

The Cost of Power Today: A Comparative View of Electric Costs

2008 Retail Electric Markets
“Werewolf Economics”

Over-riding Supposition of the Impact of De-Regulated Markets

- Over-riding Supposition is that market powers would bring down electric prices in the long term.
- No serious consideration that prices would rise.

Post 2006 Residential

Com Ed- Gas Heat	20.7% increase
Electric Heat	26.6% increase
AmerenIP	37.1% increase
AmerenCIPS	36.2% increase
AmerenCILCO	53.1% increase

Commercial Customers

- Municipal Rates Doubled?
- Grocery Store Rates Doubled?
- Small Commercial Decreased Slightly?
- Large Commercials up 15%-50%
- Lighting charges up 50%?
- Grain Drying Rates Gone
- School and Church Discounts Gone

- Cross- Subsidization Almost Gone
- Rates and Special Rates, Almost eliminated (No Municipal Rates, grain drying, interruptible, electric heat, metal bending, economic development, irrigation, schools, churches etc.)
- Com Ed keeps electric heat, others have discounts
- Since Natural Gas sets price, Winter Rates are Slightly Higher than Summer Rates

New Reform

- Auction Deemed a Failure- Canceled
- For Near Term, Investor-owned Utilities Procure Power Supply (ICC Approval)
- Long Term- Illinois Power Authority
- Rate Relief Bridge
- Initial Checks, with ramp down rebates expiring in 2010

Illinois Power Authority

- Governor Appoints 5 Person Board
- No ICC Oversight
- Acquire Power for Com Ed, Ameren
- Can build Generation, other Facilities
- Encourages State Retirement Investment in IPA Projects
- Eminent Domain- “Quick Take” Authority
- Mandates Illinois Coal
- Funds Can be Swept By Legislature
- Appointed in April, 2008

Rate Relief

- Exelon Generation, Ameren, Dynegy, Midwest Generation and Mid-American
- Estimated \$1 Billion over Four Years
- 55% in 2007, Rest in 2008 through 2010
- Help Phase-in Deregulation Impact
- Bridge to Transition Away from Auction
- Threat of Tax on Generators
- Threat of Rate Freeze Extension

Rate Relief (Com Ed)

- Com Ed and Exelon Generation provide over \$800 million
- Typical Residential Customer sees \$4 to \$13 per month.
- Essentially cuts 2007 rate increase in half.

Residential Rate Relief (Ameren)

- Rebates and Credits (Ameren)
 - \$100 minimum
 - \$130 for typical user
 - \$400 typical for electric heat customers (apartments)
 - \$1,000 for those using large amounts in winter (larger homes)

Other

- \$5,000 Hardship Assistance available to non-profits and small business who can show harm.
- Weatherization Assistance
- LIHEAP Donations (Com Ed \$10.3 million)
- Com Ed \$8 million to Space Heat (Credits)
- Total Com Ed \$64 million (68% in first year, then 16% in next two years)

Ameren 10,000 kWh per Year

Year	CIPS	CIPS(UE)	CILCO	IP
2006	\$ 844	\$ 769	\$ 779	\$ 847
2007	\$1,099	\$1,099	\$1,162	\$1,146
2007 Relief	\$ 967	\$ 937	\$ 988	\$1,014
2008 Relief	\$1,051	\$1,040	\$1,115	\$1,059
2009 Relief	\$1,081	\$1,070	\$1,145	\$1,089

Note: In 2006 the price was 7.7 cents to 8.4 cents per kWh. Ends up at about 10.8 cents to 11.5 cents per kWh (for non-electric heat customers)

Ameren Electric Heat 18,000 kWh

Year	CIPS	CIPS(UE)	CILCO	IP
2006	\$1,150	\$1,041	\$1,182	\$1,183
2007	\$1,799	\$1,799	\$1,913	\$1,884
2007 Relief	\$1,460	\$1,350	\$1,521	\$1,497
2008 Relief	\$1,470	\$1,411	\$1,589	\$1,573
2009 Relief	\$1,542	\$1,471	\$1,661	\$1,573

Note: In 2006 the price was 5.8 cents to 6.6 cents per kWh. Ends up at about 8.5 cents to 9.2 cents per kWh (for electric heat customers)

Renewables Mandate

- Com Ed and Ameren to Buy Credits
- RFP Process
- Wind Power and “In State” Priority
- Low Impact Hydro with no “in service date”
- Almost 800,000 mWh of Renewable Energy Certificates
- Renewable Energy 2% in 2008; Rising to 10% in 2015 and 25% in 2025. (Illinois Power Agency responsibility)

Conservation Mandate

- Compact Florescent Light Bulbs
- Refrigerator Swap Out Programs
- Demand Side Management
- Rate Rider to Have Customers Pay for this

Rate Increase Proposals

- Ameren and Com Ed Both Have Distribution Rate Increases Before the ICC. They are asking for about 24% (causes total bill to rise about 4 to 8%).
- We Will Know More In the Fall
- Riders for Recovery of Bad Debt Variances and System Upgrades

Auction Expiring

- Three Periods to Original Auction
- First Phase Expired
- No Public Power Authority- IOUs go to Market, then ICC ratifies
- Com Ed 2.4% in June
- Ameren 2% in June

Industrial Customers

- Little Advantage to High Load Factor (less than 35% load factor is price decrease)
- Little Advantage to Off-Peak Use
- Low Use Customers See Price Decrease
- High Use Customers See Price Increase
- Interruptible Not a Factor
- Com Ed, All over 3,000 kW are “Competitive”.

Rate Freeze Expiration and Auction Results

- Transmission Fees- FERC and MISO
- Distribution Charges- Set by the ICC
- Energy Charges- The Auction Price modified by a Rate Prism. The Rate Prism shows by class (Residential, Commercial and Industrial) what the prices are. This is based on factors like delivery voltage, line losses, usage characteristics, etc.

AmerenIP Environmental Cost Adjustment (cents kWh)

Month	DS-1	DS-2	DS-3	DS-4	DS-5
• Mar-08	0.09414	0.06527	0.04444	0.00643	0.25293
• Feb-08	0.09642	0.06590	0.04409	0.00716	0.31118
• Jan-08	0.09642	0.06590	0.04409	0.00716	0.31118
• Dec-07	0.05548	0.03967	0.02426	0.00804	0.16152
• Nov-07	0.06808	0.04231	0.02817	0.00488	0.16344
• Oct-07	0.06663	0.04039	0.02585	0.00482	0.16634
• Sep-07	0.00000	0.00000	0.00000	0.00000	0.00000
• Aug-07	0.00000	0.00000	0.00000	0.00000	0.00000
• Jul-07	0.00000	0.00000	0.00000	0.00000	0.00000
• Jun-07	0.00000	0.00000	0.00000	0.00000	0.00000
• May-07	0.00000	0.00000	0.00000	0.00000	0.00000
• Apr-07	0.00000	0.00000	0.00000	0.00000	0.00000
• Mar-07	0.00000	0.00000	0.00000	0.00000	0.00000
• Feb-07	0.00000	0.00000	0.00000	0.00000	0.00000
• Jan-07	0.00000	0.00000	0.00000	0.00000	0.00000

New Rider Proposals

- **Uncollectibles**

Concept that overages and shortfalls from historic averages will be passed on to paying customers

- **Investments in Reliability**

Concept that investments for reliability will not have to wait for next rate case. Automatic meter reading, new lines, etc.

