

October 9, 2007

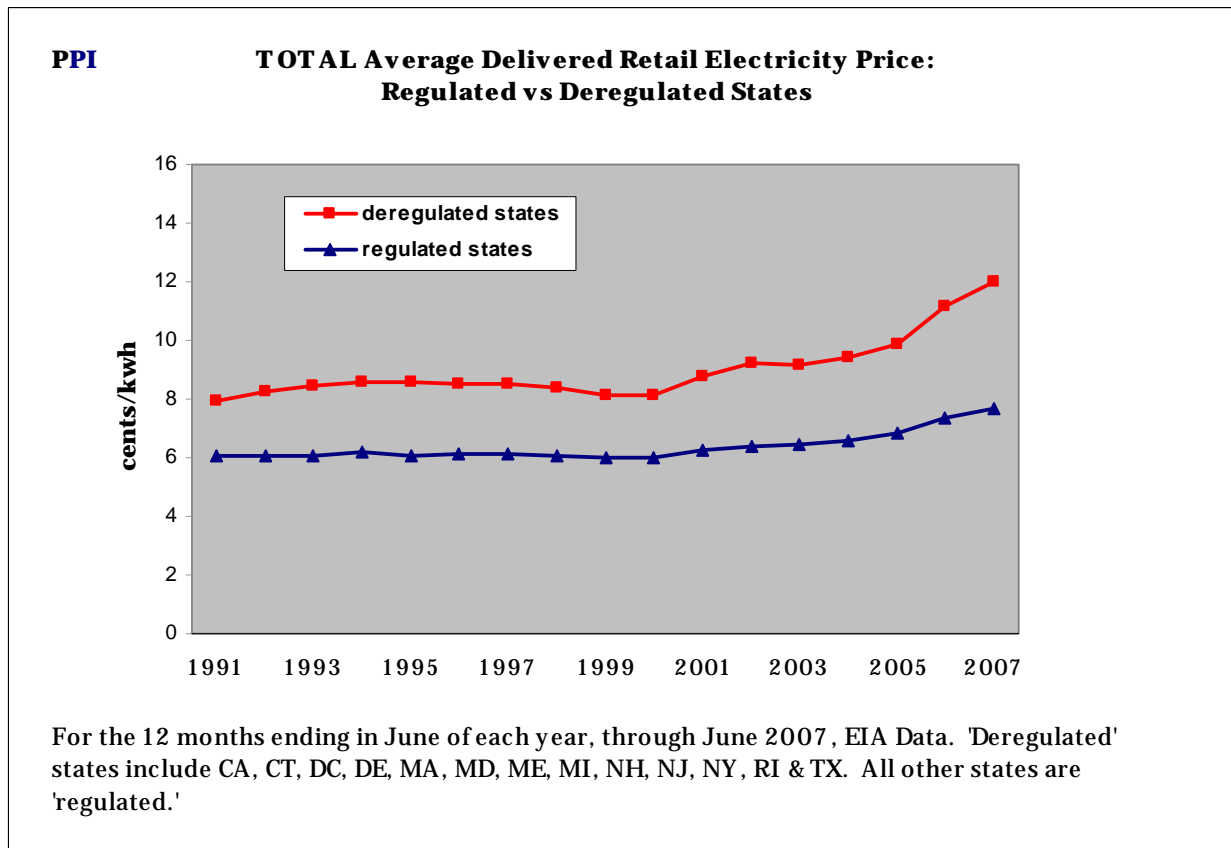
ELECTRICITY PRICE TRENDS IN NEW YORK COMPARED TO TRENDS IN PRICE-REGULATED STATES

based on EIA data through June 2007

National Picture. The gap in retail electricity prices between deregulated and regulated states continues to widen. The difference has more than doubled, from around 2 cents/kwh in 2000 to more than 4 cents/kwh in 2007.

Figure 1 shows retail prices in this price-deregulated group, compared to prices in the rest of the states, which have regulated rates (including price caps and credits).¹ Prices are for the twelve months ending in June of each year, through June 2007—the latest data available. They are for total delivered cost (generation, transmission, distribution) to all customers in a state.

