

INTERIM JOINT COMMITTEE ON NATURAL RESOURCES AND ENERGY

Minutes of the Fourth Meeting of the 2024 Interim

September 19, 2024

Call to Order and Roll Call

The fourth meeting of the Interim Joint Committee on Natural Resources and Energy was held on September 19, 2024, 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: Representative Jim Gooch Jr. Co-Chair; Senator Brandon Smith Co-Chair; Senators Robby Mills, Adrienne Southworth, Robin L. Webb, Phillip Wheeler, and Gex Williams; Representatives Adam Bowling, Randy Bridges, Lindsey Burke, Beverly Chester-Burton, Myron Dossett, Ryan Dotson, Patrick Flannery, Al Gentry, DJ Johnson, Bobby McCool, Tom Smith, Bill Wesley, and Richard White.

Guests: David Brown Kinloch, President, Appalachian Hydro Associates.

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

Approval of minutes for the meeting of August 23, 2024

A motion to approve the August minutes was made by Representative McCool and seconded by Senator Southworth. The minutes were approved by voice vote.

Discussion of new hydroelectric power projects on the Kentucky River

David Brown Kinloch, President, Appalachian Hydro Associates (AHA), stated AHA is the only hydroelectric developer in Kentucky. In 2024, Kentucky received \$73 million from the federal Inflation Reduction Act (IRA) to build four hydroelectric power plants. Berea College is a financial partner.

Hydropower provides 26.6 percent of the renewable electricity and 5.7 percent of the total electric generation in the United States. Only three percent of the dams in Kentucky have hydroelectric power plants. Kentucky has the potential to produce 616 megawatts of hydroelectric power at 35 dams.

Mr. Kinloch provided an overview of the four types of hydropower: conventional, kinetic, marine, and pumped storage. Mr. Kinloch explained how a hydroelectric power plant works and provided examples of hydroelectric power plants operating in Kentucky.

Mr. Kinloch stated AHA is currently working on licenses for six projects on the Kentucky River, which will generate 17.69 megawatts of power.

In response to Senator Wheeler, Mr. Kinloch stated some AHA projects require a license from the Federal Energy Regulatory Commission, which can take years.

In response to Representative Dotson, Mr. Kinloch stated most of the electric generation mix in Kentucky comes from coal and natural gas-fired generation plants. A small percentage is generated by hydropower.

In response to Representative Gooch, Mr. Kinloch stated fish are not in danger in Kentucky due to fish friendly turbines and low water speed.

In response to Senator Mills, Mr. Kinloch stated there are 75,000 to 90,000 existing dams in the United States that can be repurposed into hydroelectric power plants.

In response to Senator Williams, Mr. Kinloch stated hydroelectric power plants cannot operate during droughts or floods. They can supply reliable energy for a little over half the year.

In response to Representative Smith, Mr. Kinloch stated it takes a minimum of ten years to build a hydroelectric power plant. The transition to future generation technologies must be gradual in order to maintain a reliable electric grid.

In response to Senator Williams, Mr. Kinloch stated the Markland Dam on the Ohio River is in Indiana.

In response to Representative Gentry, Mr. Kinloch stated the IRA extended federal tax credits for ten years to build hydroelectric power plants.

In response to Representative Wesley, Mr. Kinloch stated there are two projects announced that will be in Estill County.

Adjournment

There being no further business, the meeting was adjourned.