Johnson, Bobby McCool, Suzanne Miles, Tom Smith, and Bill Wesley.

Guests: Dr. Brian Houillion, Assistant Professor, Hutton School of Business, University of the Cumberland; David Carter, Chief Information Security Officer, Commonwealth Office of Technology; Kenya Stump, Executive Director, Office of Energy Policy, Energy and Environment Cabinet; and Evan Vaughan, Executive Director, Mid-Atlantic Renewables Energy Coalition.

LRC Staff: Stefan Kasacavage, Kayla Carroway, Tanya Monsanto, Rachel Hartley, and Emily Wiley.

Approval of minutes for the meeting of October 19, 2023

A motion to approve the minutes was made by Senator Mills and seconded by Representative Dotson. The minutes were approved by voice vote.

Report from the Blockchain Working Group

David Carter stated that the Kentucky Blockchain Technology Working Group has 16 statutory and advisory members and holds open meetings bi-monthly on a virtual platform. The working group is mandated by KRS 42.747 to submit an annual report on December 1. The mission of the Kentucky Blockchain Technology Working Group is to evaluate the feasibility and efficacy of using blockchain technology to enhance the Commonwealth by identifying opportunities for the adoption, utilization, and regulation of blockchain technology. Blockchain technology is different from traditional transaction systems because it has a distributive ledger, records are immutable, and it allows for smart contracts. These features contribute to a transaction system with high integrity.

The working group is exploring opportunities in public utilities, logistics and supply chain management, healthcare, finance, and records management.

Chair Smith stated that blockchain could enhance infrastructure security.

Dr. Brian Houillion stated that blockchain can tokenize and fractionalize municipal bonds, providing access to these investment tools to those who may not have had financial resources to do so previously. Blockchain also allows for these fractionalized tokens to be geographically restricted, which would promote local investment. The Uniform Law Commission released emerging technology amendments in 2022, which would provide the legal framework for commercial transactions utilizing blockchain-based digital assets. Senate Bill 64 introduced during the 2023 Regular Session proposed enacting those recommendations into state law, but it did not pass.

In response to Representative Smith, Dr. Houillion stated that a limitation at the federal level is that government officials are still attempting to decide which agency has authority to oversee blockchain. Kentucky can set standards for blockchain used strictly in intrastate commerce. Banks need to become comfortable with providing qualified custody in commercial blockchain transactions.

In response to Senator Williams, Dr. Houillion stated that there are no laws regarding blockchain-based financial instruments in automated transactions, because it has not been recognized by the Uniform Commercial Code (UCC). A smart contract is an automated transaction that would be subject to basic contract law.

Chair Smith stated that blockchain adds a layer of integrity to different forms of transactions.

Representative Grossberg stated that some blockchain proponents favor its use because there is a lack of government involvement in its transactions.

Chair Smith stated that blockchain discussions will continue and commended the work of Mr. Carter and Dr. Houillion.

In response to Chair Smith, Mr. Carter stated that a consortium for states to discuss blockchain has been briefly discussed, and the working group could revisit that conversation in the beginning of 2024.

Update on the Solar Power Industry in Kentucky

Kenya Stump stated that the Office of Energy Policy (OEP) is a non-regulatory agency which funds projects throughout the state focused on energy education, affordability, grid resilience, data modeling, and power sector modernization. OEP produces the Kentucky Energy Profile and co-leads energy emergency response activities at the Emergency Operation Center (EOC).

Kentucky's utility owned solar generation accounts for 0.07 percent of Kentucky's net utility electricity generation and roughly 30 megawatts (MW) of solar capacity is operational. Merchant or independent solar power projects total about 4.0 gigawatts (GW) of capacity and are the single largest category of solar projects in the state.

The interconnection queues at each utility or regional grid operator provide a picture of potential projects. Kentucky has four queues: Pennsylvania-New Jersey-Maryland Interconnection (PJM), Midcontinent Independent System Operator (MISO), Louisville Gas and Electric Company and Kentucky Utilities Company (LGE/KU) and Tennessee Valley Authority (TVA). There are 213 Kentucky projects in progress within the four queues.

