INTERIM JOINT COMMITTEE ON NATURAL RESOURCES AND ENERGY

Minutes of the 1st Meeting of the 2018 Interim

June 7, 2018

Call to Order and Roll Call

The 1st meeting of the Interim Joint Committee on Natural Resources and Energy was held on Thursday, June 7, 2018, at 1:00 PM, in Room 149 of the Capitol Annex. Representative Jim Gooch Jr., Chair, called the meeting to order, and the secretary called the roll.

Present were:

Members: Representative Jim Gooch Jr., Co-Chair; Senators C.B. Embry Jr., Ernie Harris, Ray S. Jones II, Christian McDaniel, John Schickel, Brandon Smith, Johnny Ray Turner, and Whitney Westerfield; Representatives McKenzie Cantrell, Tim Couch, Jeffery Donohue, Jim DuPlessis, Daniel Elliott, Kelly Flood, Dennis Keene, Reginald Meeks, Suzanne Miles, Rick G. Nelson, Jim Stewart III, Jim Wayne, and Jill York.

Guests: Talina Mathews, Commissioner, Kentucky Public Service Commission; Amy Elliot, External Affairs Manager, Kentucky Power; David Sinclair, Vice President of Generation Planning, Louisville Gas and Electric and Kentucky Utilities; Brett Phipps, Managing Director, Fuel Procurement, Duke Energy; Scott Park, Director Integrated Resource Planning and Analytics Midwest, Duke Energy; Craig Johnson, Senior Vice President Power Production, East Kentucky Power Cooperative; Lindsay Durbin, Vice President Human Resources, Big Rivers; and Mike Pullen, Vice President Production, Big Rivers.

LRC Staff: Tanya Monsanto, Janine Coy-Geeslin, Shelby Bevins-Sullivan, and Rachel Hartley.

Overview of Retirements and Capacity for Electric Generation in Kentucky

Talina Mathews stated that the Kentucky Public Service Commission regulates 16 East Kentucky Power cooperatives, three cooperatives with Big Rivers, and all investor owned utilities in the Commonwealth. The commission does not have regulatory authority over the Tennessee Valley Authority or municipal utilities.

From 2013-2017, 12 coal plants and one natural gas plant have closed. One of the coal units has been converted into a natural gas plant. Cane Run Station closed three coal plants, but opened a new, natural gas combined-cycle plant. The average retired plant age was 54. There are five more planned retirements of coal plants. The reasons for retirements were low natural gas prices, age, efficiency, emission rules, and declining demand.

In 2016, 83 percent of electricity generated was by coal and 10 percent was by natural gas. In 2018, all investor-owned utilities will have excess capacity greater than 20 percent.

In response to a question from Representative Gooch, Ms. Mathews stated the declining demand is due to conservation. The average household electricity use is declining due to new appliances and improved construction of new homes.

From 1970-2016, the price of coal has been steady, but there has been a slight increase in price in recent years due to the cost of extraction. The price of natural gas has been steadily declining since 2008.

Electricity prices have increased. The 2016 average rate in Kentucky was 8.26 cents per kilowatt-hour. Residential has the highest rate while industry has the lowest rate.

The issues affecting future electricity prices include the need for environmental retrofits, declining load, increased costs of providing service, and costs related to early closure of power plants. All baseload generation currently proposed will be natural gas combined-cycle.

The factors impacting how to increase electric generation capacity in the future include the repeal of the Clean Power Plan, corporate sustainability goals, lack of forthcoming additional capacity to meet demand, adequacy of natural gas infrastructure to serve generators, uncertain future environmental rules concerning hydraulic fracturing, and the further development of battery storage.

In response to a question from Representative Gooch, Ms. Mathews stated worldwide coal plant production is increasing. In the United States, with or without the Clean Power Plan, coal is still declining due to cost.

In response to a question from Representative Flood, Ms. Mathews stated the grid is capable of providing baseload power to customers no matter the source of the power.

In response to a question from Representative DuPlessis, Ms. Mathews stated the market sets the price on coal-fired plants based on the lowest cost plan in dispatch. Kentucky is still diversified in generating electricity. The plants should not be idle because rate payers still have to pay for the plant infrastructure even if the plant is not in use. Ms. Mathews stated the rate for net metering is fair. Embedded in the retail cost is the fixed cost of electric power.

In response to a question from Representative Gooch, Ms. Mathews stated industrial customers prefer baseload generation. The coal units that will be the most impacted by the market change are those in deregulated states. Ms. Mathews believes Kentucky made a good decision to not deregulate.

In response to a question from Senator Westerfield, Ms. Mathews stated there is a cost shift related to net metering; however, the magnitude of the shift is difficult to measure.

In response to a question from Representative Donohue, Ms. Mathews stated the world would be very different without hydraulic fracturing.

