



**NORTH CAROLINA ENERGY POLICY COUNCIL
MEETING MINUTES
10:00 a.m., August 21, 2019
Archdale Building
Ground Floor Hearing Room
512 N. Salisbury Street, Raleigh, NC 27604**

Energy Policy Council Members Present:

Steven Walker
Sushma Masemore
Jenny Kelvington
Herb Eckerlin
Gus Simmons
Bruce Barkley
Rick Feathers
Scott Tew (via phone)

CALL TO ORDER

Mr. Steven Walker called the Energy Policy Council (EPC) meeting to order at 10:00 a.m. on Wednesday, August 21, 2019. After welcoming the Council members, staff and the public to the meeting, Mr. Walker introduced Jennifer Kelvington, the most recent addition to the EPC. Mr. Walker then asked for approval of the May 10, 2019 EPC meeting minutes. Mr. Rick Feathers moved for approval of the meeting minutes, Mr. Bruce Barkley seconded the motion and the minutes were unanimously approved by the Council. Mr. Walker then reviewed the agenda and introduced the first presenter.

PRESENTATIONS

Perspectives on U.S. Energy Pricing: Oil, Gas, and Electricity

Mr. Pavel Molchanov, Raymond James and Associates

Mr. Molchanov gave a “big picture” forecast of oil and natural gas prices from 2018 to 2021. He projected price increases and cyclical highs for oil by 2021, and lower natural gas prices over the same period. Oil demand in China and Asia, he said, is rising but overall international consumption may be moderating, flat or declining.

Globally speaking, he said the U.S. has cheap gasoline that only represents about 2% of the average consumer’s income, while other countries (Mexico, South Africa, Canada) have higher costs per gallon and consume almost twice as much of their average income for gasoline. Following the non-OPEC international supply growth in 2018, 2019 production slower and is likely to continue slowing in 2020. However, the U.S. production continues to increase (though not as fast as in 2017) and is expected to be nearly 19 million barrels per day by the end of 2020.

The global oil market, according to Mr. Molchanov, focuses on U.S. data even though it only accounts for about 20% of global inventories. It predicts a substantial inventory draw in 2019 and a modest one in 2020. International matters that could affect the market include a Strait of Hormuz shutdown, peace in Libya, and a regime change in Venezuela.



Mr. Molchanov said that U.S. natural gas prices are expected to range between \$2.50 to \$3.00 per million cubic feet (Mcf). The short-term prices are mainly driven by coal-to-gas switching for electric generation and weather. Demand-side drivers include liquid natural gas exports, pipeline exports to Mexico, chemicals/fertilizer manufacturing, and new gas-fired power plants. From 2008-2018, natural gas captured more than half of the market share lost by coal in the electric generation market. He projected that renewable (wind and solar) generation will double from 2014 to 2022.

He showed that NC's residential electric rates rank among the ten lowest (\$0.086/kilowatt hour) in the U.S. By comparison, a kWh in Connecticut costs \$0.177 and a kWh in Utah costs \$0.073. Overall power prices during the past ten years, he said, are trending 1-2% higher. Currently, the lowest-cost options for new power plants are natural gas-fired and on-shore wind.

Mr. Molchanov showed that solar generation costs have been rapidly declining since 2008. He concluded that large-scale battery deployments for solar are becoming more prevalent and that by 2022-2023 they may be mainstream generation sources.

North Carolina Utility System Rate Making

Mr. Christopher Ayers, Executive Director, N.C. Utilities Commission Public Staff

Mr. Ayers provided an overview of the Public Staff and how it compares to the NC Utilities Commission (NCUC). Both are independent agencies with separate staffs, leadership and budgets. The NCUC does not direct or oversee the Public Staff; it appears as a party before the NCUC. The NCUC is an advisory staff and the Public Staff is an audit/advocacy staff.

He explained that most utility functions are natural monopolies that provide essential services. They are not subject to competition, have an obligation to serve anyone, and their rates are based on the cost of service that includes a reasonable rate of return. He defined "energy" as the actual electricity being produced, "capacity" as the infrastructure needed to produce electricity, and kilowatts (kW) or megawatts (mW) as the units of measurement for electricity.

According to Mr. Ayers, capacity requirements and utilization, peak demand, demand profiles, seasonal demand variations, and generation unit dispatch are considered in utility rate cases. A rate case, which takes about 270 days to complete, asks if costs can be recovered through rates, if it benefits the customer and if it is the least cost option? The least cost requirement, covered under NC General Statute 62-2(3a), requires "...energy planning in a manner to result in the least cost mix of generation and demand side reduction measures which is achievable."

Mr. Ayers said that the general ratemaking formula determines revenue requirements as rate base X rate of return (grossed up for income taxes) + expenses. In the formula, the rate base is the value of the property (power plants, transmission/distribution lines, etc.), the rate of return is the percent of return utility may earn on its invested capital, and expenses are those costs which can be reasonably and prudently recovered based on a historical test year.

Rate design, he stated, is established to meet the revenue requirement of the residential, commercial and industrial rate classes. Its components include for fixed (minimum) charges and variable (those influenced by the customer) charges. Tariff design includes standard service, real time pricing, time-of-use, critical peak pricing and rebate, curtailable service, and co-generation. He reviewed some other ratemaking concepts including



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construction work in progress, allowance for funds used during construction, early retirement/plant abandonment, deferred expenses, and fuel riders.

Mr. Ayers then gave a brief overview of the Renewable Energy/Energy Efficiency Portfolio Standard, the Demand Side Management/Energy Efficiency Rider, the Public Utility Policies Act of 1978, and avoided cost rates. In closing, he provided the Public Staff's consumer advocate perspective for least cost of service, reasonable and prudent expenditures, and rate allocation risk between customers and the utility shareholders.

CLOSING COMMENTS

Mr. Steven Walker opened the floor for public comments and none were offered. He provided closing remarks and concluded the meeting. The motion to adjourn was made by Mrs. Jennifer Kelvington, seconded by Mr. Gus Simmons. The meeting adjourned at 12:19 p.m.

Approved by Energy Policy Council
Members on November 18, 2019