Figure 1

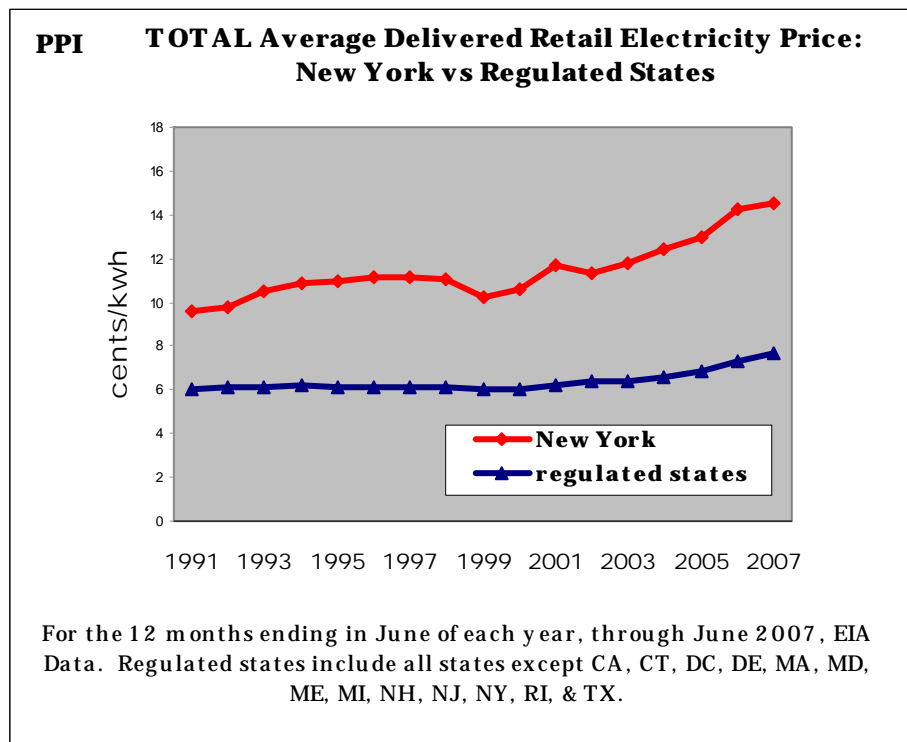


¹ For more on selection of states, see Notes at end of this paper.

New York Picture. Figure 2 shows retail prices for electricity in New York, compared to prices in states that did not deregulate.² Prices are for the twelve months ending in June of each year, through June 2007 (the latest data available from the US Energy Information Agency). They are for total delivered cost (generation, transmission, distribution) to all customers in the state.

In 2000, the average price for all customers in New York was 10.6 cents/kwh; the comparable figure for the collective regulated states was 6 cents/kwh—or a difference of 4.6 cents. As of June 2007, the difference had widened to 6.8 cents (14.5 cents/kwh for New York and 7.7 cents/kwh for the regulated states). For the 12 months ending June 2007, New Yorkers paid \$22 Billion for their electricity. The same amount of electricity at the regulated states’ average rate would have cost \$11.6 Billion—a difference (or comparative purchasing-power disadvantage to New Yorkers) of \$10.4 Billion for a 12-month period.

