



BAI

HELPING YOU ACHIEVE YOUR ELECTRICITY GOALS

ENERGY Update

A publication of Brubaker & Associates, Inc.
Website address: www.consultbai.com

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Welcome to BAI's new biannual publication designed to generate awareness of issues and concerns facing today's energy market.

FEATURED COMMENTARY

ELECTRICITY MARKET PRICES IN REMISSION BUT ANOTHER 'STORM' IS BREWING

By Jim Dauphinais, Principal

In the mid 1990s, electric utility rates were increasing significantly due to regulatory mandates, expensive new base load nuclear and coal generation facilities being added to rate base and poor nuclear plant operation by utilities. At this same time, wholesale market prices for electricity were significantly lower than utility rates due to a combination of excess utility generation, breakthroughs in combined-cycle natural gas turbine efficiency and low natural gas prices. This price difference, combined with a positive experience with natural gas deregulation, propelled 18 states to ultimately go forward with retail customer choice.

In the decade that has passed, that paradigm has reversed as regulated assets have become significantly depreciated and operated more efficiently, while wholesale market prices, prices for fuel and construction costs for new generation have skyrocketed. This has been further aggravated by a single-price wholesale market design, locational marginal pricing, that has not delivered the liquid and transparent long-term forward market for electricity that is necessary for the wholesale electric market to mature into a truly competitive market. Furthermore, due to the transfer of legacy base load generation facilities from regulated utilities to unregulated entities, often

affiliated with these very same utilities, there has been a large transfer of wealth to the new owners of these facilities, both through the market structure and so-called "stranded cost" or "transition" charges.

Recently, much to the relief of those retail customers that are required to purchase electricity at market-based prices, market prices for electricity have plummeted, as compared to last year's levels, triggered by a drop in the market price of oil and natural gas. However, economic theory tells us that this current "remission" -- brought on by the current state of the economy -- will only be temporary. Natural gas and electricity prices will rebound as supplies are curtailed and demand eventually recovers. In addition, over time, in order to sustain the

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market, the market price for electricity will need to rise to the levels necessary to support the all-in cost of the least cost source of supply that is readily available. Finally, it is likely that CO₂ emission legislation will add an estimated \$0.40 to \$1.00 per MWh to the market price for electricity for every \$1 per short ton that CO₂ emission credits are valued (See *CO₂ Regulation: A New Windfall for Non-Utility Generation Owners?*). Consequently, a second storm, possibly much fiercer than the one that preceded the current economic recession, is on the way for those retail customers who are required to purchase electricity at market-based rates.

In response to the high market prices associated with these “storms,” significant action has been and will continue to be attempted in regard to blocking the aforementioned transfer of wealth to unregulated owners of legacy base load generation facilities. This could be in the form of direct action against unregulated legacy base load generation owners and/or indirect action by making significant changes to existing market structure. In this regard, various proposals to change the market structure have been put forth in the last two years. Examples include proposals by the American Public Power Association, the American Forest and Paper Association and the Portland Cement Association as well as BAI’s own Alan Rosenberg in his article “A Way To Reorganize Organized Markets” that was published in the January/February 2008 issue of *The Electricity Journal*. Thus far, FERC has been reluctant to either significantly change the market designs it has authorized or review the fundamentals upon which its broad granting of market-based rate authority is based. However, the leadership and makeup of the FERC is changing and this may provide new opportunities for change.

It is of paramount importance for large end-use customers subject to market-based pricing of electricity to maintain awareness of the current level of activity in this arena, as significant policy changes at the regulatory and/or legislative level are likely on the horizon. If these proposals for change gain momentum, there is a great danger that the interests of large customers may be compromised in the process. While there always is hope that some unforeseen development will allow the market, on its own, to restore the balance between customers and unregulated legacy base load generation owners, unless and until help arrives, a new storm will continue to brew.

BAI continues to analyze these issues and explore possible alternatives.

CO₂ Regulation: A New Windfall for Non-Utility Generation Owners?