Transmission Issues

- Mount Carmel Public Utilities- Back-billed transmission from 2005. Affected Late 2007 bills.
- Two Factories Gone
- Fuel Cost Equals Rest of Bill
- No Choice but to Pass this on in Current Months

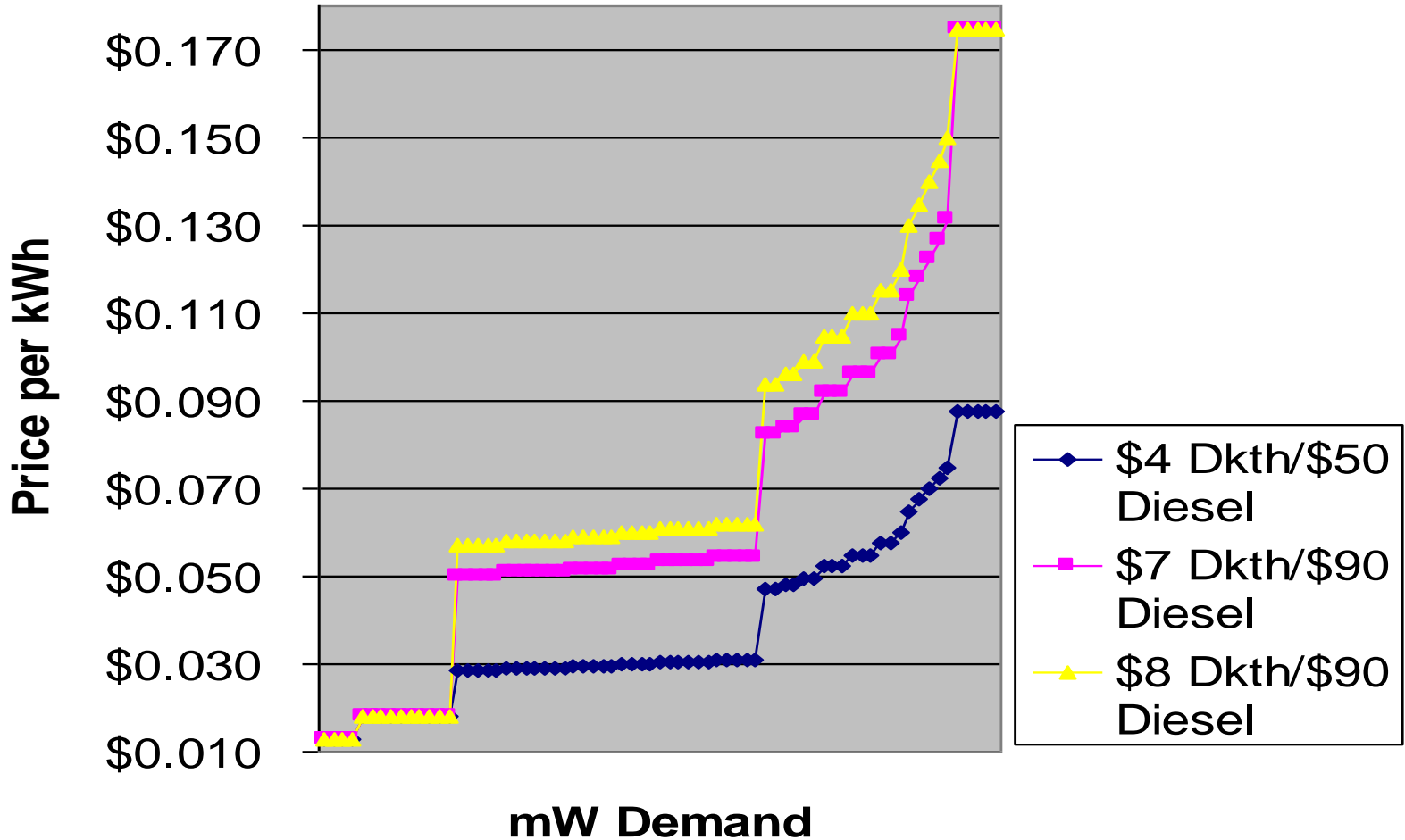
Reverse Auction for Market

- Highest price is price for all
- Old price was fuel cost, investment, and return
- New price is the bid price
- Impacted by cost of natural gas (was \$20 to \$40, with Hurricane Katrina over \$10)

The Cost of Generation

- Nuclear Power 1 cent to 1.5 cents per kWh
- Base load Coal 1.4 cents to 2 cents per kWh
- Peaking Units 4 cents to 12 cents per kWh
- Illinois Wholesale Markets at “Cost” to Five Cents per kWh
- Outside Illinois, some markets could be from five to ten cents per kWh

Illustration-How Natural Gas Prices Impact Electric Markets



Age of Power Plants

- About 17,000 mW of Base Load Coal in Illinois
- About 5,000 mW of this is at least 45 years old
- About 15,700 mW of this is over 29 years old
- Few long-term contracts, hard to bond on short-term contracts