Figure 2

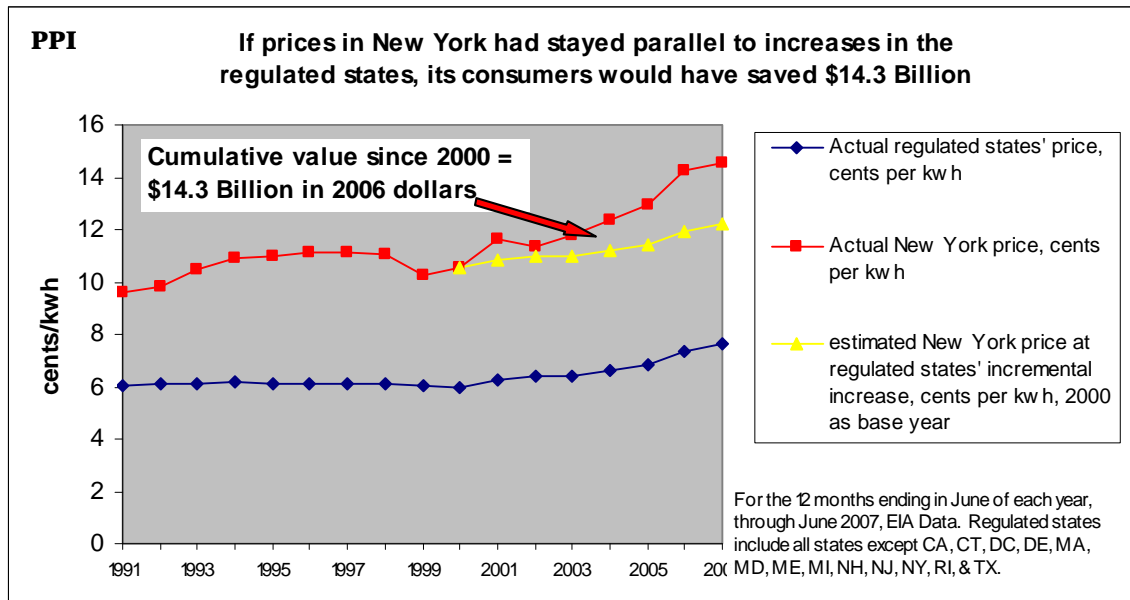


This is not to say that deregulation is responsible for the whole gap, or that the gap can be closed. The gap *does*, however, reveal the significant economic disadvantage suffered by customers in New York, and the imperative for New York to pursue the most effective form of economic regulation of electricity.

² The term “deregulated” as used in this paper, and as commonly used elsewhere, means *price*-deregulated, i.e., prices are set by a market, not directly by a regulator. The market rules themselves, however, are regulations; in this sense all electricity systems are “regulated.”

For example, Figure 3 shows a hypothetical yellow line of the average price in New York since 2000, *if* prices had simply stayed parallel to (but above) the average price in the regulated states—roughly similar to historical trends prior to 2000. In that hypothetical case, cumulatively since 2000, compared to what they actually paid, consumers in New York today would have an additional \$14.3 Billion in 2006 dollars (\$16 Billion if invested with a return of 5%) to spend on other things—on their families, their businesses, or new electricity facilities.

Figure 3



Again, one cannot say that New York would have followed this exact price-path had it not deregulated. Exact prices might have been higher or lower, depending on a number of factors, including growth, density, resource mix, and effective regulators.

The hypothetical yellow line *does*, however, provide a conceptual benchmark for examining why prices in New York have risen above it. A fair place to start would be New York's wholesale market design. By design, the most expensive needed resource, often a natural gas plant, sets the price for *all* needed resources, regardless of their underlying cost. So if the price of natural gas increases, as it has, or if an even more expensive renewable resource becomes the marginal resource, prices for *all* resources will increase as a result. By contrast, in regulated cost-based systems, a higher-cost resource will not significantly affect the amount consumers must pay for a lower-cost resource.

Here are comparison-charts for New York, broken down by class of customer: residential, commercial, and industrial.