Many in the large customer community are well aware of the inframarginal windfall profits that non-utility owners of legacy base load generation facilities have been able to earn in the deregulated electricity markets, due to the frequency with which natural gas sets the market price in those markets and the ability of generators to earn an elevated market price for capacity (e.g., under the PJM Reliability Pricing Model). The community also is likely well aware of the adverse impact that pending legislation on CO₂ emissions could have on electricity prices. However, few may be aware of the additional windfall in profits that may come to the non-utility generation owners as a result of such legislation.

First, non-utility owners of existing wind generation facilities and legacy nuclear generation facilities would be able to pocket \$0.40 per MWh to \$1.00 per MWh in additional inframarginal profits for every \$1 per short ton that CO₂ emission credits are valued. Forecasts of the value of these credits under various scenarios have ranged from as little as \$5 per short ton to over \$80 per short ton. The math is simple -- this implies a range of impact on the market price for electricity of between \$2 and \$80 per MWh.

Second, if the legislation ultimately grants emission credits to generators, rather than directly to end-use customers, non-utility owners of generation could pocket the value of those emission credits at the expense of end-use customers who are required to purchase their power at market-based rates. The reason is that these credits would likely be granted independently of the amount of energy that is produced on a going forward basis by the owner’s generation. As a result, the price for energy offered by these owners into the electricity markets will, at a minimum, be based on fuel cost, variable O&M and emission costs with possibly little or no offset for the emission credits granted to the owner. Thus, the legislation could provide yet another windfall to non-utility generation.

It is important for all large users to be aware of such hidden side effects that could occur under new legislation.

GENERATION RATE CAP EXPIRATIONS

PENNSYLVANIA

Beginning in 2010, many consumers in this state could be facing large rate increases due to the expiration of existing generation rate caps. Under Pennsylvania's current electric competition law, the Public Service Commission is not responsible for setting electric generation rates; instead, they are determined by wholesale market prices. Industry analysts have predicted, without rate intervention, industrial rates could jump between 40% and 70% once the caps expire.

In late 2008, the Public Service Commission held hearings related to wholesale energy markets and the potential impact to customers of the expiration of rate caps. In early 2009, several bills have been introduced to the PA legislature related to the termination of rate caps and possible mitigation of the expected large increases. However, proposed legislation to date has focused on small customers, primarily residential.

| COMPANY | GENERATION RATE CAP EXPIRATION |
|------------------------------|--------------------------------|
| PPL Electric Utilities, Inc. | 12/31/2009 |
| Metropolitan Edison Co. | 12/31/2010 |
| PECO Energy Co. | 12/31/2010 |
| Pennsylvania Electric Co. | 12/31/2010 |
| West Penn Power Co. | 12/31/2010 |

OHIO

With the exception of Dayton Power & Light Co. (DP&L), generation rates for other investor-owned utilities were scheduled to expire at the end of 2008. However, due to provisions under a new law passed in May 2008 (SB 211), the generation rates remain effective until the required Market Rate Offer (MRO) or Electric Security Plan (ESP) for each utility has been approved by the Public Utilities Commission of Ohio (PUCO). Under SB 211, these plans were scheduled to commence on January 1, 2009, however, numerous plan amendments required the PUCO to extend the rate caps. Both American Electric Power Co. and FirstEnergy were required to file for ESPs. Only DP&L has a current rate stabilization plan that is effective through 2010. Duke Energy Ohio's settlement agreement received regulatory approval in December 2008. AEP and FirstEnergy have stated they are close to compromise agreements. Finalization of AEP's plan is expected in March 2009. While awaiting regulatory approval, FirstEnergy has proceeded to secure power through a descending-clock bidding auction for its subsidiaries: Ohio Edison, Toledo Edison and Cleveland Electric Illuminating. Winning bidders will supply power for the period June 1, 2009 to May 31, 2011. For the bid process to proceed, the PUCO must first approve FirstEnergy's settlement agreement.