Regional Providers

IMPA-

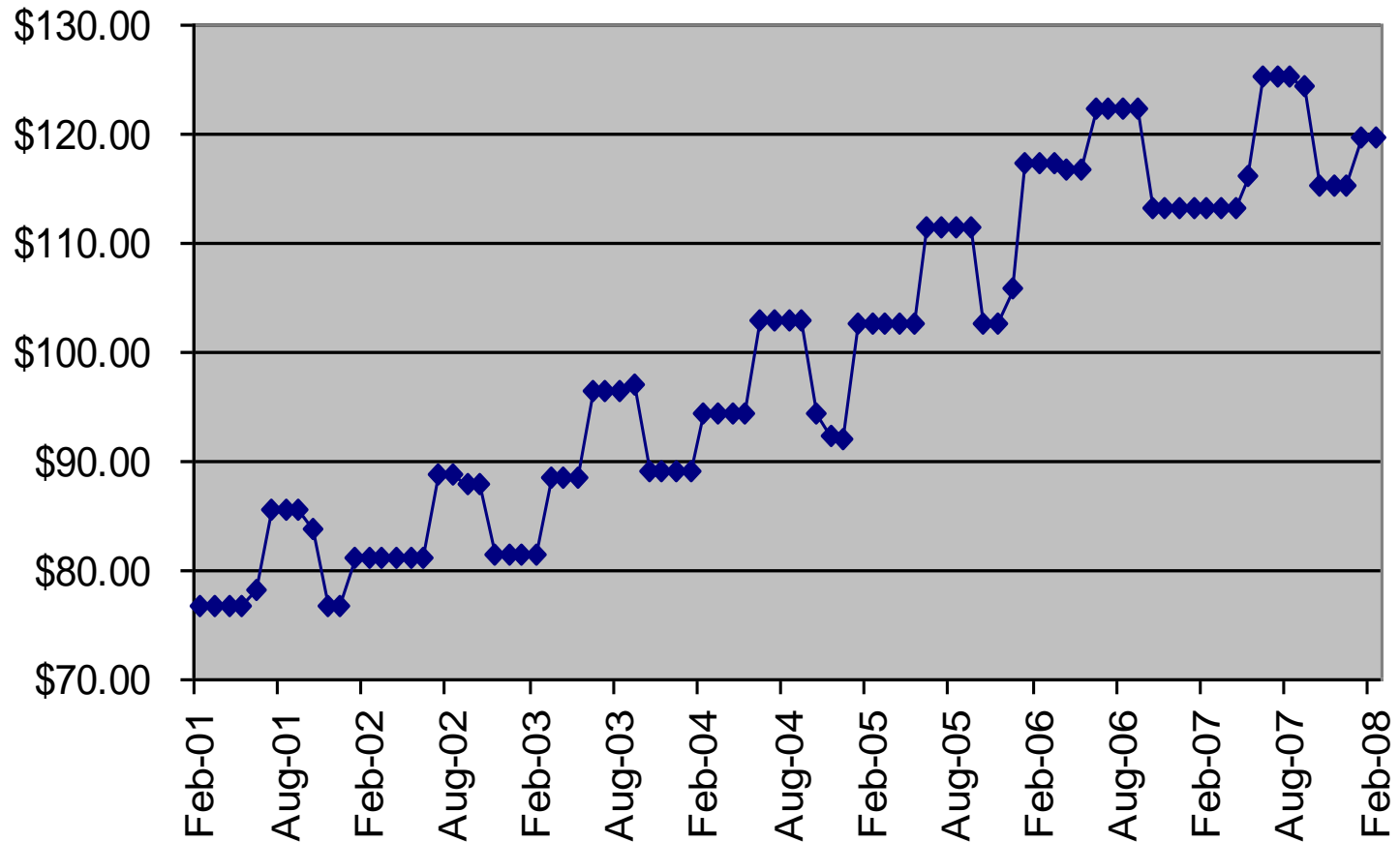
Av. Cost kWh

2004	3.99 cents
2005	4.63 cents
2006	4.70 cents
2007	5.09 cents

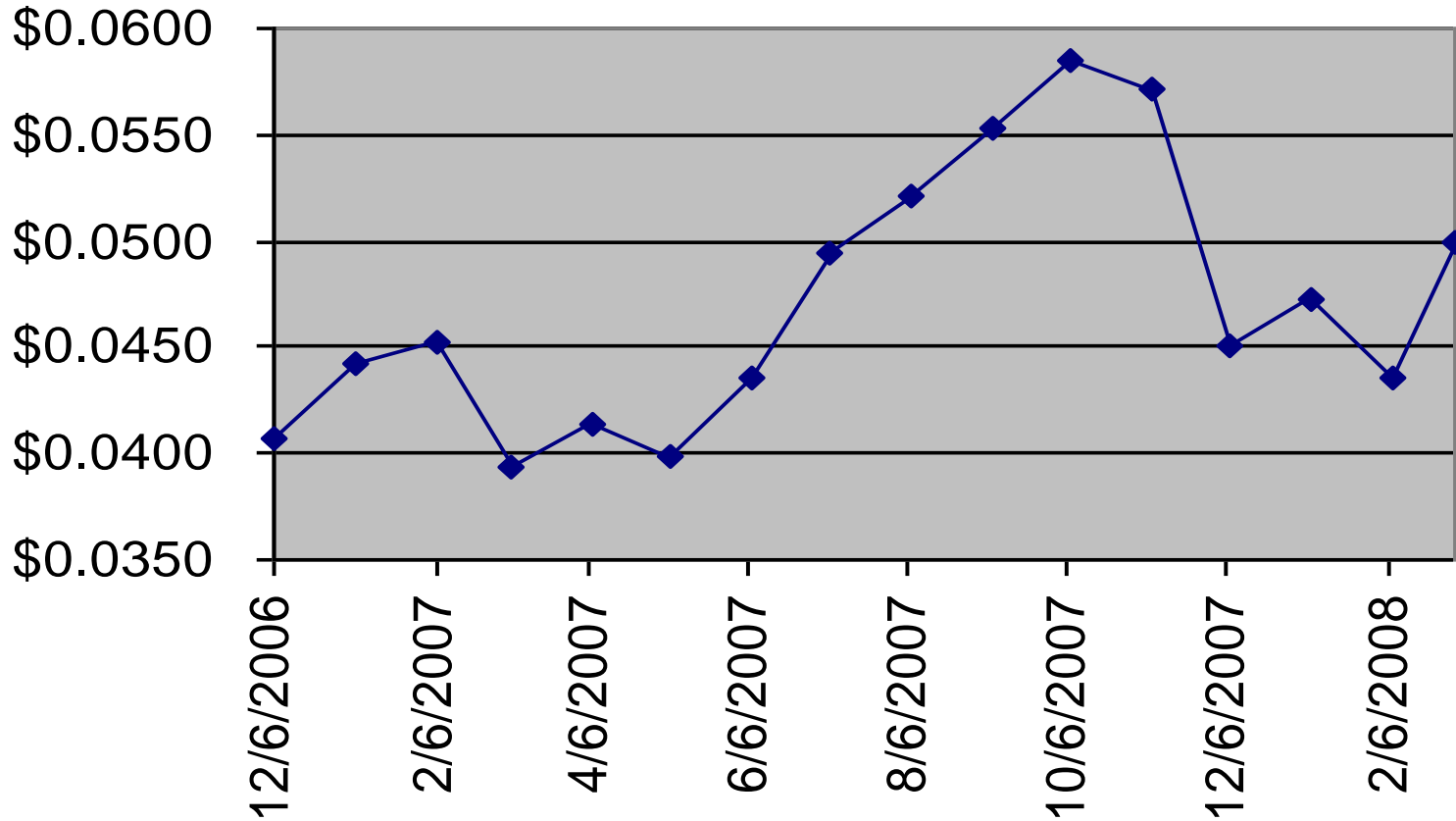
WPPI-

2004	4.28 cents
2005	5.13 cents
2006	4.98 cents
2007	6.3 cents (first 9 months)

Madison Gas & Electric Bills (900 kWh Residential) (per the Wisconsin Public Service Commission Data)

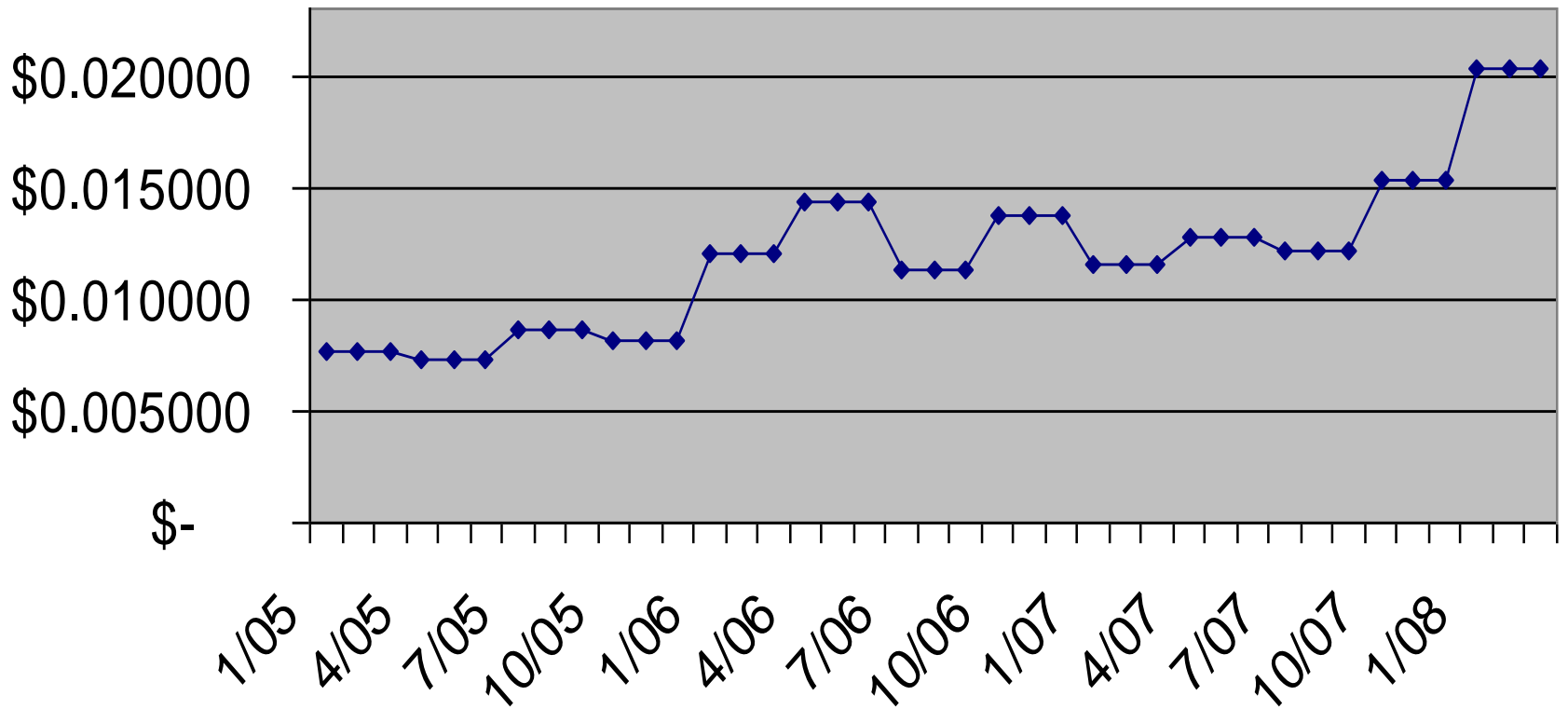


Wuakana Estimated Wholesale Cost of Power from WPPI (12/06 to 3/08)