In response to Representative Dotson, Ms. Stump stated that the Department for Environmental Protection's existing regulatory structure oversees hazardous waste for decommissioned power plants. Many solar projects have not yet been decommissioned, so there is no good measurement of waste created from solar. The best estimate could be found from anticipating when solar plants would retire, and what components would be considered hazardous.

In response to Representative Blanton, Ms. Stump stated that utility-owned solar accounts for 0.07 percent of Kentucky's net utility electricity generation. Due to the interconnection system, Kentucky imports and exports power at varying levels depending on need. Utilities are required to have resource adequacy, meaning that utilities must have enough resources to meet peak demand with an additional margin of error. Some utilities own power generation plants located outside of the state.

In response to Representative Miles, Ms. Stump stated that KRS 278.700 to 278.718 require that merchant electric generating facilities must go before Kentucky's Electric Generation and Transmission Siting Board before its facilities can move into construction. Utilities are regulated by the Kentucky Public Service Commission.

In response to Representative Smith, Ms. Stump stated that given the frequency of natural disasters, she cannot confirm that there will not be power disruptions in the future. Economic development has increased electric power demand and utilities are

preparing to maintain reliability. It is important to consider the characteristics of the grid, rather than the type of fuel utilized to maintain reliability. Coal generation and natural gas have proven to be reliable base load power sources. The OEP is now seeing increased reliability for solar when combined with long duration battery storage. Nuclear power is one of the most secure, reliable, and clean sources of base load generation in the United States, though it is not part of Kentucky's energy fleet. Hydroelectric power is the state's leading source of renewable energy. Utilities' integrated resource plans are the best resource to track Kentucky's energy transition over the next four to ten years. It is important to carefully evaluate any retirement impacts that could affect the reliability of the grid.

In response to Representative Fugate, Ms. Stump stated that operational costs for solar are low. There are no utility-owned solar projects in eastern Kentucky. Kentucky Power has no solar projects and East Kentucky Power Cooperative has one. She is unaware of any Kentucky Power solar resource. Other fuel sources can be as reliable as coal as a base load resource.

Chair Smith stated that Ms. Stump is not a regulatory agent.

In response to Chair Gooch, Ms. Stump stated that one problem with solar is that it is land intensive compared to other power generating technologies.

Evan Vaughan stated that the Mid-Atlantic Renewable Energy Coalition (MAREC Action) represents utility-scale developers of solar storage and wind across nine eastern states and Washington D.C. More than 4,300 MW of solar capacity have been approved or are under consideration by the Kentucky's Electric Generation and Transmission Siting Board.

In response to Chair Smith, Mr. Vaughan stated that large manufacturers are buying solar because it offers low and stable prices. Solar can help moderate prices for consumers.

PJM has the least renewable energy as a portion of the grid compared to other regional transmission organizations. Solar is not the only answer to reliability, but adding solar to an energy portfolio would increase reliability by increasing the diversity of generation source types.

In response to Senator Mills, Mr. Vaughan stated that maintaining reliability attributes of a grid is desirable. The type of energy produced by different fuel sources is the same.

Subsidies for solar from the federal government helps support manufacturing in the United States.

Referred Administrative Regulations - No Action Required

Chair Smith provided a brief overview of the administrative regulations on the agenda.

- **301 KAR 051:010** Proposed- Attainment status designations.
- **301 KAR 001:122** Proposed- Importation, possession, and prohibited aquatic species.

Reports Received - No Action Required

Chair Smith provided a brief overview of the reports received on the agenda.

- Kentucky Department of Fish and Wildlife Resources Status of Chronic Wasting Disease and Wildlife Diseases
- Energy and Environment Cabinet House Joint Resolution (HJR) 37 Reformulated Gasoline (RFG) Report
- Finance and Administration Cabinet Report on Use of Energy-Efficiency Measures in State Government

Adjournment

There being no further business, the meeting was adjourned.