| COMPANY | GENERATION RATE CAP EXPIRATION |
|-------------------------------------|--------------------------------|
| American Electric Power Co. | 12/31/2008 |
| Cleveland Electric Illuminating Co. | 12/31/2008 |
| Columbus Southern Power Co. | 12/31/2008 |
| Duke Energy Ohio | 12/31/2008 |
| Ohio Edison Co. | 12/31/2008 |
| Ohio Power Co. | 12/31/2008 |
| Toledo Edison Co. | 12/31/2008 |
| Dayton Power & Light Co. | 12/31/2010 |

REMINDER...

It's not too late to attend BAI's seminar!!

BRUBAKER & ASSOCIATES, INC.

*2009
Annual Spring Conference*

**Utility Fundamentals and
Energy Procurement**

Sheraton Westport Lakeside Chalet
St. Louis, Missouri
April 28-29, 2009

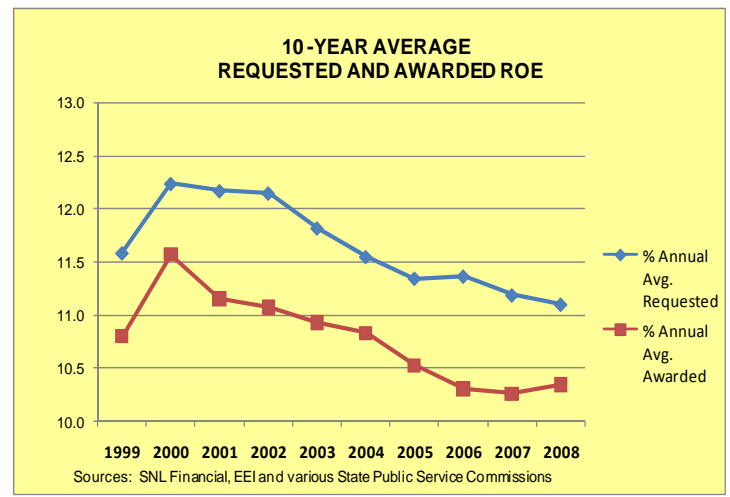
To register contact:
Tammy Klossner at: (636) 898-6725

