Competition is Dead! Long Live Competition! (Part 1)

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Sometimes in order to see where we are going it is important to look at where we have been. That is likely true of the evolution of the electricity sector.

You may have missed the news a couple of weeks ago that the Advocacy Group COMPETE closed up shop. COMPETE was a diverse group of energy marketers, electricity customers and other parties that focused on extending and expanding the competition in retail electricity that began back in the late 1980s. Only around half of the states actually went that route back then, leaving a lot of targets for advocates to work on.

For a variety of reasons, none of them the quality of the COMPETE effort, those non-open states did not move to retail competition over the past two decades. This resulted in, among other things, even more diversity in structure and form in the utility world than before, with some utilities operating as wires-only companies and some being vertically integrated as if nothing had happened.

Does that mean that the "age" of competition is officially over? Not at all. In some forms it may just be beginning. But before we get into that, let's look at what kind of competition exists or has been attempted to date and what kind of challenges there were with it. In order to streamline the past, I am going to skip the part about electric utilities competing against gas utilities to serve new suburban developments by selling all-electric "Gold Medallion Homes". I am also going to skip the part about utilities having programs where they rented hot-water heaters to their customers. Instead, I am going to start with energy efficiency.

Energy Efficiency. When energy conservation first became a "thing" some decades ago and utilities around the country started to roll out programs that included energy audits and other labor-intensive efforts, many utilities first moved to create major new internal departments filled with workers who went out into the field to do the work. Many also installed Direct Load Control devices on customer equipment for purposes of curtailment-based load management.

Even though the idea of utilities conducting energy audits was somewhat new, it raised red flags among contractors, engineers and others whose livelihood was to do that kind of work, as well as among the new emerging breed of Energy Service Companies (ESCOs). In some states, major battles broke out over the idea that the utility was using its monopoly power, including its touch points with the customer, to unfairly compete in this new product and service market. Regulators and consumer advocates jumped in to make sure this didn't happen. That, plus the fact that utilities realized that adding a lot of "feet on the street" may not be a good business for them to be in anyway, resulted in today's energy efficiency business being largely contracted out, with firms competing to provide the service to the utility or directly to the customer.

Power Generation. In 1978, Congress passed the Public Utilities Regulatory Policy Act (PURPA). This act is still amended from time to time for various policy reasons, but the real impact of PURPA was its original requirement that utilities purchase power from certain renewable and small power generation facilities. Projects that met the law's criteria for being included in this category were called qualifying facilities, or QFs. On the renewable side, the projects were predominately small hydro. In terms of "small power", PURPA essentially prescribed cogeneration (combined heat and power in today's parlance).

So suddenly there was someone other than the utility generating power, and the utility had to purchase it at a PUC-determined "avoided cost". Not exactly competition, yet I am not sure what else to call it. Someone other than the utility was generating and selling power.

The importance of the QF story is that it was the foot-in-the-door for Independent Power Producers (IPPs, and now simply called generators) to come on the scene and become the underpinning to wholesale competition and the foundation for retail competition to be built upon.

At its core, however, generation to date has not been a complicated, intricate, many-moving-parts type of business. It has not been a distributed-based business. It has been part engineering and part marketing. Some utilities gladly exited the generation business in the late 90's, as they did not want to be subjected to continuous second-guessing by regulators and the general public on the big-dollar investments they were making. So at this point, we have a competitive generation component of the electricity sector, even with some utilities still owning and operating the power plants.

Telecommunications. Easy to miss in the history of competition in the utility sector is the "adventure" that some electric utilities took into the telecommunications business. When that industry was deregulated it certainly did seem logical that electric utilities might have a play. After all, they were king of the "last-mile" of connectivity into the customer's home. Why not leverage that into an entirely new business? Well, it wasn't that simple, and CEOs at utilities that went down this path (a couple in the western U.S. come to mind) did not have success.

Metering. This is one of my favorite stories of past competition in the electricity industry, and the one most worth looking at in terms of what it means for the future. While it was steamrolling states into opening up to retail competition back in the 1990s, Enron decided to strike while the iron was hot and also push for competitive metering. It was successful in Texas and New York. But the problem (and I love saying this next part) was that Enron hadn't run the numbers, or had and yet was ignoring them. For the economics of metering showed that it was a volume-based business that depended on a coordinated network. The cost of ad hoc replacement of meters, i.e. going into one neighborhood one day to swap out a meter, and going out into some rural area the next to swap out a meter just didn't make sense (or cents). Also, putting in new advanced meters didn't make sense if there was no new communications network to interface with them. It turned out

that it cost 10 times as much to put in meters on a competitive basis. The unfortunate result was that no new meters were installed, and overall the introduction of advanced meters was stymied. Utilities did not want to move forward to deploy the technology if the business was going to be taken away from them by policy. Utilities outside of Texas and New York took notice and felt the same way. Eventually, the state laws in these two states were repealed, one thing led to another, and today over 70% of the meters installed or under contract to be installed are smart meters. The bottom line is that the deployment of new smart meters made the most sense when done by the electric utility.

So what does all of the above - especially the story of metering - mean in terms of the future of the electricity sector and the role of competition in it? As things get more distributed in the electricity industry, will utilities see opportunities to be a competitor? Will they see no choice but to enter into competition from a defensive standpoint? Will be deferred to because of their incumbency? Will cleantech and smart-tech companies see a need to compete with utilities, or will everybody partner up and find their own happy place?

That is for next time, when in Part 2 of this discussion, we look at data, microgrids, DR, DERMs and other part of the new world of competition in the electricity sector. And yes...there is a new world coming.