UTILITY COMMITTEE

A G E N D A

May 12, 2008 - 5:00 P.M. - Council Chambers - City Hall - City of Dover

Public comments are welcomed on any item and will be permitted at appropriate times. When possible, please notify the City Clerk *(736-7008 or e-mail at Tmcdowell@dover.de.us)* ***should you wish to be recognized.***

AGENDA ADDITIONS/DELETIONS

1. PACE Wholesale Power Supply Review

2. Electric Cost of Service Study by Burns & McDonnell

3. Rate Stabilization Reserve Funding

4. Amendment to Regulation 1146 Agreement

5. Adjournment by 6:30 P.M.

/tm
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THE AGENDA ITEMS AS LISTED MAY NOT BE CONSIDERED IN SEQUENCE. THIS AGENDA IS SUBJECT TO CHANGE TO INCLUDE THE ADDITION OR THE DELETION OF ITEMS, INCLUDING EXECUTIVE SESSIONS.



City of Dover
Utility Committee Meeting

Dover Wholesale Power Supply Budget

May 12, 2008



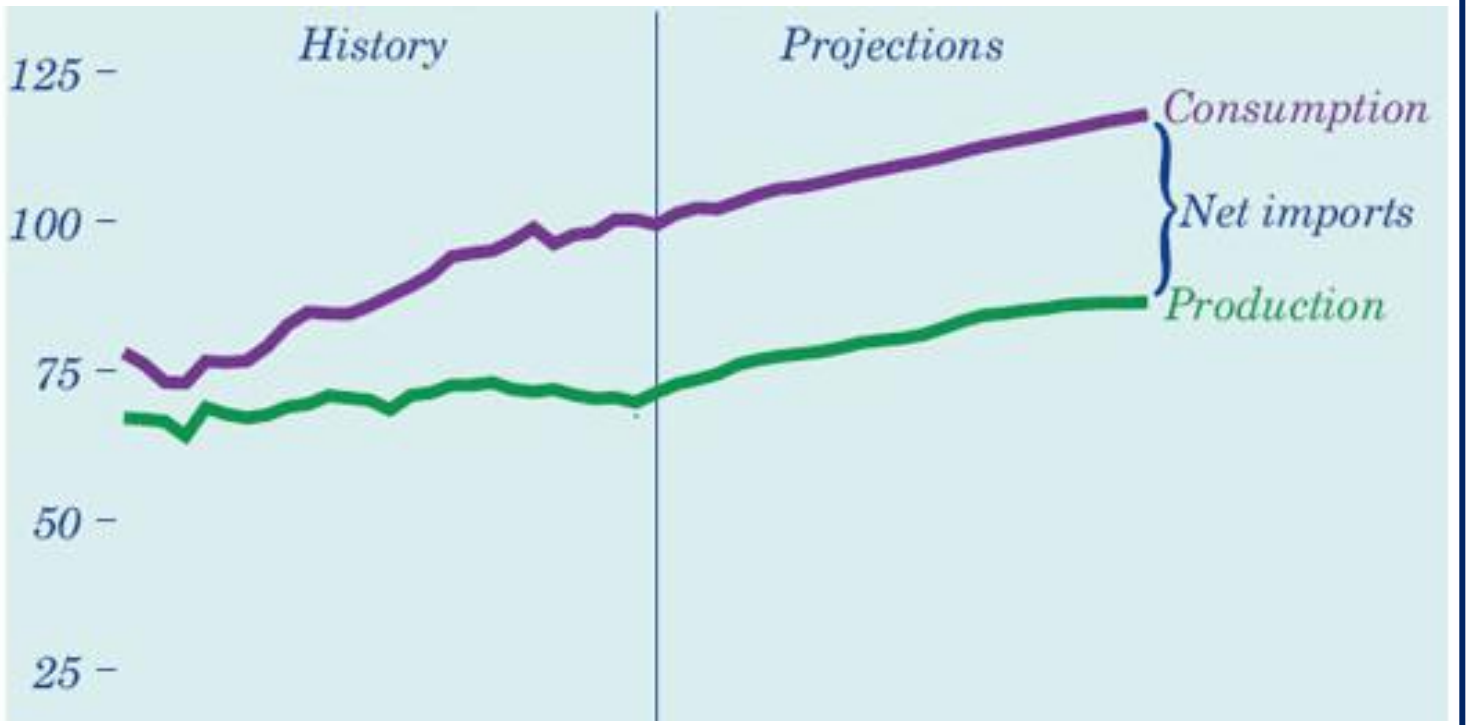
PACE

Summary

- For the 2008 / 2009 budget power supply costs increased 5.4% over last year's budget. This increase was primarily caused by:
  - Extraordinary increases in wholesale energy prices
  - Higher cost of purchased generation capacity to meet self-gen shortfall
- By proactively managing these challenges Dover has contained the cost increases to its rate payers saving the rate payers millions of dollars.
  - 13% increase in power supply costs was mitigated via risk management, saving rate payers $5.2M
  - Additional savings associated with active energy management, reduced management fees, reduced generation plant O&M and higher emissions sales revenues further reduced the necessary budget increase