2008 MAJOR RETAIL ELECTRIC RATE CASE DECISIONS

| Utility | Order Date | Authorized Amount (\$ millions) | Allowed ROE % |
|--------------------------------------|------------|---------------------------------|---------------|
| ARIZONA | | | |
| UNS Electric Corp. | 05/27/08 | \$4.0 | 10.0 |
| CALIFORNIA | | | |
| San Diego Gas & Electric Co. | 07/31/08 | \$131.0 | 10.7 |
| CONNECTICUT | | | |
| Connecticut Light & Power Co. | 01/28/08 | \$98.0 | 9.4 |
| DISTRICT OF COLUMBIA | | | |
| Potomac Electric Power Co. | 01/30/08 | \$28.3 | 10.0 |
| FLORIDA | | | |
| Florida Public Utilities Co. | 05/19/08 | \$3.9 | 11.0 |
| HAWAII | | | |
| Hawaiian Electric Co. | 05/01/08 | \$44.9 | 10.7 |
| ILLINOIS | | | |
| AmerenCILCO | 09/24/08 | (\$2.8) | 10.6 |
| AmerenCIPS | 09/24/08 | \$22.0 | 10.6 |
| AmerenIP | 09/24/08 | \$103.9 | 10.6 |
| Commonwealth Edison Co. | 09/10/08 | \$273.6 | 10.3 |
| IOWA | | | |
| MidAmerican Energy Co. | 06/16/08 | NA | 11.7 |
| MASSACHUSETTS | | | |
| Fitchburg Gas & Electric Light Co. | 02/29/08 | \$2.1 | 10.2 |
| MAINE | | | |
| Central Maine Power Co. | 07/01/08 | (\$20.3) | 11.0 |
| MICHIGAN | | | |
| Consumers Energy Co. | 06/10/08 | \$27.5 | 10.7 |
| MINNESOTA | | | |
| Otter Tail Power | 07/10/08 | \$3.8 | 10.4 |
| MISSOURI | | | |
| Empire District Electric Co. | 07/30/08 | \$22.7 | 10.8 |
| MONTANA | | | |
| Montana Dakota Utilities Co. | 04/23/08 | \$4.1 | 10.2 |
| Northwestern Energy Co. | 07/08/08 | \$10.0 | 10.2 |
| NEVADA | | | |
| Sierra Pacific Power Co. | 06/27/08 | \$87.0 | 10.6 |
| NEW MEXICO | | | |
| Public Service Co. of New Mexico | 04/24/08 | \$35.2 | 10.1 |
| Southwestern Public Service Co. | 08/26/08 | \$10.8 | 10.2 |
| NEW YORK | | | |
| Consolidated Edison Co. of NY | 03/25/08 | \$425.0 | 9.1 |
| Orange & Rockland Utilities Inc. | 07/23/08 | \$15.9 | 9.4 |
| UTAH | | | |
| PacifiCorp | 10/13/08 | \$3.2 | NA |
| Rocky Mountain Power Co. | 08/11/08 | \$36.2 | 10.2 |
| VERMONT | | | |
| Central Vermont Public Service Corp. | 01/31/08 | \$6.4 | 10.7 |
| WEST VIRGINIA | | | |
| Appalachian Power | 06/27/08 | \$106.1 | 10.5 |
| WISCONSIN | | | |
| Northern States Power-WI | 01/08/08 | \$39.4 | 10.7 |
| Wisconsin Electric Power Co. | 01/17/08 | \$148.4 | 10.7 |
| WYOMING | | | |
| Cheyenne Light, Fuel & Power | 05/02/08 | \$6.7 | 10.9 |
| PacifiCorp | 04/28/08 | \$23.0 | 10.2 |
| ROE Average | | | 10.41 |

- **RATE CASE ACTIVITY DECLINED SLIGHTLY IN 2008 WITH FORTY-TWO CASES FILED, FOUR LESS THAN 2007**
- **CURRENT ECONOMIC CONDITIONS EXPECTED TO INCREASE RATE CASE ACTIVITY IN 2009. ANTICIPATED RATE FILINGS IN FLORIDA, ILLINOIS, IOWA, KENTUCKY, MISSOURI AND NEW JERSEY.**

