Response to Marilyn Showalter: "A Billion Here. A Billion There. Price Matters."

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I have been asked by EPSA to review a recent "blog" posting published on August 7, 2007 by Marilyn Showalter with the title, "A Billion Here. A Billion There. Price Matters." The crux of Ms. Showalter's posting is her comparison of retail electricity prices between "regulated" and "deregulated" states, and her claim that, based on this comparison, consumers in deregulated states would have saved billions of dollars if deregulation had never been pursued. Ms. Showalter's comparisons – and her conclusions – are deeply flawed and highly misleading, for a number of reasons that I will discuss. Normally, I would not respond to a blog posting. A blog is, after all, a medium for expounding strongly-held opinions and reacting to the data point or news item *du jour*; blogs are not subject to editorial review, peer review, or some other fact-checking process. In this case, however, *The New York Times* has used Ms. Showalter's blog posting as a source for an article on electricity regulation ("A New Push to Regulate Power Costs", September 4, 2007). Ms. Showalter's poorly-supported analysis and conclusions have been reported uncritically, and I am concerned that her analysis may thereby be accorded a degree of validity that is totally unwarranted. Hence, I feel compelled to offer a critical review of the analysis and contentions Ms. Showalter puts forth.

First, if one is to perform a comparison of "regulated" and "deregulated" states,[1] it is important that the states be classified appropriately. Ms. Showalter, however, includes in "regulated" states a number of states that have undergone restructuring, including Illinois, Virginia, Pennsylvania, Ohio, and New York. Indeed, another recently

[1] Ms. Showalter uses the terms "regulated" and "deregulated" in her blog posting. Since the electric industry is subject to continued federal and state regulation throughout the United States, it is more accurate to use the terms "unrestructured" and "restructured." Electric industry restructuring in various states replaced traditional utility regulation of electric generation with a market-oriented competitive model. The "wires" part of the electric utility business continues to be regulated under the traditional approach. I use Ms. Showalter's terminology when describing her claims, and I use the more accurate terminology in parts of my discussion. In the remainder of this response, the term "restructured" corresponds to "deregulated," and "unrestructured" corresponds to "regulated."

published study (*Public Utilities Fortnightly*, "Restructuring Revisited," by J.P. Pfeifenberger, G.N. Basheda, and A.C. Schumacher, June 2007) performed a similar comparative analysis, using 20 "restructured" states as compared with Ms. Showalter's eight "deregulated" states, and came to the *opposite* conclusions. In that article, the authors concluded that there was *no* significant difference in rate changes during 1997-2006 between restructured and non-restructured states (rates increased by approximately 31% in both groups of states). Furthermore, those authors concluded that the rate increases in the restructured states "lagged" the rate increases in the unrestructured states, resulting in a $24 billion *benefit* to customers in restructured states through 2006. In an article that I co-authored (*Public Utilities Fortnightly*, "The Fallacy of High Prices," by Harold Axelrod, David DeRamus, and Collin Cain, November 2006), I noted that over the period 1998-2005, prices had increased by 24% in the non-restructured South, as compared with 8% in the largely restructured "PJM" region; given that some states in the PJM region continued to be under rate freezes during that time period, I also noted that rates in restructured New Jersey had increased by less than 10% over that time period, even though New Jersey has had prices set competitively since 2003. Thus, as a starting point, it is important to note that Ms. Showalter's results are highly dependent on her choice of "regulated" vs. "unregulated" states – other comparisons point to very different conclusions.

Second, rates have increased substantially in unrestructured states as well as restructured states, largely in response to increases in fuel costs. Thus, any meaningful comparison of rates in "regulated" vs. "deregulated" (or "restructured" vs. "unrestructured") states needs to control for the other important factors that drive price differences, as well as the rate of change of price differences. Differences among states in the fuel mix of their generation is one of the most obvious and important factors that needs to be considered in such a comparison. While Ms. Showalter appears to give lip-service to the fact that there are other differences between regions that explain differences in price *levels*, she fails to acknowledge that these differences can also explain differences in price *changes*. As the authors in the June 2007 *Public Utilities Fortnightly* article discussed, this rate differential was increasing *prior* to deregulation and was one of the motivators for restructuring.