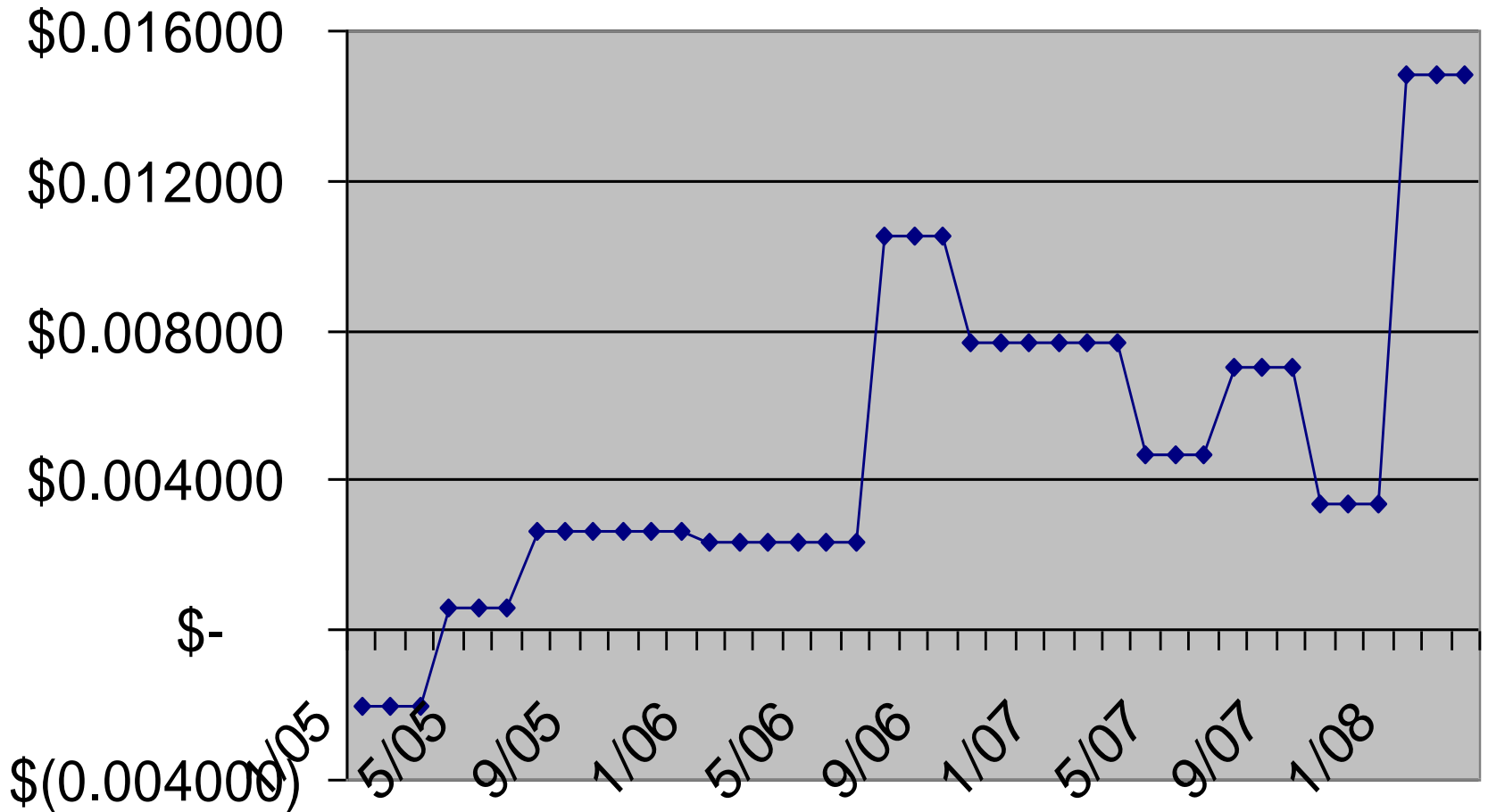
Crawfordsville, Indiana Electric Rate Adjustments (IMPA Wholesale)

