Individual Electric Utilities' Rate History and Rate Plans[1]

February 2015[2]

A Bit of Generalizing

The details in this year's edition of this summary of Ohio electric rate activity yield some general observations which are inserted below.

Musings on Electricity

In January 2014, the stress of colder than normal weather revealed large cracks in the reliability foundation of PJM Interconnection, LLC's ("PJM") market-based form of wholesale electric regulation. But, the most notable consequence of the "polar vortex" is the excuse it has provided to PJM and others to advance several proposals that feed on the fears that were fanned after the polar vortex experience.

Winston S. Churchill[3] once said "never let a good crisis go to waste" and electric suppliers and many of their wholesale and retail regulators appear to agree. So, it is not surprising that events in 2014 included the introduction of several significant fear-based proposals which all seem to have a common objective; they all work to enhance the revenue that PJM or electricity suppliers can collect from captive consumers for the benefit of incumbent generators while ignoring the objective analysis that needs to be

[1] The law firm of McNees Wallace & Nurick LLC ("MWN") prepared this document to chronicle the evolution of Ohio's approach to the regulation of investor-owned electric utilities. It is MWN's hope that the information assembled in this report will facilitate efforts to obtain price and service quality outcomes that are customer-driven. This report and the activities we undertake on behalf of Ohio businesses are made possible thanks to the efforts of Kevin Murray, Executive Director of the Industrial Energy Users-Ohio ("IEU-Ohio"), Debbie Ryan, Vicki Leach-Payne, Karen Bowman, Renee Gannon, Joe Bowser, Matt Pritchard, Frank Darr and Scott Elisar, with assistance from Ed Hess, Jim Ebert, Don Pesich and John McGough. The views expressed herein are the views of the individual contributors to this report and not the views of IEU-Ohio or any other client which has been or will be represented by MWN.

[2] Author's Note – Information on the status of any Public Utilities Commission of Ohio ("PUCO") case identified herein can be obtained *via* the PUCO's website using the menu item for the PUCO's Docketing Information System ("DIS") at http://dis.puc.state.oh.us/ by inserting the case number in the "Case Lookup" box.

[3] In Churchill's time, there was great controversy over his effort to displace the use of domestic coal in favor of imported oil (see http://www.foreignaffairs.com/articles/61510/daniel-yergin/ensuring-energy-security, last visited February 10, 2015). His goal was to make the fleet of the Royal Navy faster than the German fleet. As part of his many observations and to counteract his opponents, which included incumbent coal producers, he asserted that immense deposits of clay containing oil-bearing bands or seams stretched across England (inflammable oil shale deposits were identified in England in reports dating back to at least 1888).

done to identify and remedy the root cause of problems revealed during the polar vortex experience.

PJM's efforts to increase the amount of consumer wealth transferred to incumbent generators include, among other things: (1) a modification of the demand and supply curve so as to increase the amount of capacity that consumers must buy and pay for; (2) adding a new capacity product (the "capacity performance" product) that consumers must buy and pay for; (3) dithering rather than addressing "seams" issues that prevent non-PJM resources located in the Eastern Interconnect from offering resources needed by the 13-state region within PJM's walls; (4) increasing the offer cap; and (5) reacting timidly to generators' efforts to block participation by the demand response resources of retail consumers.

Meanwhile, generators are also busy looking for revenue and earnings enhancement opportunities at the state level.

In Illinois, a large vertically integrated electric utility is seeking "out of market" compensation for its legacy nuclear plants.

West Virginia and Kentucky allowed merchant generating units of vertically integrated utilities to reenter the safe harbor of retail cost-plus regulation. (Kentucky recently discovered that its approval was based on a misleading utility presentation of consumer benefits.)

Vertically integrated electric utilities in Michigan are pushing to eliminate the 10 percent slice of "customer choice" in that state.

In Arizona and Florida, vertically integrated electric utilities are working to eliminate rates and tariff provisions they judge to be too favorable for consumers who install roof-top solar systems.

And here in Ohio, the PUCO is considering electric security plans ("ESPs") that include new generation-related non-bypassable charges that are designed to funnel cash to affiliated generating plants of each electric distribution utility ("EDU") based on a cost-plus revenue requirement formula. The supporters of the ESP argue that the cost-plus revenue requirement will eventually allow consumers to avoid higher electric bills than would otherwise occur if retail electric prices continue to be aligned with PJM's market-based form of wholesale regulation.