Over the past six years, average annual awarded ROE has been below 11%

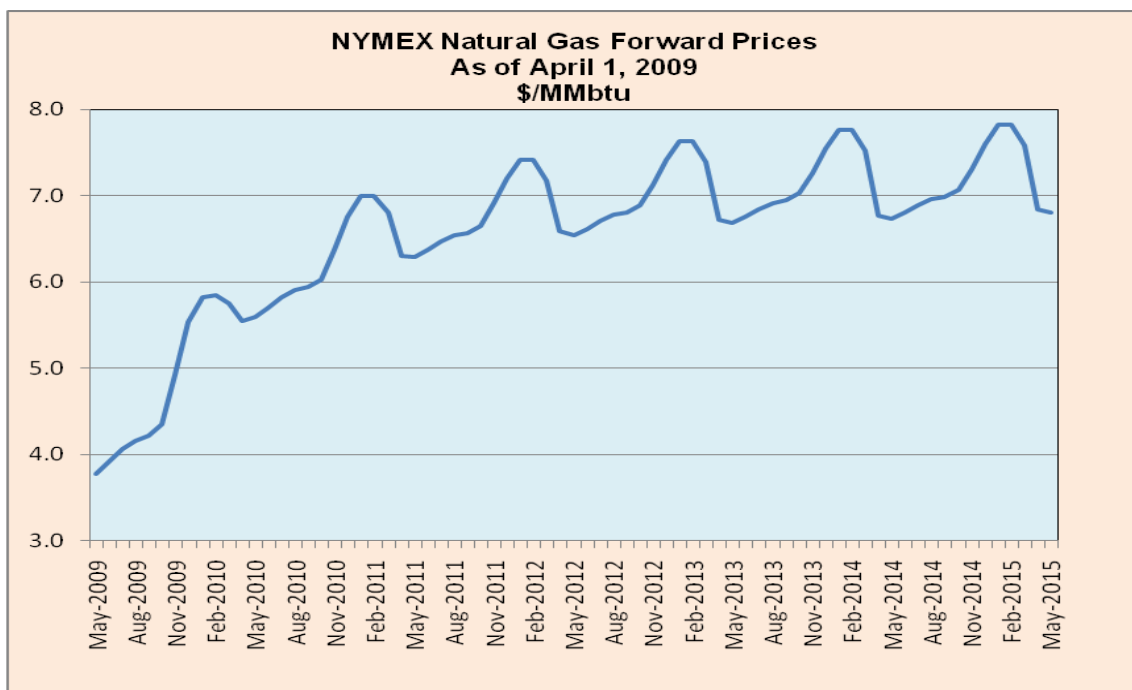
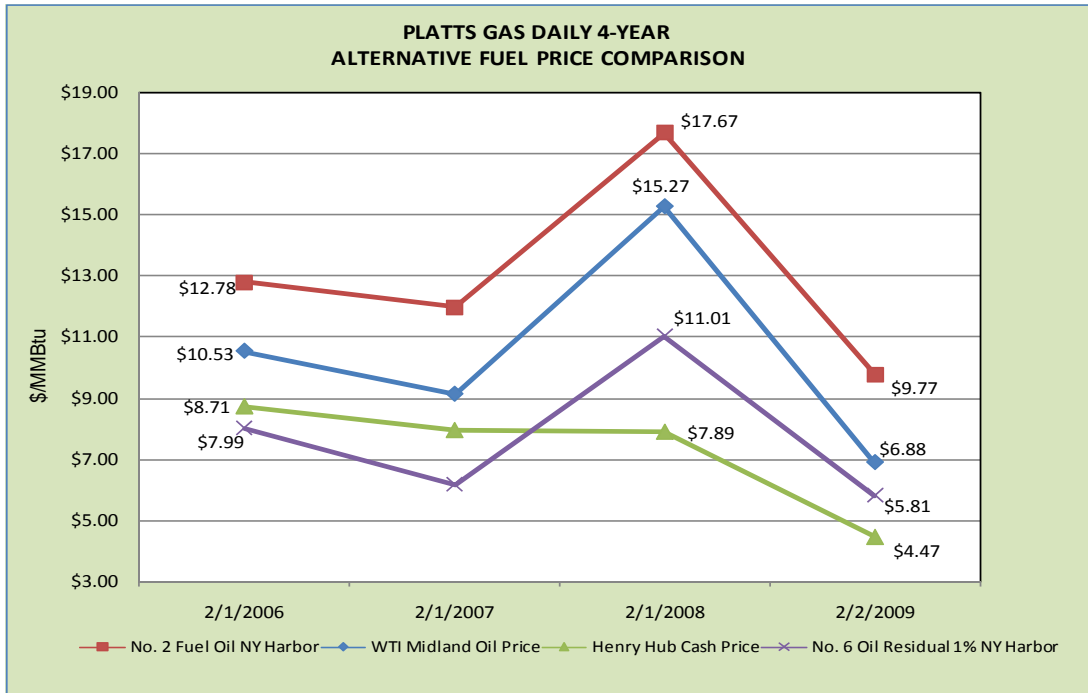


Note: The above cases represent various electric rate cases filed before state regulatory agencies throughout the U.S.

