

# **INTERIM JOINT COMMITTEE ON NATURAL RESOURCES AND ENERGY**

## **Minutes of the 1<sup>st</sup> Meeting of the 2024 Interim**

**June 6, 2024**

### **Call to Order and Roll Call**

The 1<sup>st</sup> meeting of the Interim Joint Committee on Natural Resources and Energy was held on June 6, 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: Senator Brandon Smith Co-Chair; Representative Jim Gooch Jr. Co-Chair; Senators Robby Mills, Adrienne Southworth, Johnnie Turner, Robin L. Webb, and Gex Williams; Representatives Adam Bowling, Randy Bridges, Lindsey Burke, Beverly Chester-Burton, Myron Dossett, Ryan Dotson, Patrick Flannery, Chris Fugate, DJ Johnson, Bobby McCool, Suzanne Miles, Bill Wesley, Richard White, and Wade Williams.

Guests: Kent Chandler, Chairman, Kentucky Public Service Commission; Cathy Waddell, Controller, Nucor Steel Gallatin; Michael L. Kurtz, General Counsel, Kentucky Industrial Utility Customers (KIUC); Kim Allen Menke, Regional Director of Government Affairs, Toyota Motor North America; Tom FitzGerald, former Director, Kentucky Resources Council; and Rusty Cress, Kentucky League of Cities.

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

Representative Johnson led the committee in commemorating the 80<sup>th</sup> anniversary of D-Day. Representative Dossett commended the work of electrical linemen and first responders for their quick response to storm damage in western Kentucky.

### **Energy Review and Outlook for 2024**

Kent Chandler stated the Kentucky Public Service Commission (PSC) is an independent regulatory agency governed by a three-member commission. The PSC regulates more than 1,000 utilities that provide water, sewer, natural gas, electric, and telecommunication services.

Wholesale power prices significantly increased in 2022 driven by an increase in fuel prices including coal and natural gas. Natural gas prices increased due to the war in

Ukraine and the concern regarding availability of natural gas. The increase in natural gas prices caused an increase in the demand for coal, which in turn increased coal prices.

Global natural gas prices have been higher than US prices due to an increase in domestic shale production beginning in the mid-2000s. Beginning in 2015, the US saw a significant increase in liquefied natural gas exports as transportation constraints were reduced. The increase in exports led US natural gas prices to become more aligned with the global price.

The current power generation mix in Kentucky is 71.4 percent coal-fired, 19 percent natural gas-fired, and 9.4 percent renewable energy. There is less than 1 percent petroleum-fired power generation. There are no expected changes in generation capacity, transmission, or fuel delivery systems through 2025.

PJM Interconnection (PJM), a regional transmission organization whose service territory includes part of eastern Kentucky, has forecasted electrical load growth of 0.8 percent per year for summer peaks and 1 percent per year for winter peaks for the next 10 years. The growth in Kentucky is significantly less. The load growth is primarily happening due to an increase in data centers in Ohio and Virginia.

Pending or proposed environmental rules will pose electric transmission cost and reliability concerns. There is significant cost to customers of inefficiently planning the electrical transmission system, and how the costs of transmission are allocated. In the last 13 years, the wholesale cost of transmission has tripled for PJM. Currently, the cost of transmission is half of the cost of energy. In the past, the cost of transmission was approximately 10 to 15 percent the cost of energy.

In response to Representative Johnson, Mr. Chandler stated the primary cause of increased transmission costs is the replacement of older transmission with similar transmission. The Federal Energy Regulatory Commission passed a new rule requiring transmission operators to update long-term transmission planning to anticipate future needs.

In response to Senator Smith, Mr. Chandler stated Kentucky has competitive power rates. In 2023, Kentucky's average residential power rates ranked 14<sup>th</sup> and industrial power rates ranked 11<sup>th</sup> in the US.

In response to Senator Mills, Mr. Chandler stated the transmission costs displayed in the presentation represent expenses paid for actual transmission. The costs do not reflect the savings needed to recover the depreciation of the asset.

## **Industrial Customer Responses to the Changing Energy Environment**

Cathy Waddell stated Nucor Steel produces sheet steel, which has hundreds of everyday uses such as parts for automobiles and appliances. Nucor Steel is one of Kentucky's largest electricity consumers.

New technologies, such as electric vehicles, and the materials they require are driving an increase in manufacturing in the US and significant investments in Kentucky. There is an increase in the construction of data centers to power artificial intelligence and the digital economy.

Nucor Steel has demand response agreements with the utility providers, which reduces their electricity consumption during peak demand.

Nucor Steel is the largest recycler in the US and one of the cleanest steel makers in the world. They make steel by recycling scrap metal in electric arc furnaces, which uses one-third of the power that traditional blast furnaces use. The low-carbon steel making process is a competitive advantage for Nucor Steel as electric customers are seeking to reduce carbon emissions. Nucor Steel has set a goal of net zero carbon emissions by 2050. Approximately 40 percent of the electricity consumed by Nucor Steel comes from clean energy sources.

Kim Allen Menke stated having a reliable and uninterruptable power supply is crucial to automobile manufacturing. Toyota Motor has a working relationship with Kentucky Utilities/Louisville Gas and Electric.

Toyota Motor utilizes a dual-power feed to minimize the potential for power outages and provides for the opportunity to do routine utility maintenance.

Representative Gooch stated companies are setting unattainable goals to become net-zero carbon emitters.

Michael L. Kurtz stated there is general consensus among PJM, Midcontinent Independent System Operator (MISO), and North American Electric Reliability Corporation (NERC) that there is a reliability crisis looming. The demand for electric power is increasing due to data centers and supply has decreased. The decrease in supply is due to decreasing usage of coal which supplies reliable power generation.

The United States Environmental Protection Agency (EPA) issued a new rule relating to carbon dioxide (CO<sub>2</sub>) emissions. Coal-fired plants that plan to operate after 2039 will have to capture 90 percent of their CO<sub>2</sub> emissions by 2032. Carbon capture and sequestration are unproven technologies and not commercially viable.

In response to Representative Miles, Mr. Kurtz stated all utilities are treated equally under state law.

In response to Senator Southworth, Mr. Kurtz stated the University of Kentucky has studied carbon capture and sequestration, and it has not been productive. The utilities that are against the new EPA CO<sub>2</sub> rule do not think carbon capture and sequestration are the best CO<sub>2</sub> control technologies, because they are not commercially viable.

In response to Senator Williams, Mr. Kurtz stated policies in other states do affect Kentucky power rates.

### **Adjournment**

There being no further business, the meeting was adjourned.