January, 2005 through March, 2008

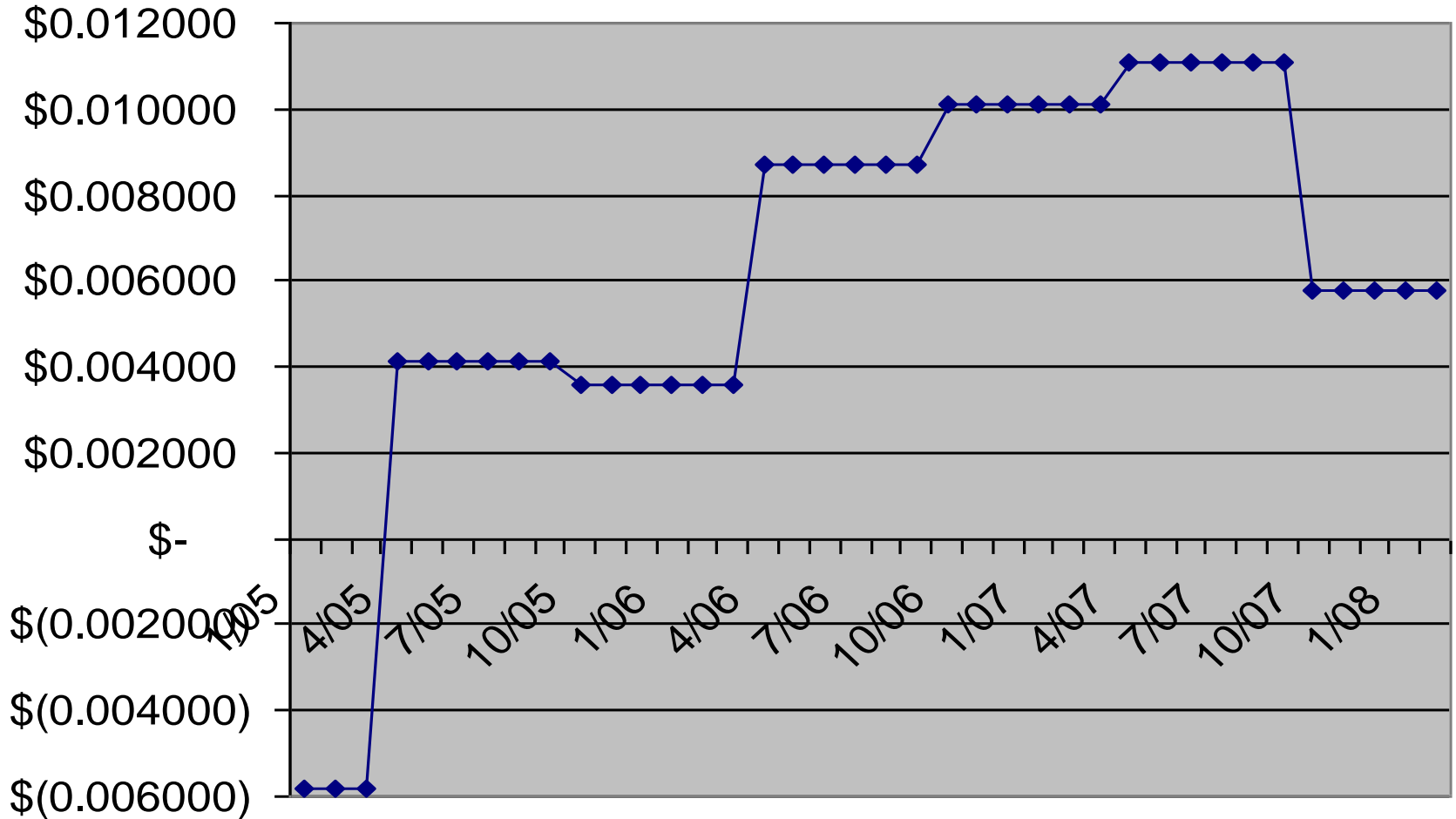


Duke Energy (PSI) Fuel Cost Adjustment

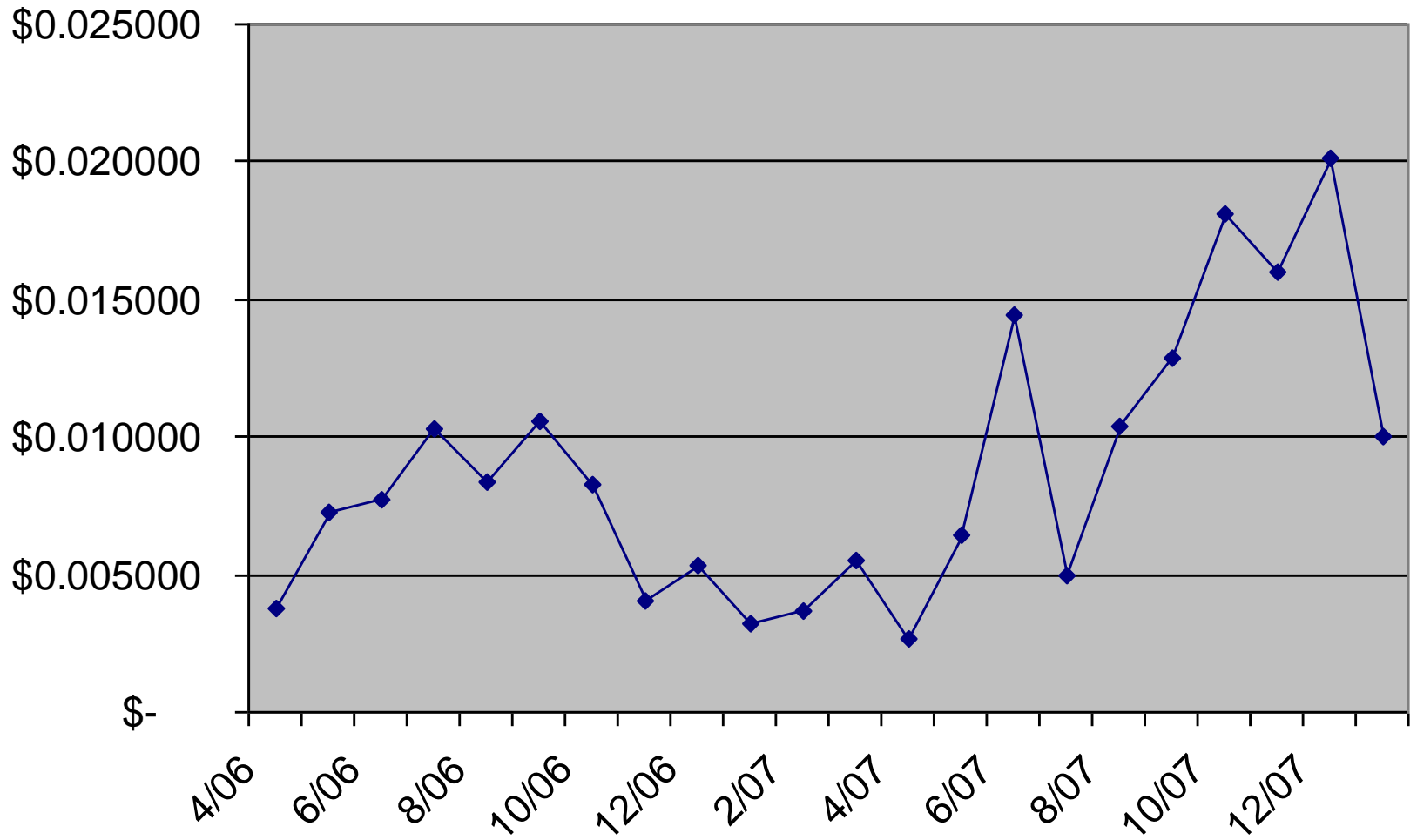
(January, 2005 through March, 2008)



Springfield, MO Fuel Cost Adjustments (Jan. 2005- Feb. 2008)

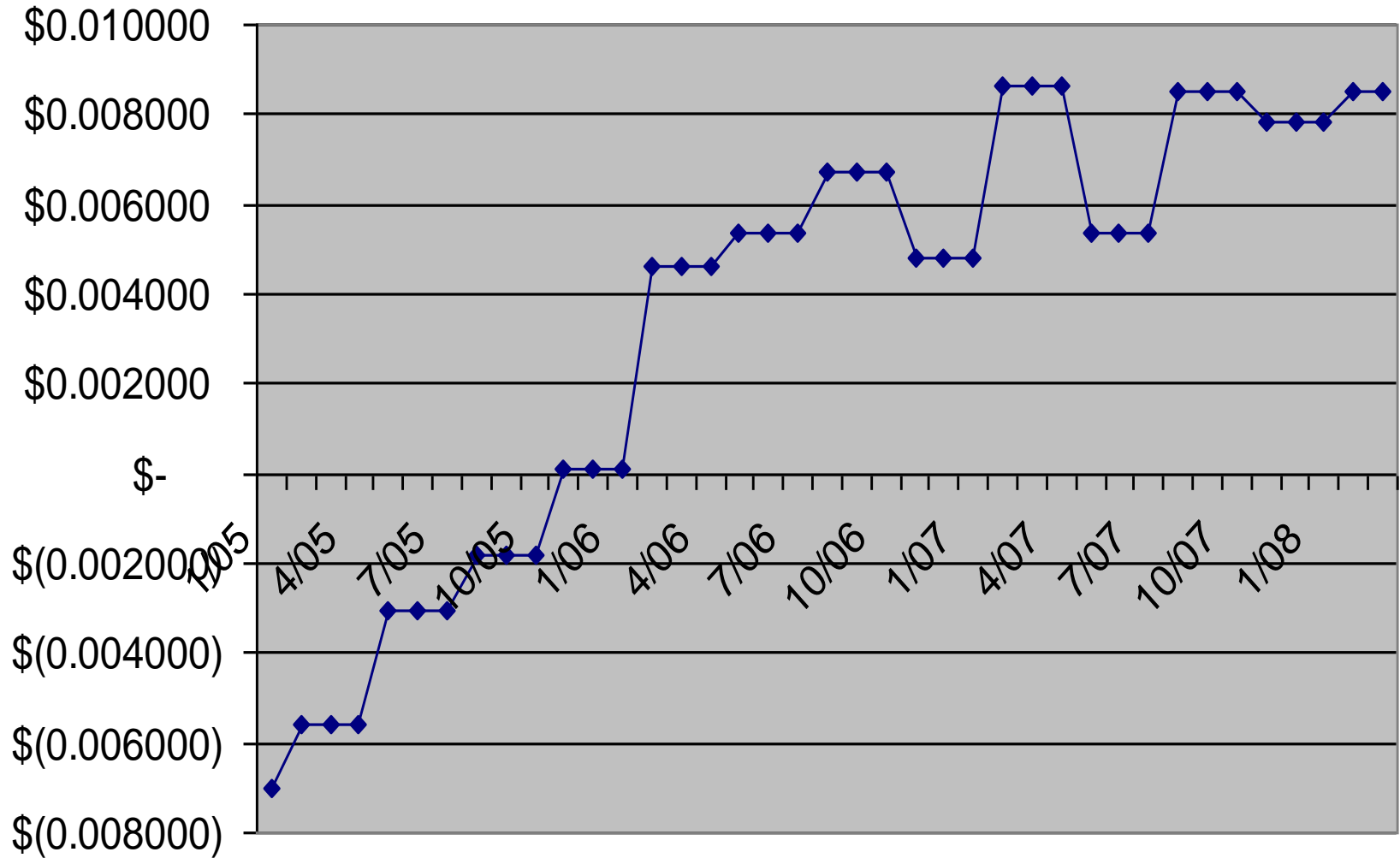


Springfield CWLP Fuel Cost Adjustments (April, 2006 to January, 2008)