The fuel mix difference has a large impact on any comparison of electricity rates in different states. Some regions and states are more susceptible to increased fuel costs than others, particularly states or regions that depend largely on oil and natural gas. States or regions with a greater preponderance of coal, nuclear, and hydro generation have been less susceptible to price increases. Many "unrestructured" states, especially those in the South, have relatively large portions of their generation supply coming from coal and nuclear (and in some states, hydro). Prices have not increased as much in some of those states (as compared with more oil and gas dependent states, such as Massachusetts, for example), because their fuel costs – which are generally automatically passed through to customers – have not increased at the same rate as states relying more heavily on gas-fired and oil-fired generation. Even within a region, one cannot simply compare "unrestructured" Vermont (with more than 60% of its electricity coming from hydro and nuclear units) with "restructured" Massachusetts (with 50% of its electricity coming from natural gas units) and draw any meaningful conclusion about the relative benefits or deficiencies of the "regulated" vs. "unregulated" paradigm: the changes in electricity rates in the two states over the past several years will be dramatically different, completely unrelated to restructuring. Many states with relatively high electricity rates also have other attributes that are likely to result in higher prices, i.e., higher wages, taxes, etc. Since Ms. Showalter has not even attempted to control for the various important differences between the so-called "regulated" vs. "unregulated" states, one simply cannot draw any meaningful conclusions from her comparison.

It is also important to note that for the non-restructured states that have benefited over the past several years from their greater reliance on coal (e.g., some Southern states), their *future* rate of growth in rates, relative to less coal-dependent states, is likely to be higher than in the recent past. In other words, if Ms. Showalter were to perform this same comparison a few years hence, she will likely obtain considerably different results. States that are currently highly dependent on coal-fired generation face considerable risks of future cost increases, due to the increasing need for pollution control technology and other future emissions-related costs. We are already seeing significant rate increases attributable to pollution control equipment (e.g., in "unrestructured" Georgia), and states dependent on coal-fired generation are particularly susceptible to further rate increases as

carbon issues come to have a financial impact on consumers (e.g., as a result of future sequestration requirements, the cost of emissions allowances, etc.).

Third, and perhaps most egregiously, Ms. Showalter's calculations of the excess rates incurred by customers in restructured states are sheer nonsense. Given her failure to account for the main drivers of electricity price that vary by state, such as generation mix, fuel prices, environmental costs, zoning hurdles, and overall regional costs, Ms. Showalter's calculations of excess rates by customers in restructured states are less than useless – they are highly misleading. For example, Ms. Showalter claims that customers in "now-deregulated states" paid $25 billion more in *2000* than if they had bought power at the average rate of regulated states. As Ms. Showalter herself notes, however, states that restructured (in roughly 1999) did so in large part because they had high rates under regulation, rates that largely ***still prevailed*** in 2000. Her calculation is thus simply a comparison of high cost to low cost regulated states, and says absolutely nothing about the costs or benefits of deregulation. Obviously, residents of Massachusetts (with rates of 9.5¢/kWh in 2000) would have been delighted to buy power at rates paid by Idahoans (with rates of 4.2¢/kWh in 2000), but that would have required that they obtain 92% of their energy from hydroelectric generation, as in Idaho in 2000, rather than more than 50% from oil and natural gas. Massachusetts is not endowed with the same hydro generation resources that are present in Idaho – a tough break when it comes to electricity rates, but this has nothing to do with the costs and benefits of deregulation. Similarly, Ms. Showalter goes on to claim that customers in "now-deregulated states" paid $48 billion more in *2006* than if they had bought power at the average rate of regulated states. Again, the fact that she has failed to control for differences in price levels, due in particular to generation fuel mix, makes this comparison meaningless, from the perspective of assessing the costs and benefits of deregulation. As of 2005, Idaho relied on hydro generation for 79% of its electricity needs, while Massachusetts relied on natural gas and oil generation for 58% of its needs. Ms. Showalter calculates the seven-year cumulative value of this "gap" between regulated and deregulated rates as equal to $292 billion – a figure cited by the New York Times as the "total real cost to consumers in states with competition." While I have reviewed many conflicting studies purporting to quantify the

costs and/or benefits of competition, this figure has to be the least reliable and most misleading – it says absolutely nothing about the costs and benefits of restructuring.