In response to a question from Representative Cantrell, Ms. Mathews stated there will be a rate case involving Louisville Gas and Electric and Kentucky Utilities. There will be six major rate cases by the end of 2018.

In response to a question from Representative Miles, Ms. Mathews stated the repeal of the Clean Power Plan is still in process.

Electric Generation by Utility: Retirements, New Capacity, and Purchase Power
Louisville Gas & Electric and Kentucky Utilities

David Sinclair stated Integrated Resource Planning (IRP) has consistently delivered reliability and reasonable costs for their customers. IRP is a holistic approach to understanding future electricity needs and identifying the best technologies.

In the last decade LG&E has invested $4 billion in utilizing coal, $600 million to build the state's first natural gas combined-cycle plant, and $450 million in a coal combustion residual treatment plant. Reliably meeting energy needs for the customer requires a diverse mix of resources. A mix of generation assets is required to effectively manage risk of multiple failures. Coal units that retire will likely be replaced by a combination of natural gas, renewables, and energy storage.

In response to a question from Representative Gooch, Mr. Sinclair stated there are two plants that are closing due to economics. The plants were only in production 23 percent of the time. It is very expensive to reopen a coal plant, and there are no plans to idle plants.

East Kentucky Power Cooperative

Craig Johnson stated the East Kentucky Power Cooperative (EKPC) has two coal plants, two natural gas plants, six landfill gas plants, one solar farm, and one hydropower plant. Additionally EKPC has 2,850 miles of transmission lines, 373 distribution substations, and 97 transmission stations. About 55 percent of their electricity is produced by coal units and 43 percent is purchased power.

There are no new resources planned until after 2025, and no plant retirements in the next decade. Also there are no nuclear plants planned, and no new natural gas baseload generation planned. About $1.7 billion was spent on environmental compliance for coal-fired units, and it is expected that EKPC coal units will be some of the last to retire because of their favorable geographic location to coal reserves.

In response to a question from Senator Harris, Mr. Johnson stated the contract with Louisville Gas and Electric and Kentucky Utilities regarding a unit in Oldham and Clark counties expires April 30, 2019.

Duke Energy

Scott Park stated Duke Energy has a generating capacity of over 800 megawatts. Its baseload in East Bend 2 produces 600 megawatts by coal fire and those plants will be the primary generation source for the next decade. During peak demand, there is an additional 476 megawatts supplied by gas-fired plants, and in 2019 oil will be another option. Solar also makes up seven megawatts of capacity.

Coal plants will continue to operate, but a carbon dioxide tax would put coal units at risk. There is a plausible replacement of retiring coal generation with gas which emits carbon dioxide at 35 percent the rate of coal. There is no nuclear development expected, and renewables are increasing in development over time. Renewables will be added to increase diversity, meet the demand of existing customers, and increase the ability to attract new businesses.

In response to a question from Representative Gooch, Mr. Park stated that carbon dioxide is not the only gas released by coal and gas plants.

In response to a question from Representative DuPlessis, Mr. Park stated he does not know if solar farms are paid for by increased rates or environmental fees.

Big Rivers

Mike Pullen stated Big Rivers has 116,000 members and is a non-profit. It provides capacity through a combination of eight cooperative-owned generation units, one leased generation station, and purchased power. The capacity of cooperative-owned generation is 1,444 megawatts. Big Rivers has approximately 1,300 miles of transmission lines and 22 substations.

Lindsay Durbin stated Big Rivers has continued to work successfully to reform its business model to meet the needs of its member customers and pay its financial obligations with revenues from new power supply contracts.

Kentucky Power

Amy Elliot stated Kentucky Power generates power from three sources: two coal plants and one natural gas. There are currently no plans to retire any of its generation in the next five to ten years, and there are no plans to add fossil fuel generation. In 2017, 87 percent of generation was coal, and 13 percent was natural gas.

Kentucky Power contributes approximately $480,000 annually for low-income energy assistance. That amount is matched with contributions from customers, for a total of nearly $1,000,000 annually. Kentucky Power offers two different types of budget billing to help customers manage their energy bills. There are currently approximately 25,000 customers enrolled in one of the two programs.

Of the total $4,116,000 of economic development funding since 2012, approximately $3.4 million was contributed by Kentucky Power. Braidy Industries groundbreaking took place June 1, 2018, and will create 550 jobs.

In response to a question from Representative Gooch, Ms. Elliot stated there are currently 36 employees at Big Sandy. Converting Big Sandy from coal to gas, and acquiring 50 percent of the Mitchell plant saved customers $600-$800 million.

The next meeting of the Interim Joint Committee on Natural Resources and Energy will be July 5, 2018. Documents distributed during the meeting are available in the LRC Library and at www.lrc.ky.gov.

There being no further business, the meeting was adjourned.