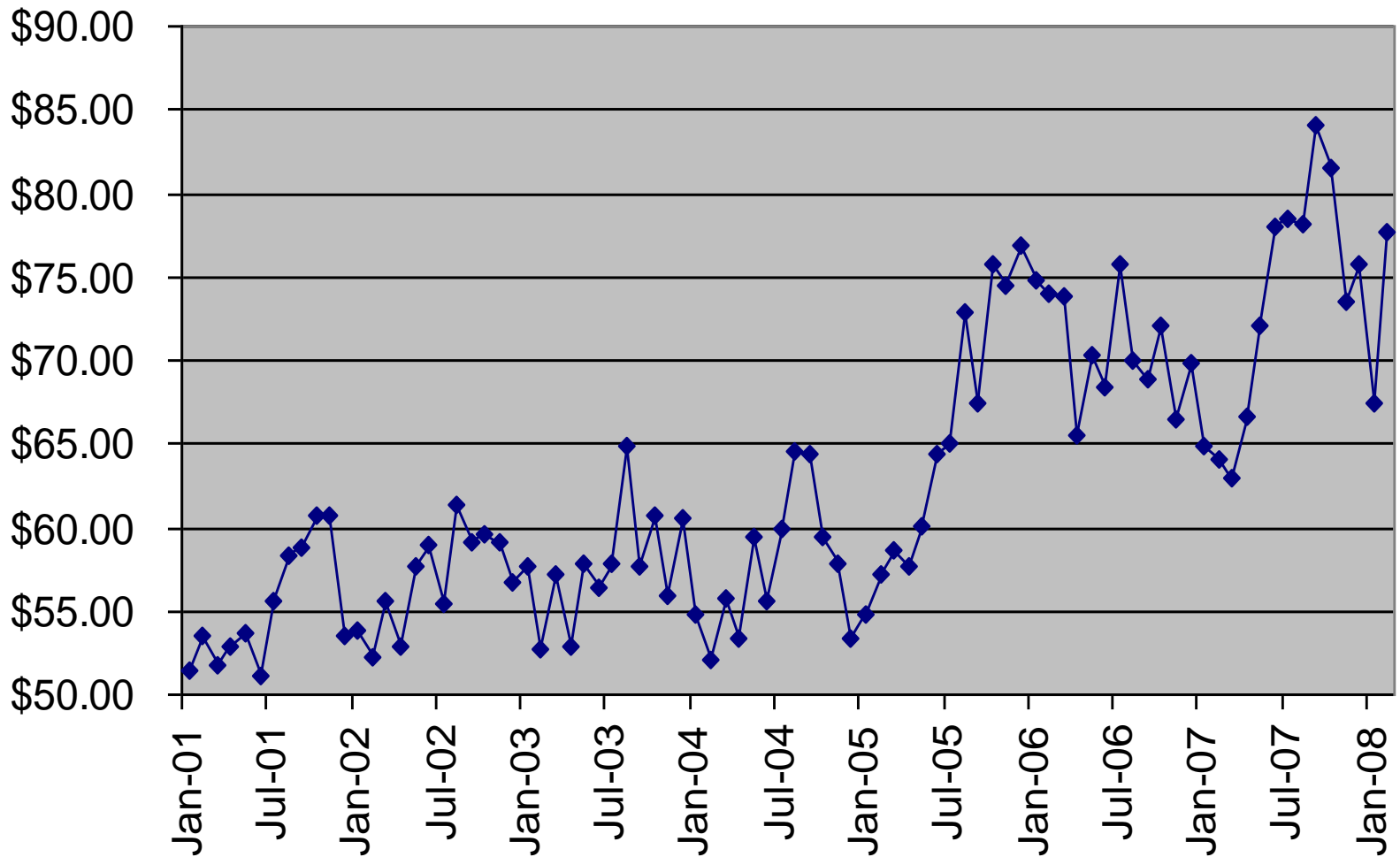


NIPSCO Fuel Cost Adjustments

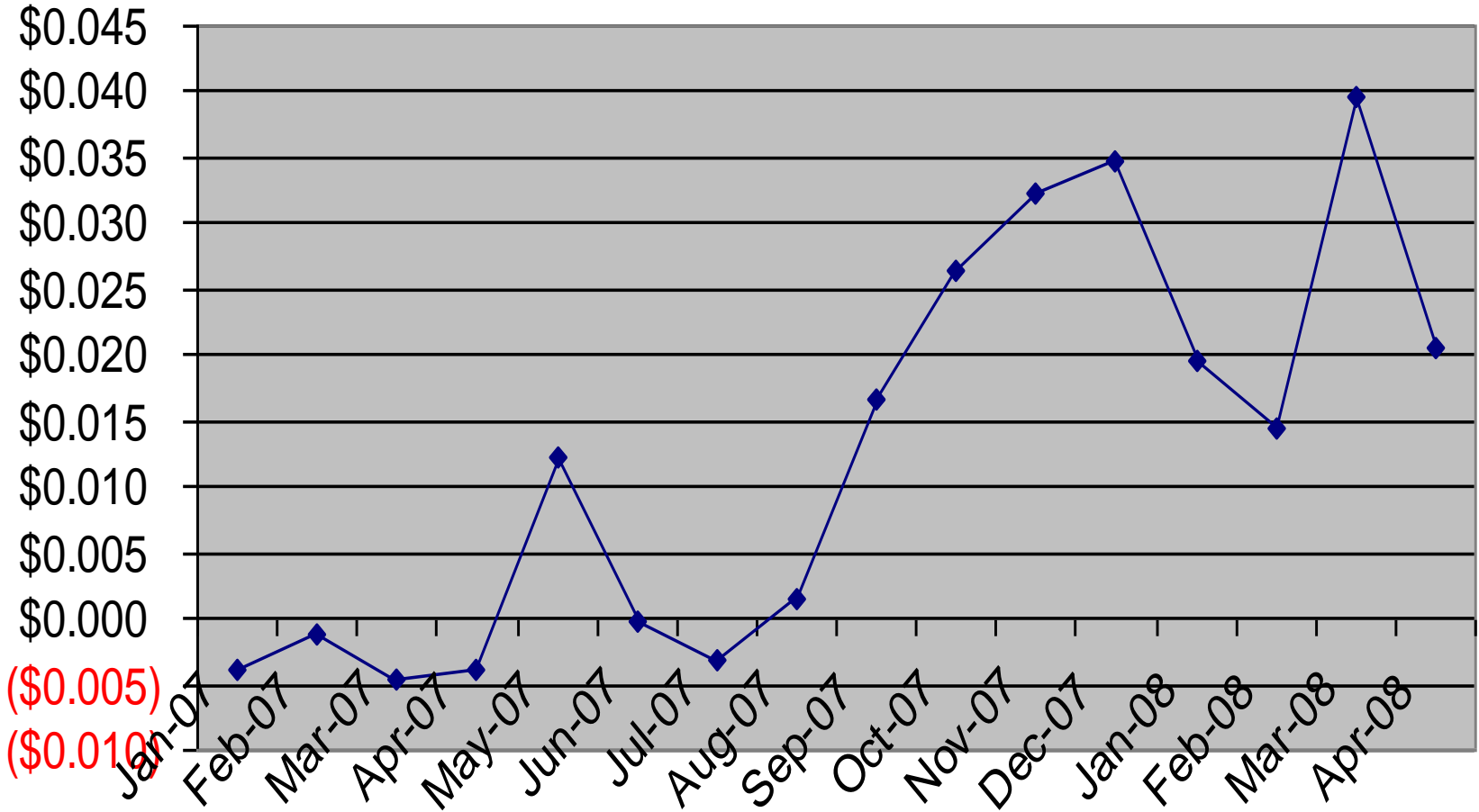
(January, 2005 to March, 2008)