Ms. Showalter goes on to claim that there would have been $60 billion in aggregate savings since 2000 if customers in restructured states had paid rates that rose at the same rate as in unrestructured states. While this figure is at least conceptually an improvement over her calculation of the $292 billion "gap," Ms. Showalter's comparison of the rate of change in prices between unrestructured and restructured states suffers from the same flaws as her comparison of price levels, i.e., she fails to control for other factors that give rise to systematic differences (ignoring the errors in her identification of "deregulated" states, noted above). For example, natural gas wellhead prices have risen *130%* between May 2000 and May 2007, while coal prices have risen 42% from 2000 to 2006 (according to the latest data from the EIA). Thus, one would *expect* unrestructured coal-dependent states to have a lower rate of increase in rates than restructured oil and gas-dependent states – completely unrelated to the issue of deregulation. One would also expect the difference in the rate of increase in rates to be even greater between unrestructured hydro-dependent states and restructured gas-dependent states. It is also notable that Western (sub-bituminous) coal in 2006 averaged $10.26 per short ton, while Eastern (bituminous) coal averaged $37.51 per short ton. Thus, even if restructured Northeastern states had been more reliant on coal-fired resources, electric rates would be higher than in unrestructured Western states – again, completely unrelated to the impact of restructuring.

At issue is whether consumers living in states that have undertaken electricity restructuring are and have been better off than had those states retained traditional cost-of-service rate regulation. Ms. Showalter's blog posting sheds no light on that question. This is a particularly difficult question to answer based on a comparative analysis across states, given the many other variables that need to be considered in the analysis. Even aside from differences in fuel mix, other costs, taxes, reserve margins, etc., at a more fundamental level, the classification of states as being either "restructured" or "unrestructured" obscures a wide range of substantive issues that have an impact on relative prices (and price changes over time). Restructuring has occurred over time and to different degrees in different states, accompanied by various transition mechanisms, rate

freezes, and stranded cost recovery provisions (the latter being a relic of the traditional cost-of-service regulatory model). In fact, many of the "unrestructured" states have themselves benefited from restructuring, particularly if "restructuring" is defined to encompass the expansion of competitive wholesale markets. There is considerable excess capacity in the unrestructured Southeast, for example, almost all of which is attributable to new capacity built by merchant generation – not by the incumbent vertically-integrated utilities – in anticipation of further restructuring in that region. Ultimately, restructuring in the Southeast did not occur (witness the paucity of RTOs in that region), and the combination of lack of market access and high gas prices caused much of that new merchant capacity to become "distressed." The presence of substantial amounts of distressed merchant generation not only holds prices down in the Southeast, but this distressed generation has also been increasingly acquired by incumbent vertically integrated utilities at bargain basement prices, often at a small fraction of the cost of new build. The resulting impact on retail prices in unrestructured Southeast states has absolutely nothing to do with the relative merits of the traditional cost-of-service regulatory model as compared with restructuring – other than the fact that under traditional cost-of-service regulation, the costs and risks of this distressed capacity would have been borne by ratepayers, not by the generation owners.

Another significant challenge in conducting a comparison of rates across states is how California should be treated in such an analysis. California experienced enormous problems resulting from how its restructuring was implemented, including not only fundamental problems with its novel market design, but also retail rate freezes that exacerbated the crisis, compounded by a lack of new building prior to restructuring, spiraling emissions costs, critical supply problems in 2000-2001, and a host of other factors. California will likely have a significant impact on any comparison of retail rates in regulated vs. unregulated states, given its relatively large size. Thus, an open question is whether the California experience should be included as a benchmark against which restructuring in general should be judged. In addition, it is not even clear how California should be categorized for purposes of comparing restructured and unrestructured states: while the generation side is largely restructured (i.e., most plants are competitively owned and operated), rates for most load do not reflect current market prices.

In order to answer the question of whether ratepayers have benefited from restructuring, a more reliable approach would be to conduct a "but-for" analysis: what were rates in restructured states, what would they have been under continued cost-of-service rate regulation, and what are they likely to be going forward? This is an analysis I have done for Maryland, for example, a state in which there was enormous political controversy when seven years of rate reductions and freezes mandated by restructuring legislation expired – in an election year. In that analysis, I found that Maryland ratepayers had obtained substantial savings as a result of restructuring legislation, even with the recent dramatic price increases accompanying the lifting of the price freezes. Certainly, much of the benefit accrued to date to Maryland ratepayers was the result of the legislative "bargaining" that accompanied restructuring legislation, namely, the rate reductions and rate freezes themselves. One can argue how to treat the benefit to consumers of past rate freezes in comparing the long-term performance of restructured vs. unrestructured states, but the past rate freezes have undeniably provided a direct monetary benefit to consumers. In the absence of restructuring, Maryland ratepayers' electricity rates would have inevitably increased in response to increasing fuel prices. This has been the central fallacy of much of the "restructuring-bashing" press: a single-minded focus on retail price increases immediately after price freezes were removed, ignoring the fact that retail prices were often frozen at levels below pre-restructuring levels for many years, despite substantial increases in fossil fuel prices over that time period. Furthermore, what is ignored in Ms. Showalter's analysis – and in the political debates in Maryland and other states, such as Illinois, that had many years of rate freezes – is the fact that rates under continued cost-of-service rate regulation would have likely increased to the level that prevailed after price caps were lifted, assuming, quite heroically, that the efficiency gains in baseload generation over the past eight years would have occurred even without restructuring.

