

INTERIM JOINT COMMITTEE ON NATURAL RESOURCES AND ENERGY

Minutes of the 5th Meeting of the 2021 Interim

October 7, 2021

Call to Order and Roll Call

The 5th meeting of the Interim Joint Committee on Natural Resources and Energy was held on Thursday, October 7, 2021, at 1:00 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: Senator Brandon Smith, Co-Chair; Representative Jim Gooch Jr., Co-Chair; Senators C.B. Embry Jr., Denise Harper Angel, Adrienne Southworth, Johnnie Turner, Robin L. Webb, and Phillip Wheeler; Representatives Adam Bowling, Randy Bridges, Tom Burch, McKenzie Cantrell, Myron Dossett, Ryan Dotson, Jim DuPlessis, Patrick Flannery, Chris Fugate, DJ Johnson, Norma Kirk-McCormick, Mary Lou Marzian, Suzanne Miles, Melinda Gibbons Prunty, Attica Scott, Bill Wesley, and Richard White.

Guests: Bob Berry, CEO, Big Rivers Electric Corporation; Carey Johnson, Director, Division of Water, Energy and Environment Cabinet; and Brian Clark, Deputy Commissioner, Kentucky Department of Fish and Wildlife Resources.

LRC Staff: Stefan Kasacavage, Janine Coy, and Rachel Hartley.

The minutes from the meetings of August 5, 2021, and September 15, 2021, were approved by voice vote.

Grid Transmission and Reliability

Bob Berry stated Big Rivers Electric Corporation (BREC) was founded in 1961 and currently has nearly 400 employees in four locations. BREC is owned by three electric cooperatives that serve approximately 121,000 homes and businesses in 22 western Kentucky counties. The three cooperatives are Jackson Purchase Energy Corporation, Meade County Rural Electric Cooperative Corporation, and Kenergy Corporation. BREC's generation resources include 936 megawatts from coal and natural gas, 178 megawatts from hydroelectric power, and 260 megawatts from solar power.

In 2020, Kentucky's electricity rates were 20 percent lower than the national average. Kentucky relies on coal for almost 70 percent of its electricity, while coal provides only 20 percent of the nation's electricity supply.

BREC is a member of Midcontinent Independent System Operator (MISO). MISO operates the electricity grid across 15 states and part of Canada, serving 42 million people. MISO relies on coal and has the largest coal fleet of any region with almost 60,000 megawatts, which is one-fourth of the nation's coal fleet.

Mr. Berry testified that the Biden administration's goal of carbon free electricity by 2035 is not attainable. Maintaining grid reliability and resiliency requires dispatchable energy sources to fuel the grid when renewable energy is not being generated. Also, technological advances are still needed in carbon capture and battery storage research to achieve carbon free electricity. Coal and natural gas provide 92 percent of Kentucky's electricity. Customers would be responsible for the cost of new renewable generation and the stranded assets of current coal and gas plants being retired. BREC has reduced its carbon emissions by 71 percent since 2010.

California relies more on solar and wind power than any state. Solar and wind power provide 30 percent of California's electricity. In August 2021, California was forced to impose rolling blackouts on 2 million customers due to a lack of dispatchable electricity to generate power. MISO has expressed concern about the difficulty of operating its grid with 30 percent renewable energy.

By 2030, BREC will generate and access power from a diverse portfolio including: 178 megawatts from hydropower, 260 megawatts from solar, 417 megawatts from coal, and 470 megawatts from natural gas. BREC relies on coal and natural gas, but it is also investing in solar power. BREC supports a gradual transition of the electricity grid.

In response to Representative DuPlessis, Mr. Berry stated solar and hydropower are used to lower BREC's carbon footprint. Also key to reducing emissions has been BREC's success in decreasing its heat rate, which results in greater efficiency in converting fuel to electricity. In the last three years, BREC has decreased its heat rate by six percent. Mr. Berry stated that no more than 30 percent of BREC's portfolio will be renewable energy sources, and dispatchable electricity generation complements solar installations. BREC's current energy portfolio contains 20 percent renewable energy. Electric vehicle charging stations will require more power generation because of the added load.

In response to Representative Gibbons Prunty, Mr. Berry stated the location of the electric vehicle charging station will affect what type of power generation is used. BREC does power electric vehicle charging stations from its grid.

In response to Representative Miles, Mr. Berry stated that reclamation should be required for solar facilities at the end of their useful lives, just as it is required for coal mines.

Representative Gooch cautioned against overdependence on merchant solar and stated baseload generation is crucial to the resiliency and reliability of the electric power grid.

KRS Chapter 151 Updates and Dam Safety Program Enhancements

Carey Johnson stated Kentucky Revised Statutes (KRS) Chapter 151 provides broad authority to the Energy and Environment Cabinet (EEC) to regulate dam safety, floodplain development and management, water supply planning, stream restoration and mitigation, groundwater monitoring, and improvement of public drinking water supplies.

Mr. Johnson proposed changes to KRS Chapter 151, including the following: 1) update the terminology to reflect current technologies, programs, and practices; 2) repeal statutes made obsolete by federal laws and regulations; and 3) require Emergency Action Plans (EAPs) for high and significant hazard dams. Hazard classification is not based on the condition of a dam, but rather the potential damage in the event of a dam failure.

A dam is defined in KRS Chapter 151 as any structure that is 25 feet in height or has a maximum impounding capacity of 50 acre-feet or more. KRS Chapter 151 applies to all dams in Kentucky except the dams owned and operated by federal agencies. There are 970 regulated dams located in 115 counties in Kentucky. Approximately 45,000 Kentuckians are located in potential dam inundation zones.

An EAP is a formal document that identifies potential emergency conditions at a dam and specifies preplanned actions to be followed to minimize property damage and loss of life. The goals of EAPs are to encourage the development of comprehensive and consistent emergency action planning and the participation of emergency management authorities and dam owners in emergency action planning.

Brian Clark provided a brief overview of the Kentucky Department of Fish and Wildlife Resources No Net Loss of Hunting Land Report.

In response to Representative Burch, Mr. Clark stated there has been a long-term decline in hunting licenses since the 1980s. The hunting license fees are increased to make up for the decline in participation. The increased elk population in Kentucky has become more remote, which has caused less damage to agricultural land. The deer population in Kentucky is stable.

There being no further business, the meeting was adjourned.