Sources: SNL Financial, EEI and various State Public Service Commissions

FUEL PRICES AND NYMEX NATURAL GAS FORWARD PRICES

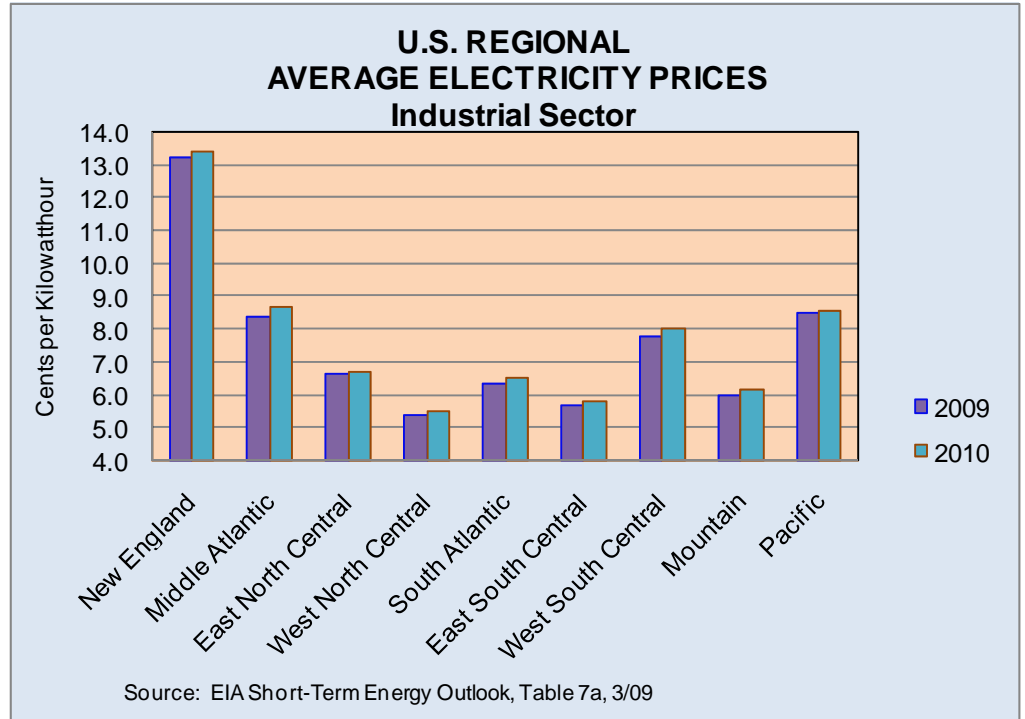
The first graph below provides a view of price volatility over the past four years. The 2008 price spikes are clearly visible while February 2009 prices have taken a downward move. The following hubs were selected for the price comparison: WTI Midland Oil Price, No. 2 Fuel Oil NY Harbor, No. 6 Oil Residual 1% NY Harbor and Henry Hub cash price. The second graph outlines NYMEX's expected price increases through May 2015.