- Regional energy prices are rising
  - Fuel, generation and environmental related costs continue to rise
  - Dover is located in a high-priced capacity constrained region
- The City of Dover is planning ahead and will continue to use every available approach to managing cost for the City's rate-payers

Challenges

U.S. Energy Imports Continue to Increase



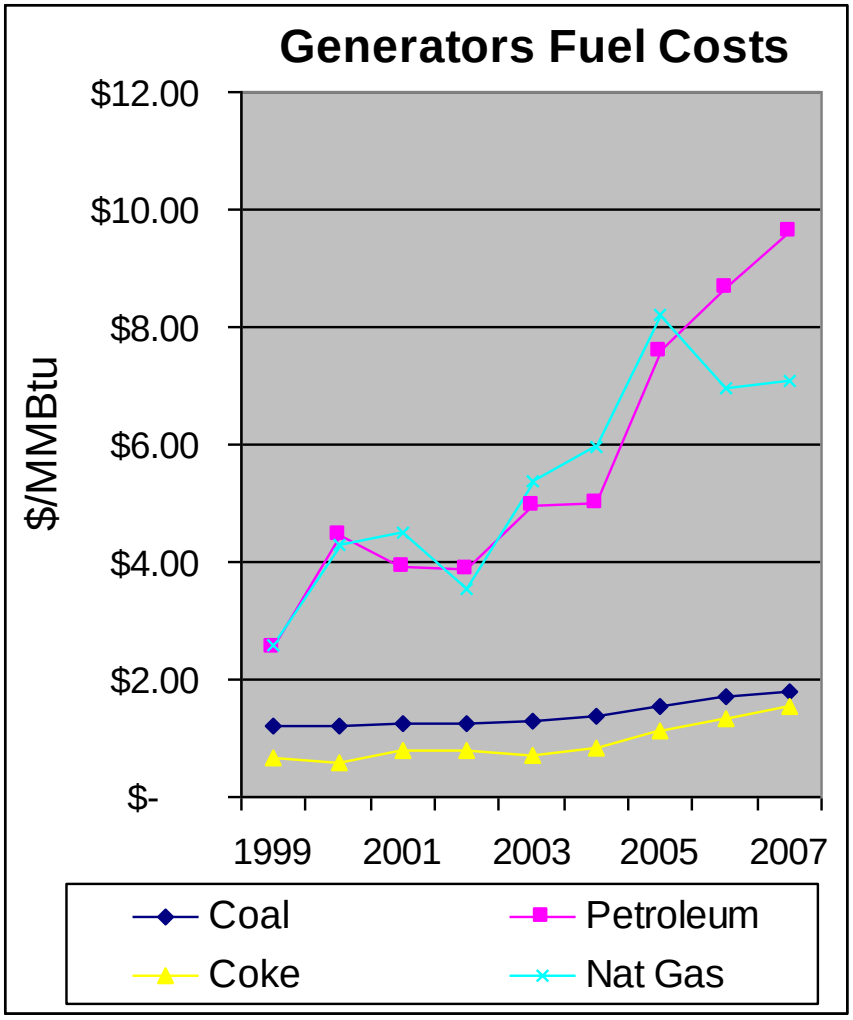
Source: EIA Annual Energy Outlook 2008 with Projections to 2030 (Early Release)

- US crude oil production declined 13% since 2000
- US total coal production flat since 2000 while Appalachian coal has experienced declines
- US natural gas production basically flat since 2000
- Significant increases in non-hydro renewables, but starting from small base

Environmental Pathways and Impacts

- Legislative and regulatory uncertainty limits new generation
  - CAIR permanently caps emissions of sulfur dioxide (SO2) and nitrogen oxides (NOx) in the eastern United States.
  - CAMR creates cap-and-trade program to limit mercury emissions from coal-fired power plants.
  - Lieberman / Warner caps GHG emissions from the electric power, transportation and manufacturing sectors.
- New rules and changing enforcement raising generators' costs
  - Delaware regulation 1146 creates the need for significant capital investments in certain power plants.
  - Standards and enforcement of New Source Review have been tightened.
  - RGGI creates cap and trade on GHG in ten NE states.