Figure 4

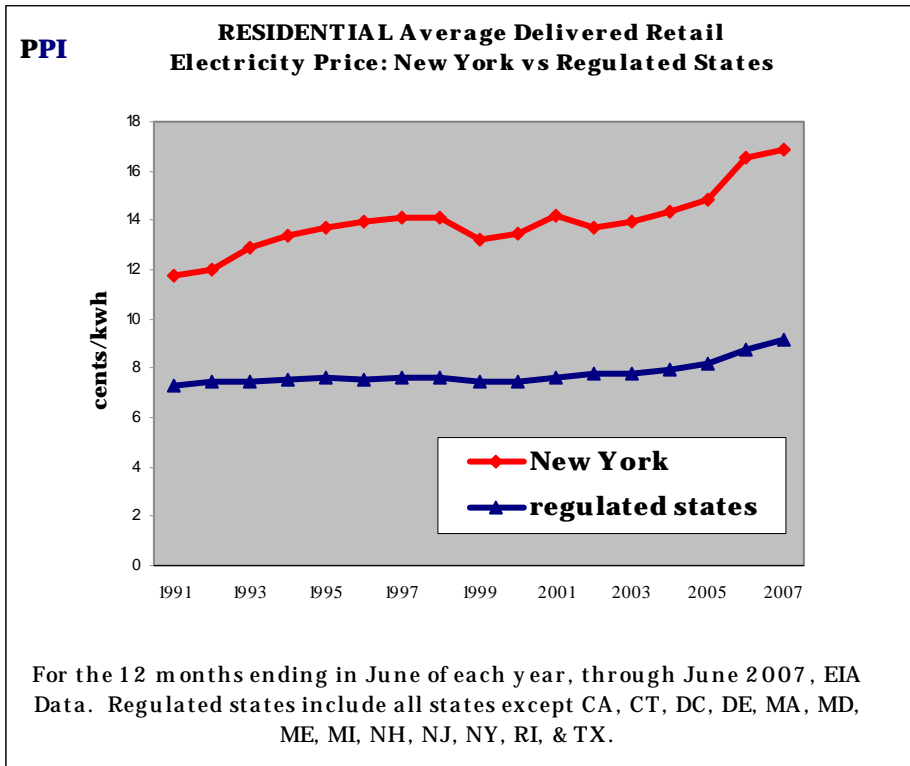


Figure 5

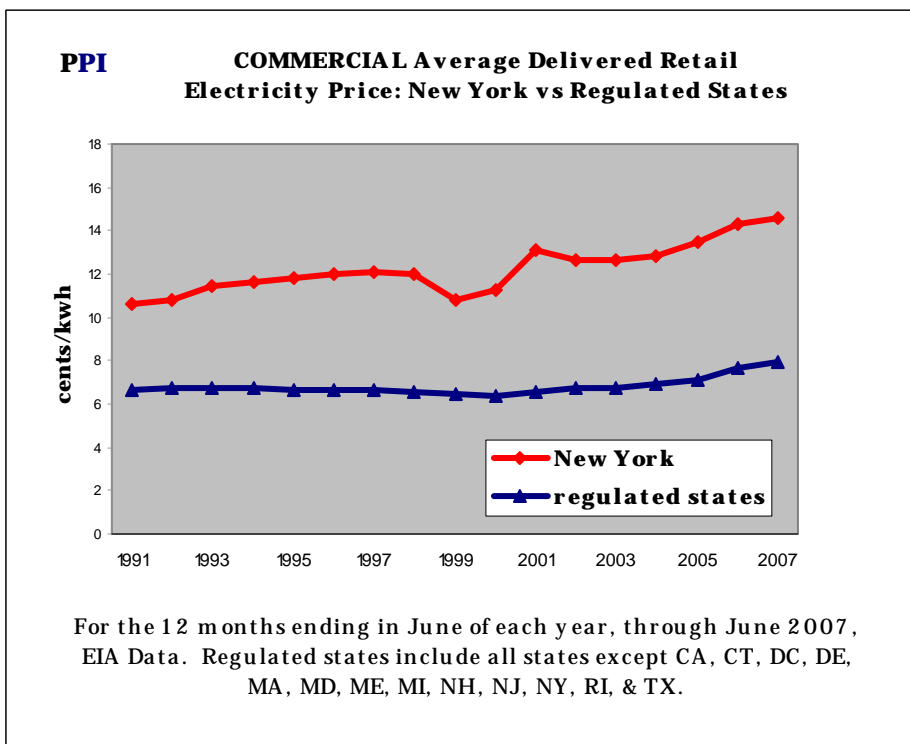