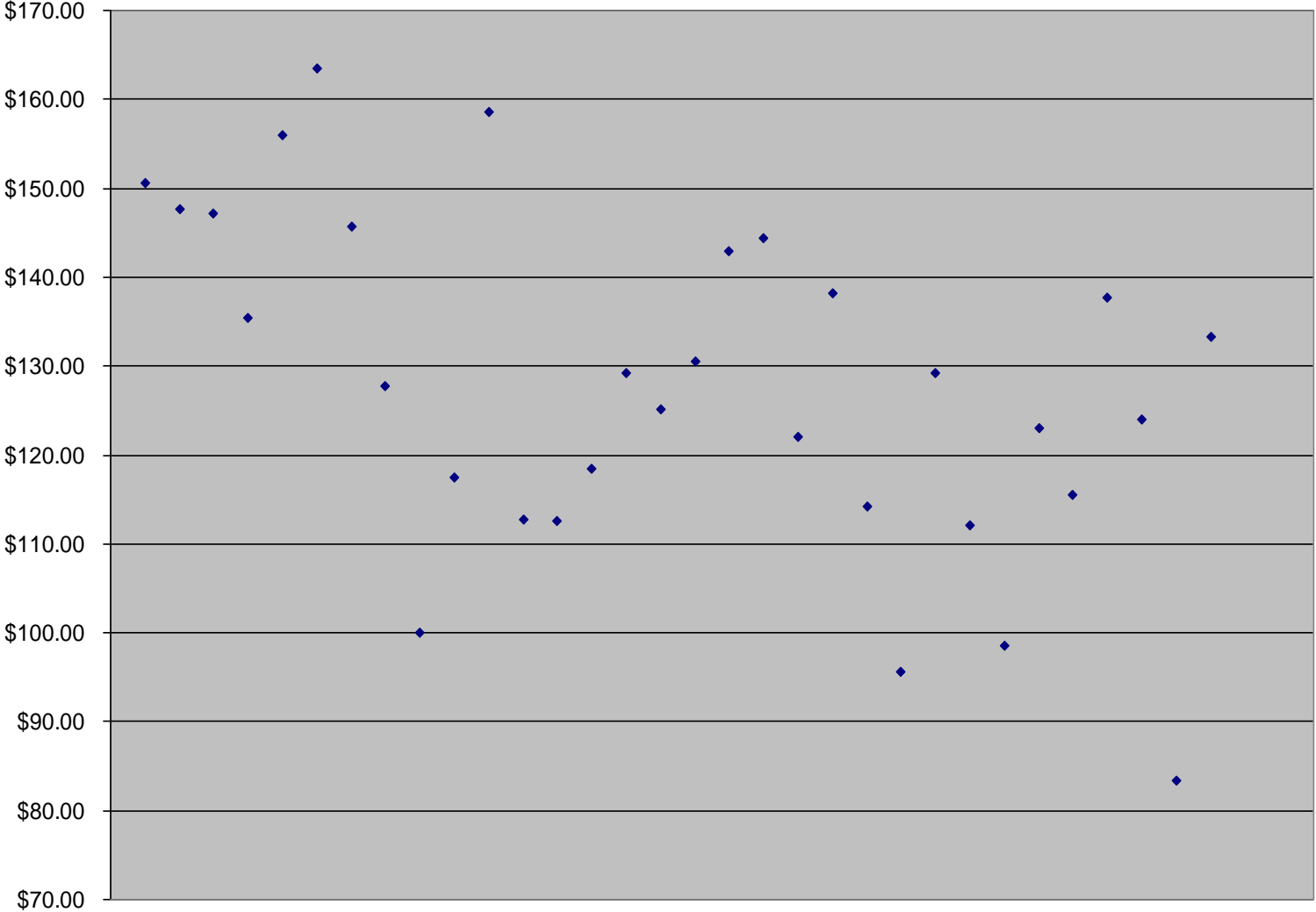
Sun Prairie Residential Rates (900 kWh) Per the Wisconsin Public Service Commission



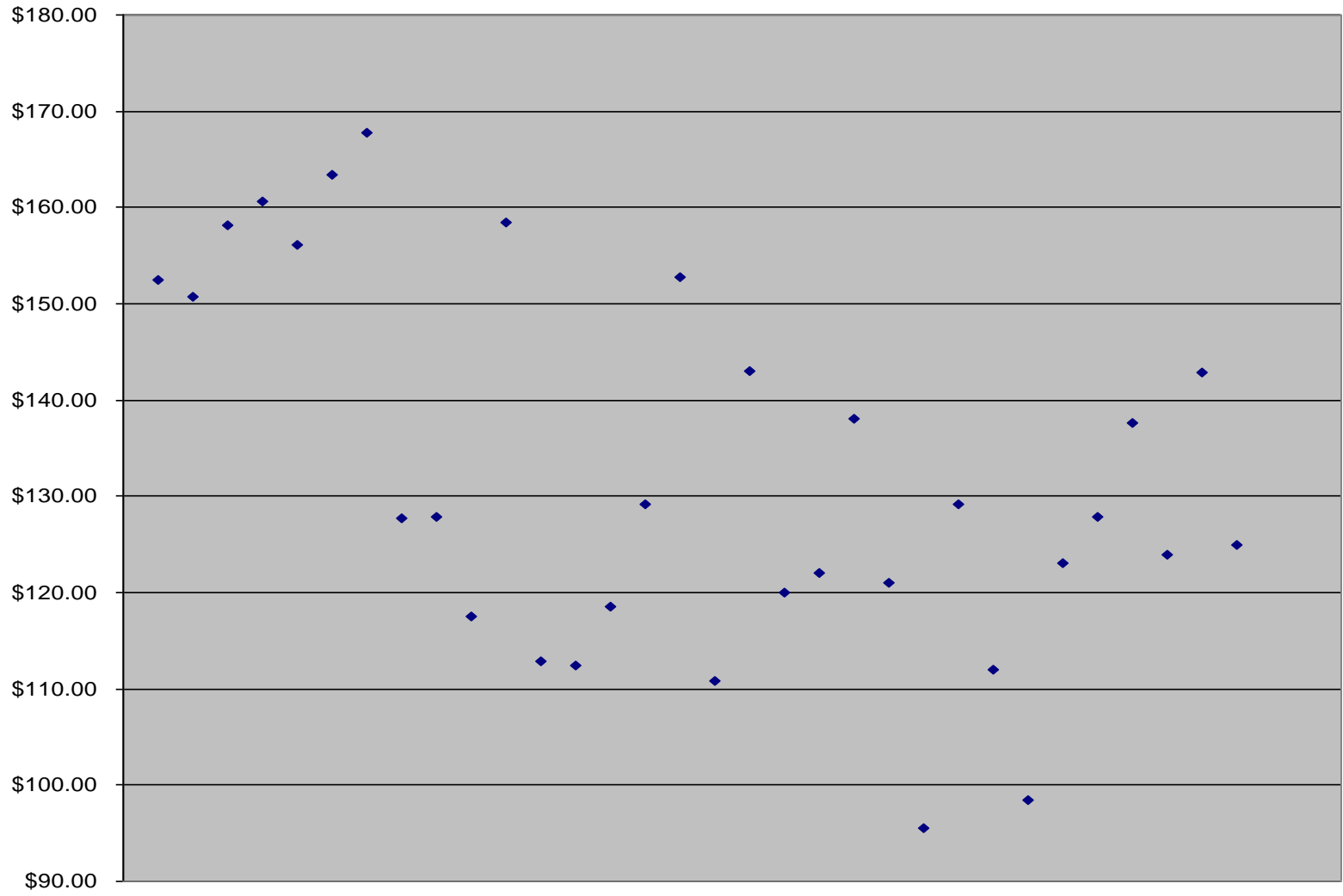
Hazel Green, WI Fuel Cost Adjustments (January, 2007 through April, 2008)