Notwithstanding much of the recent negative press accounts, considered as a whole, much of the evidence indicates that restructuring of electricity markets has been successful, despite the significant set-back of the California debacle of 2000-2001. Ms. Showalter, for example, ignores the significant efficiency improvements in baseload power plants that has accompanied restructuring, with improved heat rates and capacity

factors at fossil plants and reduced outage times at nuclear plants. If these operating benchmarks had remained at pre-restructuring levels, rates in restructured states would have been far higher than they actually were, given that small increases in capacity factors of nuclear units have a large impact on rates. “Restructuring” in the electricity industry has also led to the expansion of organized markets, which in turn allows for the more efficient dispatch of a larger portfolio of resources. There are large efficiency gains from expanding the geographic scope of markets, as occurs with the formation of RTOs, as compared with the “balkanized” operation of regulated utility service territories.

Finally, arguments such as those advanced by Ms. Showalter ignore the fact that the most important policy challenge we currently face – carbon emissions and the prospect of climate change – can best be addressed with restructured markets. Ratepayers need to be exposed to clear price signals – signals of the marginal cost of the electricity that they consume – in order for them to have the financial incentives to respond accordingly, either by reducing consumption, shifting consumption to lower-priced periods, or investing in technology that improves efficiency. Incentives to address carbon emissions and climate change in the electricity sector – which accounts for more than 30% of carbon emissions – are muted, at best, in the absence of market mechanisms. Moreover, while many unrestructured states with access to greater coal-fired generation have benefited from relatively lower rates in the past several years, they will be exposed to significant risks on a going-forward basis. Not only will those unrestructured states see coal-fired generation becoming increasingly expensive due to the need for sequestration, cost of emissions, etc., but the absence of robust market mechanisms in those states means that they also lack the high-powered incentives to appropriately respond to the environmental challenges we are facing. Regulated utilities have no incentive for consumers to reduce consumption (quite the contrary); they have weak incentives to control costs (e.g., pass-through clauses for increased fuel costs); customers will bear the costs of changing relative values of generation technology in regulated states (e.g., current rate base increases due to installation of emissions control technology); and regulated utilities have at best muted incentives to improve either construction or operating efficiencies (e.g., conditions accompanying recent proposals for new baseload development in regulated states).

To be clear: restructuring was not, and could not be a guarantee of ever-lower electricity prices. Rate freezes aside, it was not even a guarantee that prices could not rise temporarily above rates that would have prevailed under continued regulation. Rather, restructuring established a competitive framework that, if implemented correctly, provides appropriate incentives for greater efficiency in plant operations, new capacity development, and consumption. That competitive framework is particularly suited to dealing with uncertain and changing circumstances, as are present in the current economic environment. Proper incentives for both supply and demand will allow the costs and risks associated with controlling greenhouse gas emissions to be allocated efficiently and fairly among producers and consumers. Competitive incentives will also promote the lowest cost solution to addressing climate change.

In summary, Ms. Showalter's comparison of regulated vs. deregulated states is fundamentally flawed:

- the data do not make the case she is trying to make;
- her estimates of excess costs in restructured states are nonsense;
- she ignores a broad range of evidence pointing to the benefits of competitive electricity markets; and
- she ignores the fact that competitive electricity markets – and restructuring – are critically important if we are to even begin to tackle the issue of carbon emissions and climate change.

There is no doubt that there have been significant missteps in restructuring, and there are significant challenges remaining to improve the functioning of competitive markets. But robust competitive markets are in the long-term public interest, not the retention of a regulatory model that is only in the interests of the remaining electric utility monopolies.