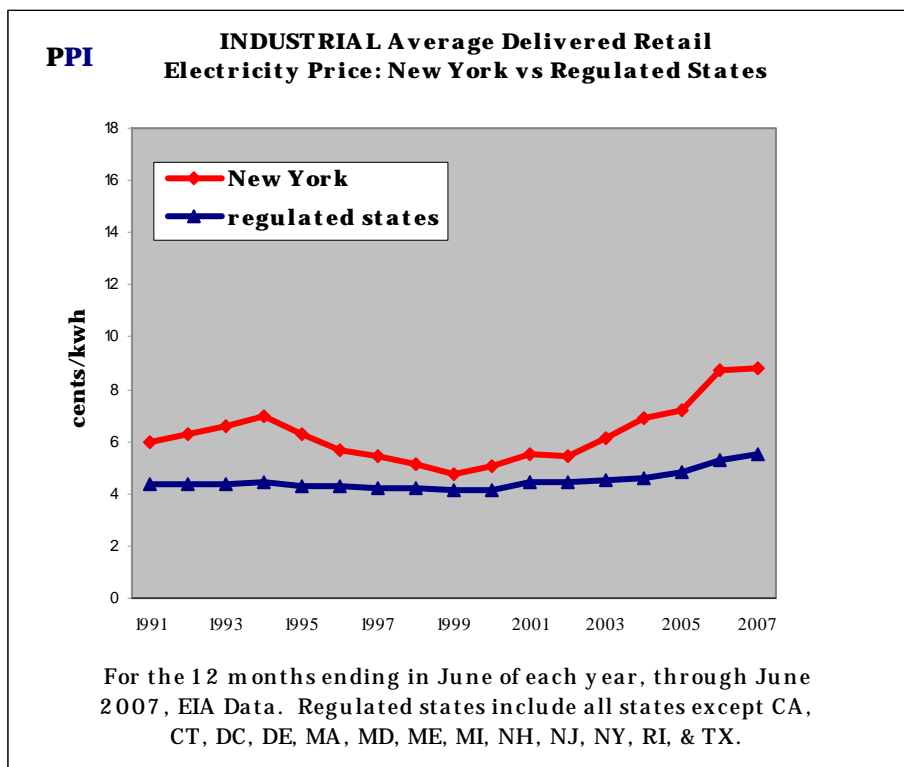
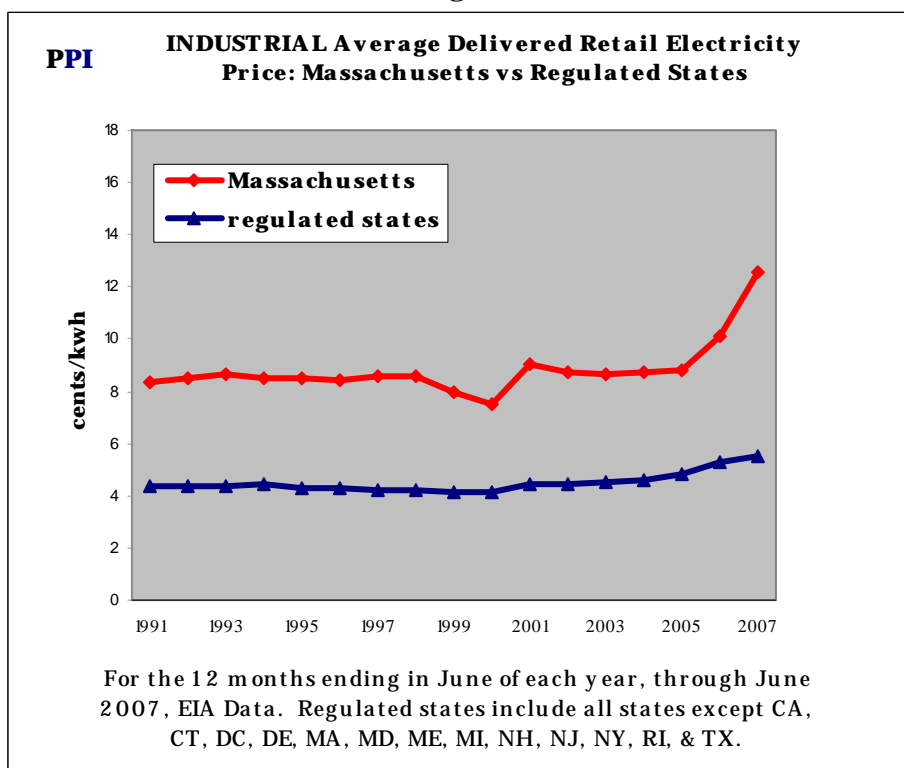