FORECASTED ELECTRICITY AND COAL PRICES

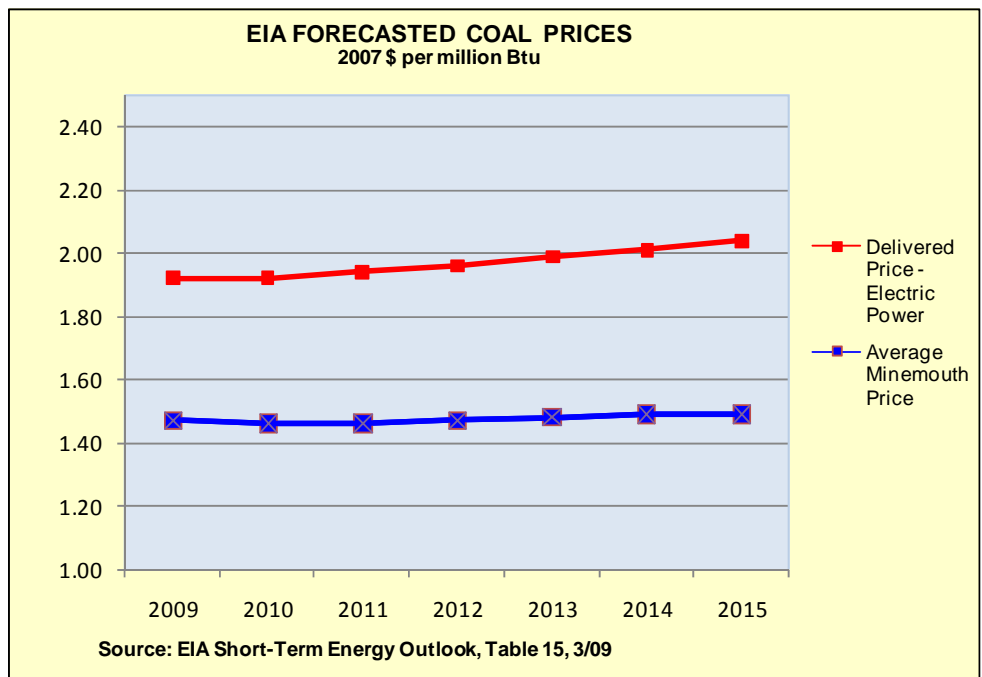
EIA predicts a decline of 6.4% in industrial electricity sales for 2009, resulting in a decline of approximately 1.7% in overall U.S. electricity consumption.

Source: EIA Short-Term Energy Outlook, 3/09



U.S. coal prices are expected to remain stable through 2010. The average delivered coal price is estimated to decrease approximately one percent in 2009, then increase slightly through 2015.

Source: EIA Short-Term Energy Outlook, 3/09



INDUSTRIAL POWER SHOPPING AND RETAIL CHOICE

| STATE | PERCENT OF INDUSTRIAL CUSTOMERS SHOPPING |
|---|--|
| DELAWARE | 16.5% |
| ILLINOIS | |
| AmerenCIPS | 87.9% |
| AmerenCILCO | 94.1% |
| ComEd | 84.1% |
| Ameren(IL Power) | 93.2% |
| MARYLAND | |
| Allegheny Power | 80.0% |
| Baltimore G&E | 91.2% |
| Delmarva Power | 92.5% |
| Pepco | 83.6% |
| MASSACHUSETTS | |
| All Companies | 1.5% |
| NEW YORK | |
| Central Hudson | 49.0% |
| Con Edison | 83.1% |
| NYSEG | 44.0% |
| National Grid | 75.1% |
| Orange & Rockland | 18.8% |
| Rochester G&E | 69.9% |
| OHIO | |
| Cleveland Electric Illuminating | 13.3% |
| Duke Energy | 2.3% |
| Columbus Southern Power | 0.0% |
| Dayton P&L | 8.5% |
| Ohio Edison | 15.6% |
| Ohio Power | 0.0% |
| Toledo Edison | 22.7% |
| Statewide Industrial Switching thru Aggregation | 12.1% |
| OREGON | |
| Pacific Power & Light | 6.6% |
| Portland General | 10.1% |
| PENNSYLVANIA | |
| Allegheny Power | 0.0% |
| Duquesne Light | 45.6% |
| Med/Ed/Penelec | 0.1% |
| PECO Energy | 0.1% |
| Penn Power | 67.0% |
| PPL | 0.1% |
| UGI | 0.0% |
| TEXAS | Figures not available |

Sources:

Delaware Public Service Commission, January 2009
 Illinois Commerce Commission, January 2009
 Maryland Public Service Commission, November 2008
 Massachusetts Department of Energy Resources, January 2009
 New York Public Service Commission, November 2008
 Ohio Public Utilities Commission, September 2008
 Oregon Public Utility Commission, January 2009
 Pennsylvania Office of Consumer Advocate, January 2009

14 STATES AND THE DISTRICT OF COLUMBIA CONTINUE TO OFFER ELECTRIC RETAIL CHOICE

STATES WITH FULL RETAIL CHOICE*

- Arizona
- Connecticut
- Delaware
- District of Columbia
- Illinois
- Maine
- Maryland
- Massachusetts
- New Hampshire
- New Jersey
- New York
- Ohio
- Pennsylvania
- Rhode Island
- Texas