Increasing Operating Costs + Limited New Capacity = Escalating Electricity Prices

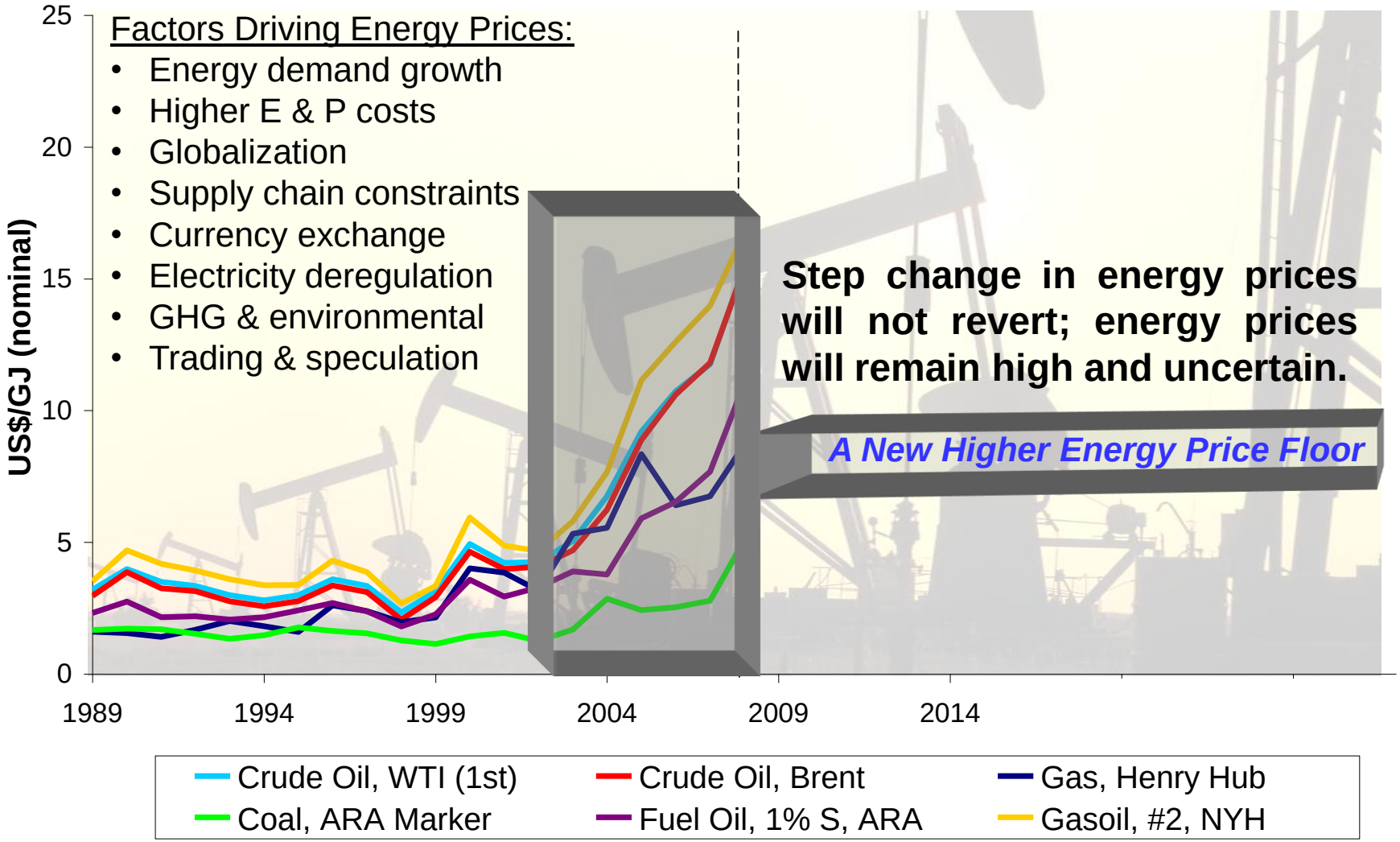


Source: Energy Information Administration

PJM's Capacity Market

- Designed to provide long term price signal for new generation.
- To date capacity markets have exhibited mixed results
  - Has created excess supply
    - reducing net exports,
    - reversing de-rates of old, high cost generation, and
    - interruptible load.
  - High capacity prices have failed to attract new resources, but market not fully implemented
  - Resulted in over $6 billion in capacity costs paid by load for FY 2009