Figure 6



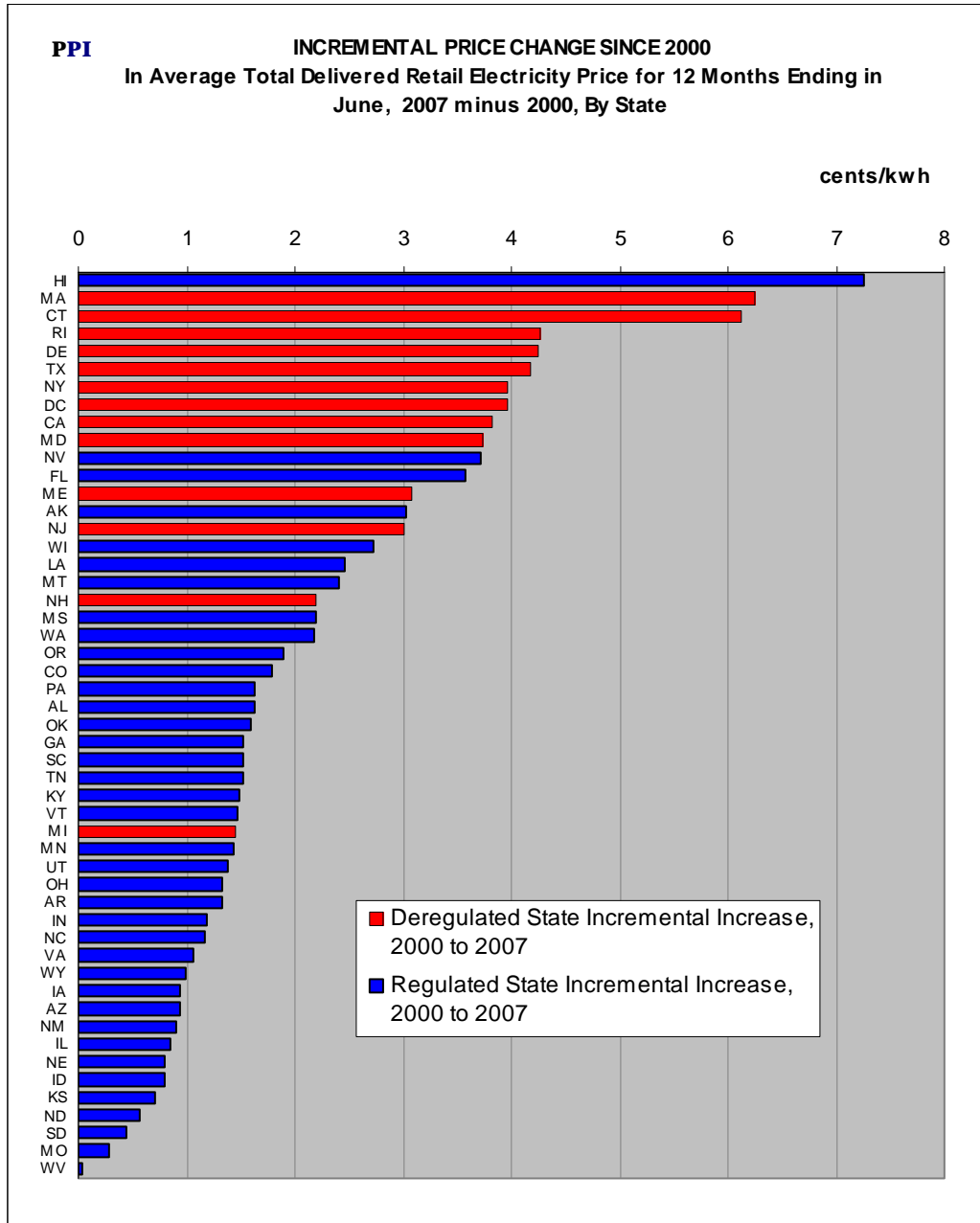
Price trends in other deregulated states are similar. To see price trends in all states go to www.ppinet.org and click on the blue map. Here, for example, are industrial prices in Massachusetts:

Figure 7



As Figure 8 shows, New York’s incremental increase in price since 2000 ranked seventh highest in the nation. Of the top ten states, all except Hawaii are deregulated states.