The generators' efforts to boost revenue and earnings are occurring at a time when consumers are also getting hit by: (1) large increases in the prices charged for transmission caused, in part, by the build-out associated with delivering the output of wind turbines in remote locations to population centers; (2) the direct and indirect cost of utility compliance with portfolio mandates; (3) increases in the delivered cost of many goods and services that are the result of environmental laws and regulations; and (4) an expanding list of "self-reconciling riders" that transfer business and financial risk from utilities to consumers and make utility bills more difficult to predict.

In summary, being captive to the grid is getting scarier and more expensive regardless of the form of regulation that is applied to determine the prices for grid-supplied electricity. And all of this is happening at a time when the cost of capital is relatively low and innovators are producing hardware and software – some of them "off grid" – that promise better service and lower prices.

The incumbent-erosive forces of relatively low capital costs and innovation are made more significant in present times because they coexist with a low, if any, growth rate in grid-supplied kilowatt hours ("kWh").

History tells us that local, state and federal economic regulation (regardless of the form) can slow the pace of change that incumbent utilities view as disruptive.

Manufactured gas utilities used local and state regulation to slow the entry of electricity providers. Telegraph utilities slowed the entry of voice communication companies. Voice communication companies slowed the entry of competitive customer premises equipment providers, wireless communication and cable television providers wishing to provide voice, video and data transmission.

But history also tells us that slowing the pace of change may not alter the final chapter of the story.

The fate of the fear-based proposals that arrived in 2014 depends on the response that they receive from government. But the power of government to directly or indirectly tax commerce is no broader than the power to collect the tax. If government cannot collect the tax, then a debate over the power of government to impose the tax holds only academic interest. And so it is with government engaged in utility regulation, whatever the form.

Time will tell if the incumbent generators and regulators who are straining to make grid-supplied electricity more expensive and scarier are on the right track.

Musings on Natural Gas

For the electricity sector, the current supply and price of domestically available natural gas are negatively disrupting most utility business models that indexed earnings to high electric prices (that were dependent on an inadequate supply of natural gas and high and volatile natural gas prices). For most consumers, and the larger domestic economy (which is heavily influenced by consumer spending), the disruption is positive.

The success of remedies designed to address the anticompetitive structure of the electricity sector, remedies much discussed in the 1990's, frequently depended on innovation to reduce the capital cost and heat rate for new generating technologies fueled by a plentiful supply of natural gas available at "reasonable" prices. Today, new generation technologies offer significant heat rate improvements as compared to "legacy" plants and there appears to be a large unconventional supply of natural gas that can be produced at relatively low and stable prices. As already mentioned, the cost

of capital is relatively low. And these conditions that are generally favorable to natural gas producers are enhanced by environmental laws and regulations that tilt, at least in the near term, capital allocation decisions towards increased reliance on natural gas.

But increasing the portion of our energy consumption portfolio that is satisfied by natural gas may be easier to talk about than it is to do.

The location of our unconventional natural gas and other energy resources means that the use and operation of existing pipelines are changing and will likely change further. In Ohio, there are some well-known examples of areas where the infrastructure will not provide adequate pressure or volume at the customer's meter to support a customer's shift to natural gas. Even when the local infrastructure may be up to the task, the amount of firm transportation on interstate pipeline segments needed to get the gas from the desired producing area to the target consuming area may not be sufficient.

Unlike the electricity area, there are no regional transmission organizations engaged in analysis of the longer term infrastructure needs.[4] And, the identification of areas where new natural gas infrastructure may be needed to reliably support an end use energy portfolio that is more heavily weighted towards natural gas is not typically in the field of view of state or federal regulators.

Rather than forcing intermittent forms of energy and demand-side gizmos into the end use energy portfolio through portfolio mandates, perhaps the power of government might be better used to: (1) systematically collect data on the state of the energy network infrastructure relevant to Ohio; (2) develop or apply scenario-based models to identify weak links; and (3) harness the market to do the work needed to de-bottleneck the network.

The nature and pace of change is accelerating both generally and in the energy sector. Some of the change is very disruptive to incumbent suppliers, their business models and governments that have tied themselves to particular energy forms or have adopted laws that force citizens to ignore their energy preferences. The trend line that points to our future indicates that an easily navigable and reliable energy network based on an open architecture design can be a strategic advantage for Ohio and its citizens. But, getting there will require government to think and behave much differently about how to discharge its energy-related responsibilities so as to advance the public interest.

Will Ohio let the "polar vortex" crisis go to waste?

The rest of this report is located on the Manufacturers' Education Council's website at: www.mecseminars.com.

[4] Time differentiated basis differentials or locational differences in the delivered price of natural gas are generally indicative of bottlenecks.