



Divergence Paper Update

By Dan Allegretti

In 2017 and 2018 RESA published two papers by the late Dr. Phil O'Connor: *Restructuring Recharged the Superior Performance of Competitive Electricity Markets 2008-2016* (April 2017) and *The Great Divergence in Competitive and Monopoly Electricity Price Trends* (September 2018) (this second whitepaper was written jointly with Muhammad Asad Khan). Unlike other recent studies which have attempted to draw conclusions from an examination of more limited data solely within certain competitive jurisdictions to conclude

whether competition is benefitting consumers the authors looked at a broader set of data and provide insights to explain why and how choice and competition are producing economic benefits for all customers across the board in those jurisdictions that enable choice and competition.

O'Connor and Khan's disciplined and thoughtful examination of electric competition is more important reading than ever for those attempting to understand whether competition and choice have produced economic benefits in the form of lower electric costs. Recently some critics, such as consultant Susan Baldwin, have examined narrow sets of data and concluded that choice is an economic failure based on short-term comparisons between competitively sourced utility offers and competitively produced offers from suppliers to residential consumers. These analyses fail to rely on verifiable public data, fail to look across many years of such data and ignore the powerful insight that competition and choice have reshaped the allocation of investment risks and costs in ways that have lowered and continue to drive down electric costs for all customers, regardless of whether customers remain with utility backstop service or exercise individual choices. Now more than ever, therefore *Restructuring Recharged* and *The Great Divergence* are essential reading.

Sadly, for all of us, Dr. O'Connor passed away shortly after completing the *Great Divergence* whitepaper in 2018. RESA, however, has recognized how vital his work is and has undertaken to maintain the timeliness and relevance of his work by annually updating the trends with respect to pricing, generation, capacity and other relevant statistics and measures that O'Connor compiled in these two whitepapers. The data updates for 2019 and 2020 continue to unequivocally support the same insights and conclusions the author presented in 2017 and 2018.

In *Restructuring Recharged* Dr. O'Connor begins with a fascinating and enlightening history of the restructuring of the electric power industry. Understanding where we began and how we arrived where we are provides the reader with the essential foundation for examining the success of competition and customer choice for electric supply service in those jurisdictions that enable choice and competition at the retail level. Dr. O'Connor then takes us from this history into the numbers with review of the price divergence between restructured and traditional monopoly states, the attraction of investment capital and the performance of merchant generation facilities in both types of jurisdictions. His conclusions are compelling as he explains the superior performance of customer choice policies and the unsustainability of the monopoly

model in a world in which technological innovation is driving down demand for electricity and requiring investment to adapt to this constant change. Looking to the future, Dr. O'Connor shares his observations on innovations in the power sector that will occur in the information age and how competition is the essential driver to realize the enormous potential from advanced meters and ever more sophisticated data and information systems. He summarizes the many ongoing policy initiatives to expand and improve customer choice and the dimensions across which we can expect restructuring to evolve.

In *The Great Divergence* the authors examine electricity price data across the contiguous U.S. in both competitive and vertically integrated monopoly states and across a decade of time to reach a compelling set of conclusions. The insight from this paper is that by looking past price comparisons between or within particular states (or within particular years) a more profound trend emerges: states that rely on regulated monopoly service have seen prices rise over time at a far steeper rate than those states that restructured to adopt competitive retail choice. In other words, regardless of the experience of any individual customer at any particular point in time the economic benefit to states that made the public policy decision to implement choice is a significantly lower weighted average cost of electricity than would be the case had they continued to rely upon regulated monopolies. Indeed, the 2020 updates to the underlying data set show that this gap between the price trend in monopoly states and the price trend in choice states has continued to widen every year, reaching a whopping 26.4% spread across all rate classes as of 2019¹. The second whitepaper written in 2018 refers to this startling trend as “The Great Divergence.” O'Connor and Khan dive into the data and explore some potential explanations for why choice states have done so much better over time and uncover two important insights.

First, the authors noted that across the ten-year term they examined the growth in aggregate electric consumption has been flat or declining. This decrease in consumption has the effect of producing over-capacity in terms of available electric production. When generating assets are included in a utility's rate-base under cost of service regulation they observed that consumers themselves continue to bear the cost of this utility production capacity, whereas within a market construct they are free to escape paying for any excess capacity by exercising choice, thereby forcing investors to bear the cost of capacity that is no longer needed. As the authors put it “Central to the Great Divergence is that the monopoly model increases price precisely because there is weak demand.”

The second insight into *The Great Divergence* also has to do with production capacity. Specifically, the authors point to the lower rates of capacity utilization in vertically integrated monopoly states versus those in jurisdictions that allow choice and competition. The explanation here is one of incentives. So long as a plant is used and useful its fixed costs can be recovered in a regulatory paradigm, whereas plants in competitive markets have no captive rate-base and only those with high utilization rates can remain competitive. Again, the ability to exercise choice puts the investment under constant economic pressure, leading to a more efficient production fleet. This insight is borne out as well by the most recent data update which shows that as plant utilization in general has trended downward across the contiguous U.S. with falling electric demand over time the ability of choice states to remove excess capacity from service, along with

¹ See the update to Figure 2 of “The Great Divergence” or Figure 10 of “Restructuring Recharged”.

its attendant cost to consumers, has produced strikingly superior results when compared to monopoly states.

Looking back at the introduction of choice in telephony the changes over time have been astounding. When choice was introduced the main driver for consumers was the attainment of savings on long distance calls measured in cents per minute. Critics of competition pointed to rate comparisons between new entrants like Sprint and MCI versus the rates still offered by Ma Bell. What they failed to grasp at the time was how competition would drive innovation in products, technology and in consumer behavior. Early innovations like call-waiting, call-answering and caller ID seemed underwhelming. Over time, however competition in telephony has produced remarkable change, with products and services like email, texting, GPS navigation, internet search, music, and video streaming and more that were beyond the imagination of early critics. As we look to the future of electric choice there is no way to know what comparable sorts of innovative changes and benefits electric competition will produce. What is clear, however, from the data we can see today is that competition is producing clear economic benefits in those states which have adopted choice. Just how far beyond these early benefits competition will take us is for now a question of how far our imaginations can take us.