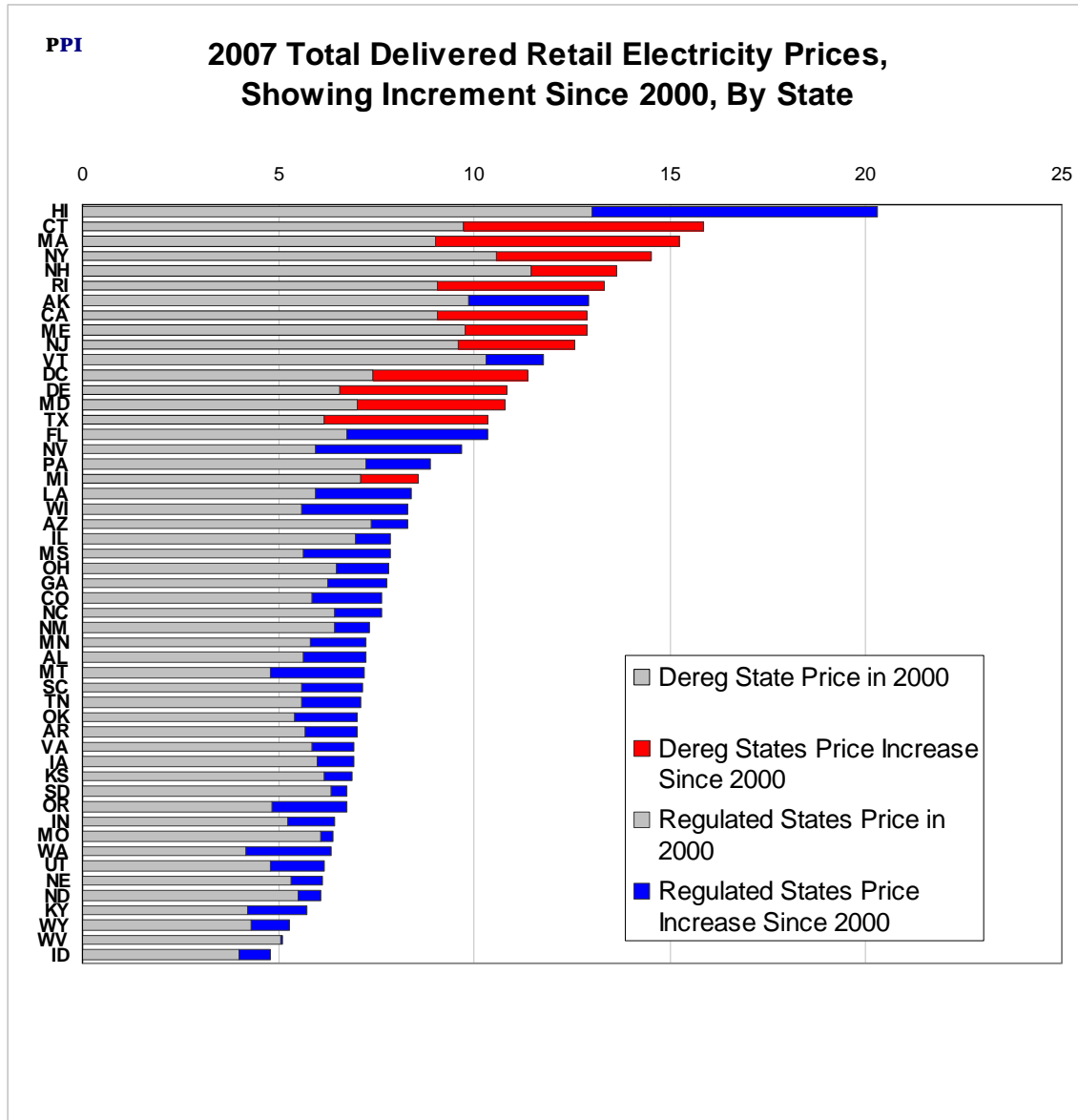
Figure 8



Challenges By Market Enthusiasts. Restructuring enthusiasts try to discount the reality of these high prices in a number of ways. First, they fault the selection of states shown as “deregulated” and argue that the “restructured” states of Illinois, Ohio, Pennsylvania and Virginia should be included with the deregulated group. But with the exception of a few months in Illinois and a small corner of Pennsylvania, retail prices in these states have been constrained by price caps. Retail prices under price caps do not reflect market prices.