RETAIL CHOICE DELAYED OR SUSPENDED

- Arkansas (law repealed in 2003)
- California (choice suspended in 2001)
- New Mexico (law repealed in 2003)
- Oklahoma (indefinite delay in 2001)
- West Virginia (indefinite delay)

RESTRUCTURING LAWS AMENDED

- Michigan (PA 286 effective Oct. 2008)
- Montana (HB 25 effective Oct. 2007)
- Virginia (SB 1416 effective Jul. 2007)

CHOICE LIMITED TO LARGE CUSTOMERS

- [Michigan](#) (limits choice to 10% of an electric utility's average retail sales for the preceding year and cooperative customers with a peak load of 1 MW or greater)
- [Montana](#) (limited to large industrial customers with loads greater than 5 MW)
- [Nevada](#) (limited to large customers approved by state regulators)
- [Oregon](#) (limited to customers with loads 1 MW or greater)
- [Virginia](#) (limited to large customers with loads 5 MW or greater)

* Full Retail Choice indicates that legislation exists to allow competition. It does not necessarily mean customers have competitive supply options available. Some states, such as Arizona, have very limited or non-existent choice options.

SAVING CLIENTS \$\$\$

BAI HELPS CLIENTS SECURE \$160 MILLION REFUND FROM LADWP

by Alan Chalfant, Principal

On October 27, 2008 the Los Angeles Department of Water and Power (LADWP) announced settlement of a claim by certain customers for \$160 million, which is the largest recovery ever from a utility for overcharging its customers. The case was a Qui Tam (whistleblower) proceeding originally brought to court by Sam Barakat, a California energy consultant. BAI represented the following claimants who received payments ranging from approximately \$4 million to \$68 million: The Los Angeles Unified School District, Los Angeles County, The Los Angeles County Metropolitan Transportation Authority, The Los Angeles Community College District, The University of California at Los Angeles, and the State of California.

BAI worked closely with the attorneys in this proceeding providing five complete cost of service studies and estimates of total overcharges for the 10 years for which the plaintiffs were allowed to claim damages. The attorneys in the case were Eric Havian of Phillips & Cohen and Wayne Lamprey of Goodwin, McBride, Squeri, Day & Lamprey.

Under a California law (since changed due to successful utility lobbying efforts) municipal utilities were not allowed to charge other government entities more than the cost of providing electricity to those entities. LADWP had never complied with this law but instead based its rates on calculations of marginal costs that did not satisfy the requirements of law.

BAI's estimates, which were accepted in the initial decision of the Superior Court of San Bernardino, indicated that its clients had been overcharged approximately \$222 million for the period July 1997 through October 2006. These estimates were made in spite of bad metering data on customer billings provided by LADWP. In order to work around such problems and develop the most accurate estimates possible, the attorneys also hired mathematical and statistical consultants to help fill the holes in the data provided by the utility.

In addition to BAI's cost allocation studies, there were several issues concerning the total costs incurred by LADWP during the period in question. For example, during the meltdown of the California Power Exchange and open access in California beginning in 2001, the LADWP (which did not offer open access) made enormous profits from the sale of electricity to the regulated California utilities. None of this profit was credited to ratepayers. The Court accepted BAI's argument that the LADWP total cost of service should be reduced to reflect credits to customers for these profits made from customer-owned facilities. Similarly, during recent years, LADWP has had substantial income from its investments. LADWP did not provide customers with credits for these revenues. BAI also convinced the Court that these revenues should be credited to customers since the investments were made with customers' money.

"BAI Energy Update" is a publication of Brubaker & Associates, Inc. (BAI). Please contact Bob Stephens (bstephens@consultbai.com) or Mary Zielinski (mzielinski@consultbai.com) with questions regarding this publication. BAI's office phone number is (636) 898-6725.

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