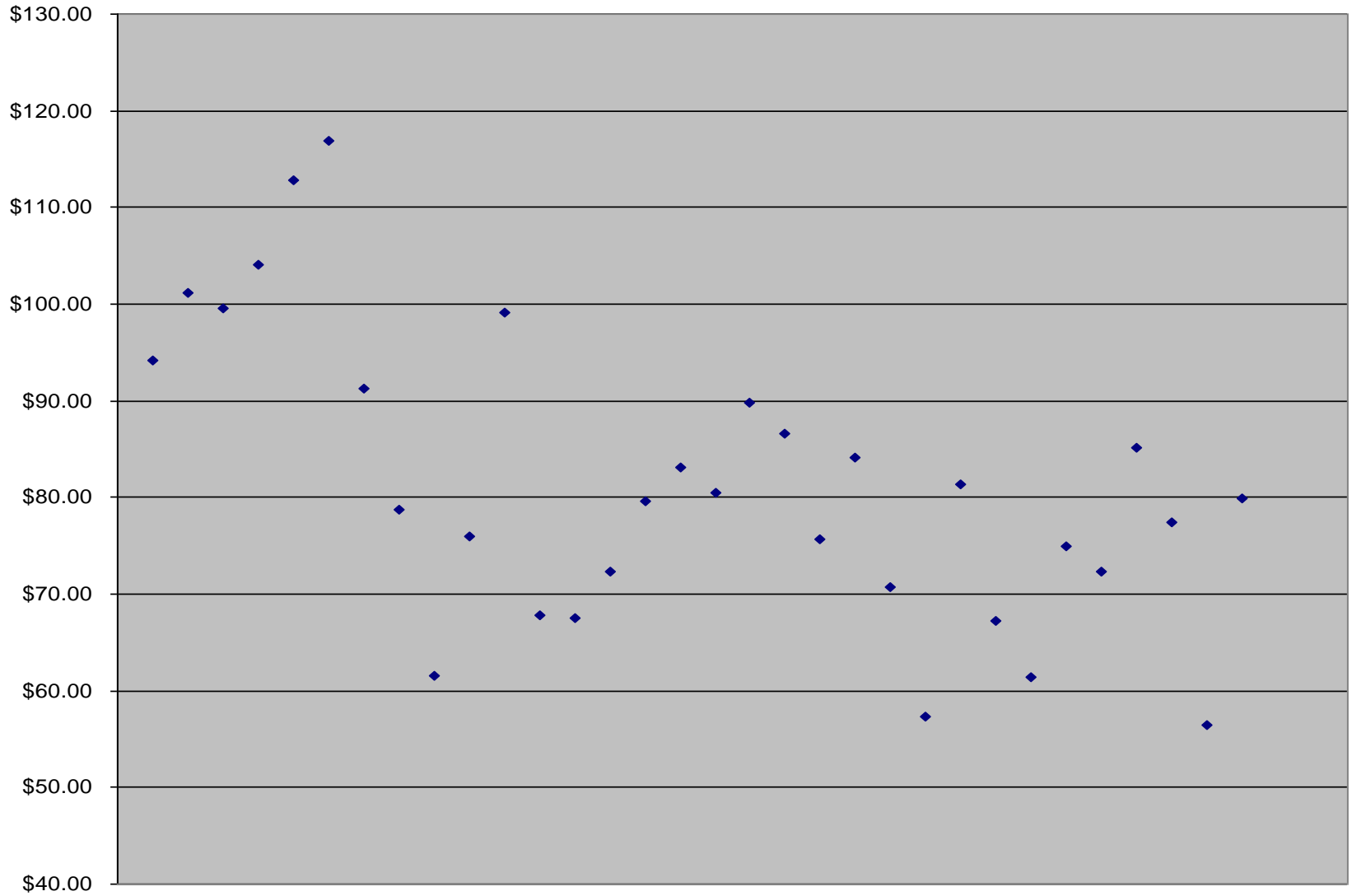
Estimated Monthly Bill for 1,500 kWh Residential Usage (Winter)



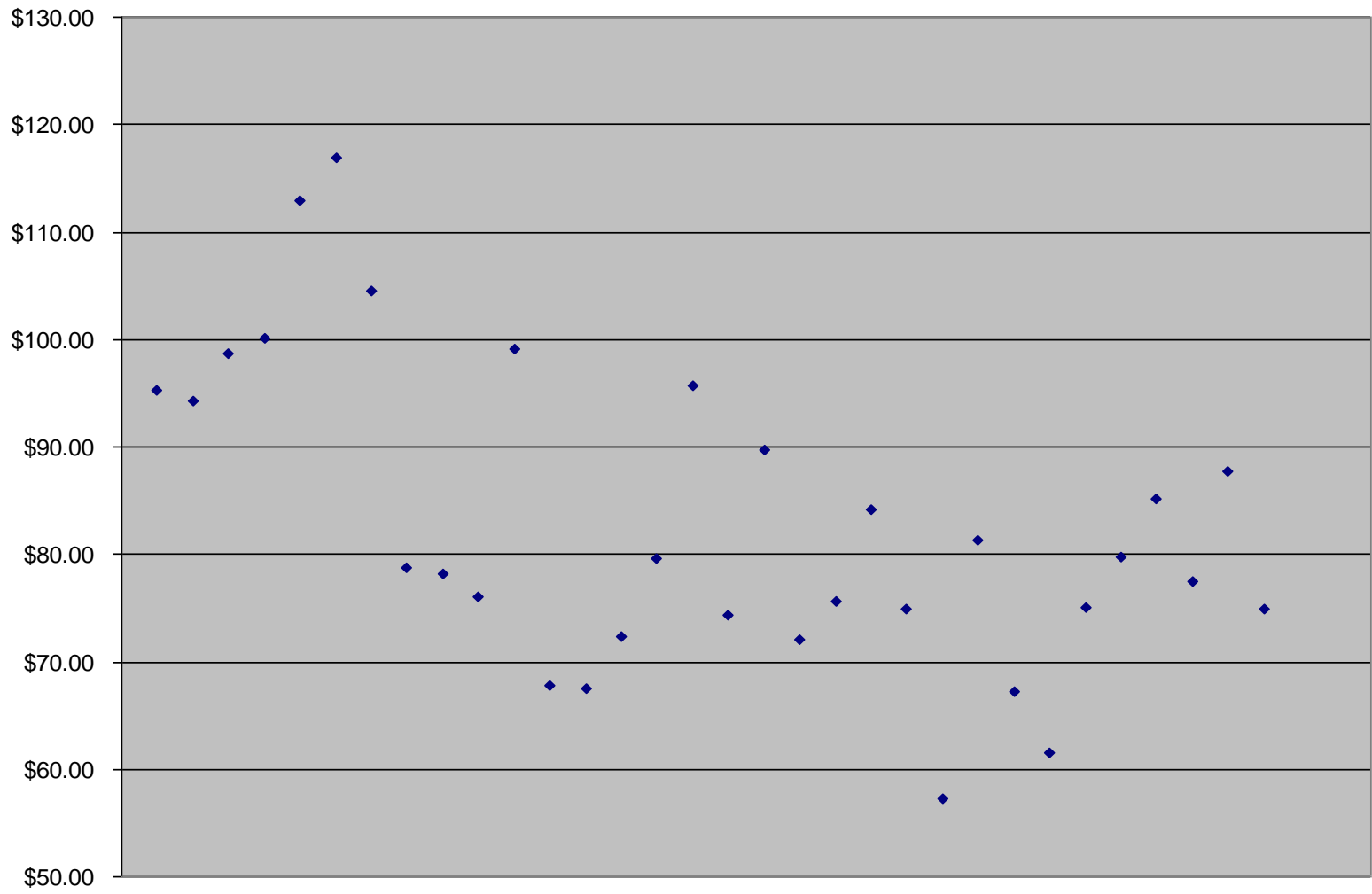
Estimated Monthly Bill for 1,500 kWh of Residential Usage (Summer)



Estimated Monthly Bill for 900 kWh Residential Usage (Winter)



Estimated Monthly Bill for 900 kWh Residential Usage (Summer)



Utility Reliability Indices for Calendar Year 2006

	SAIFI	CAIDI (Minutes)	CAIFI
• AmerenCILCO	1.61	489	2.37
• AmerenCIPS	2.04	754	2.68
• AmerenIP	2.53	1,545	3.07
• Com Ed	1.43	149	2.18
• MidAmerican	1.89	87	2.39
• Mt. Carmel	1.9	224	1.94
• Note: Ameren had severe storms			

Tree Trimming



Reliability Issues are Important

Electric reliability can be more important than price

“Just-in-Time” Warehousing

Plastic hardens in molds, chemicals separate, food spoils

Scanners don't work- hand enter data into computers

Safety issues at facilities- Fire at a Decatur facility

Utilities have regional-based crews and warehouses

Impact of outage-related increased labor costs

A facility with a one mW demand and a fifty-percent load factor has an electric consumption of about 4,380,000 kWh per year. At 6 cents per kWh the annual bill is \$262,800.

The labor costs related to a four-hour outage can be over \$21,000.

Three outages can cost over \$60,000 per year.

\$60,000 represents a twenty-three percent impact cost on a customer.

Generation Back-Up as an Incentive

- For outages over an hour
- Year 2001 had first tour of a local generation plant as part of a prospect tour
- Locate generation on site or near site
- Accounts can prove reliability to gain contracts
- Madison Gas and Electric charges \$24 per kW year (\$2 per month) for on-site generation backup.

Local Crews

- Response time is decreased, service restored quicker
- They know the system
- Equipment Stored Locally
- Other Municipal Employees can Help
- Document time from office to site
- Be ready to document expertise
- If town is growing, crews need to be growing (new question)

Local Generation

\$2 per kW month retail value (Madison Gas and Electric)

Reduces outage time

Support during voltage event

Get contracts by proving reliability

Conclusion- The Municipal Advantage

- Competitive Low Price
- Ability to Bond Long Term
- High Reliability
- Local Generation
- Incentive Rates for Economic Development
- The Future Looks Great- Prices will increase, but we should track below our competitors