Second, deregulation enthusiasts argue that deregulated and regulated states have experienced comparable *percentage* increases in rates. They would argue that the price increase in Idaho (at the very bottom in Figure 9) is “the same” as the price increase in New Hampshire (fifth from the top in Figure 9) because both experienced about a 20% increase since 2000. But no consumer would agree that New Hampshire’s increase from 11.4 to 13.6 cents/kwh is the same as Idaho’s increase from 4 to 4.8 cents/kwh—the cheapest rates in the country.

Figure 9



For the 12 months ending in June of each year, through June 2007, EIA Data. Regulated states include all states except CA, CT, DC, DE, MA, MD, ME, MI, NH, NJ, NY, RI, & TX.

Some advocates claim that the higher prices in deregulated states are simply the unfortunate effect of increased natural gas prices. Actually they are a reflection of market *design*. As previously noted, the wholesale market designs that drive retail prices in the deregulated states allow the most expensive needed bid, often natural gas plants, to

set the price for all needed resources, regardless of their underlying costs. If the price of natural gas increases, as it has, or if an even *more* expensive renewable resource becomes the marginal bid, prices for *all* resources will increase as a result. By contrast, in a regulated cost-based system, a higher-cost resource will not affect the amount consumers must pay for a lower-cost resource.

Notes:

The prices are averages for the 12 months ending in June of each year, 1991 through 2007. (A rolling 12-month average captures all seasons and can be updated each month.)

The prices shown are for total delivered price (generation, transmission, and distribution) for all customers in the state, whether served by an investor-owned or public-power utility.

The “regulated states” include all states except CA, CT, DC, DE, MA, MD, ME, MI, NH, NJ, NY, RI, TX, which comprise the “deregulated” states. Characterizing a state as “regulated” or “deregulated” involves some judgment, since different states can have different approaches to pricing for different classes of customers and to divestiture of regulatory assets. In general, states whose residential customers retained regulated rates are defined as “regulated.” The states of IL, OH, PA, VA are included in regulated states, due to price caps in those states through 12/06. Price caps in Illinois were removed as of January 2007, but January and some of February rates reflect prices paid under the previous month’s capped rates; since the graphs show a rolling 12-month average, Illinois prices for the 12 months ending June 2007 still largely reflect capped rates; further, a credit was legislated in summer of 2007 that will blunt the effect of future market rates. California suspended deregulation but remains in the “deregulated” category because significant regulatory assets were divested, some customers remain unregulated, and others are exposed to wholesale market rates due to divestiture. Montana is included in “regulated” states because it never fully exposed its residential customers to the open market, though its main utility did divest itself of its regulatory assets. Arguably, Montana should be included in the “deregulated” category, at least for a period of years, but doing so would not significantly change the graphs, because it is a small-population state. New Hampshire, another small state, is characterized as “deregulated,” even though some regulatory assets were preserved. Also, a “deregulated” state may include territories, notably those of public-power utilities that have been exempted from the state's deregulation requirements. These graphs include all prices for all customers in a state, regardless of which utility or supplier serves them. The label “deregulated” or “regulated” is applied at the state level. Finally, prices for any given state are shown in either the “regulated” or “deregulated” line for the entire period, even though most states began deregulation around 1999 or 2000; prior to that time all states would have been classified as “regulated.”

For more on this subject, go to http://www.ppinet.org/graph_construction.php. For summaries of state restructuring activities see <http://www.appanet.org/aboutpublic/staterestructurlist.cfm>. To see price trends for all states, which are updated monthly, go to <http://www.ppinet.org> and click on the map.

--Marilyn Showalter, 360-259-1700, marilyn.showalter@ppinet.org