A New, Higher Price Floor for Energy



Ratepayers facing steep increases across US & Region

State,
Constellation reach truce

[BG&E] 1.1 million residential customers, … will pay 85 percent more for electricity than in 2005

Baltimore Sun, March 30, 2008

Power co-op
raises rates

Delaware Electric Coop has raised electric rates by 8.86 percent

Delaware Online,
March 30, 2008

Dominion
Pursues 18 Percent … Hike

…largest one-time rate increase … since the 1970s … necessary to offset … fuel [purchases]

Washington Post,
May 7, 2008

Con Ed
Seeks to Increase … Up to 17%

…by 17 percent for … residential … and by 10.7 percent for … business

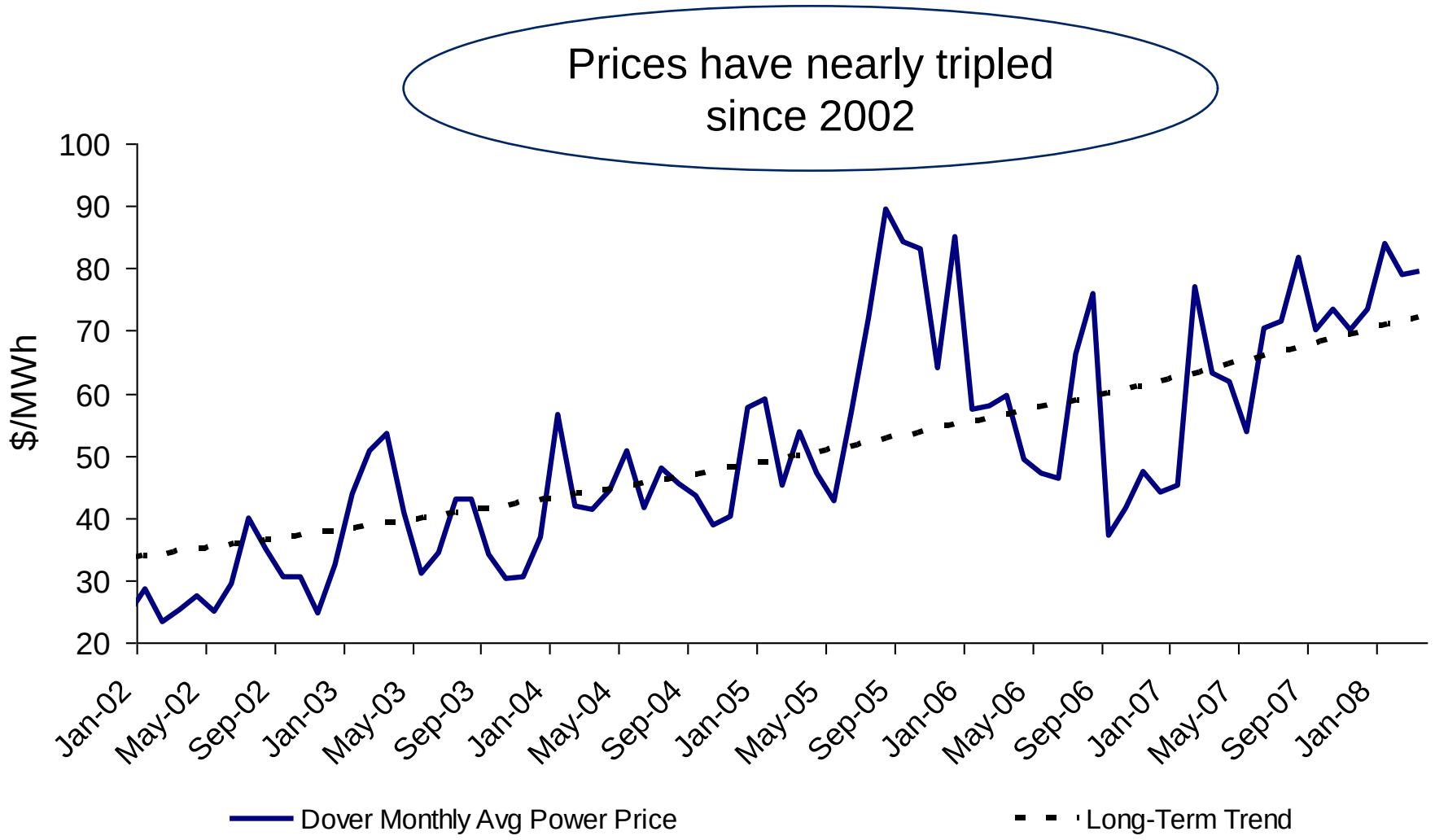
The New York Times,
May 5, 2007

Ameren
requests 12.1% … rate increase

Ameren Corp., will file … for a 12.1 percent … rate increase

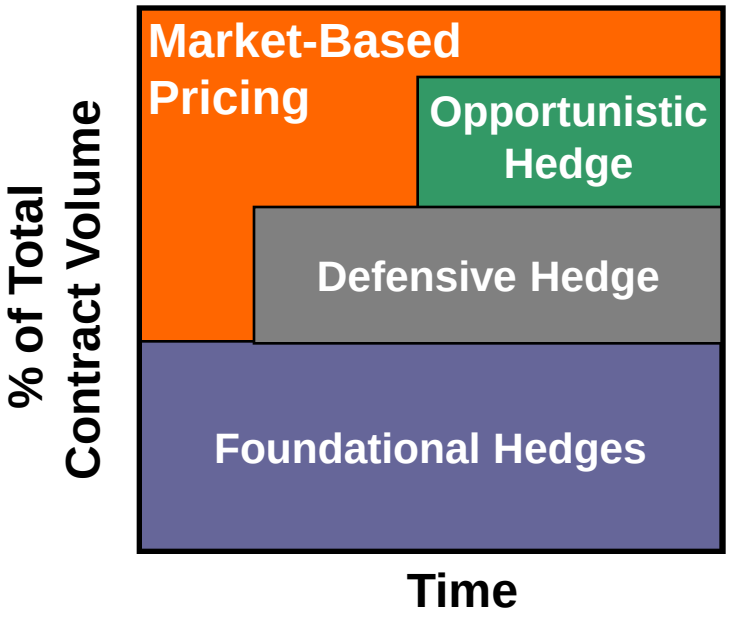
St. Louis Business Journal,
April 4, 2008

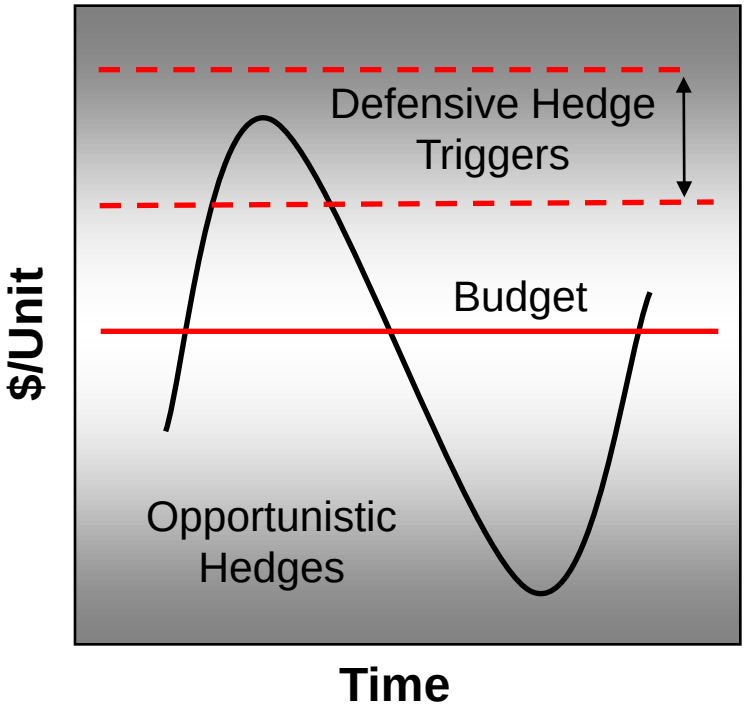
Wholesale Power Market Prices for Dover



Managing the Challenges

Risk Management

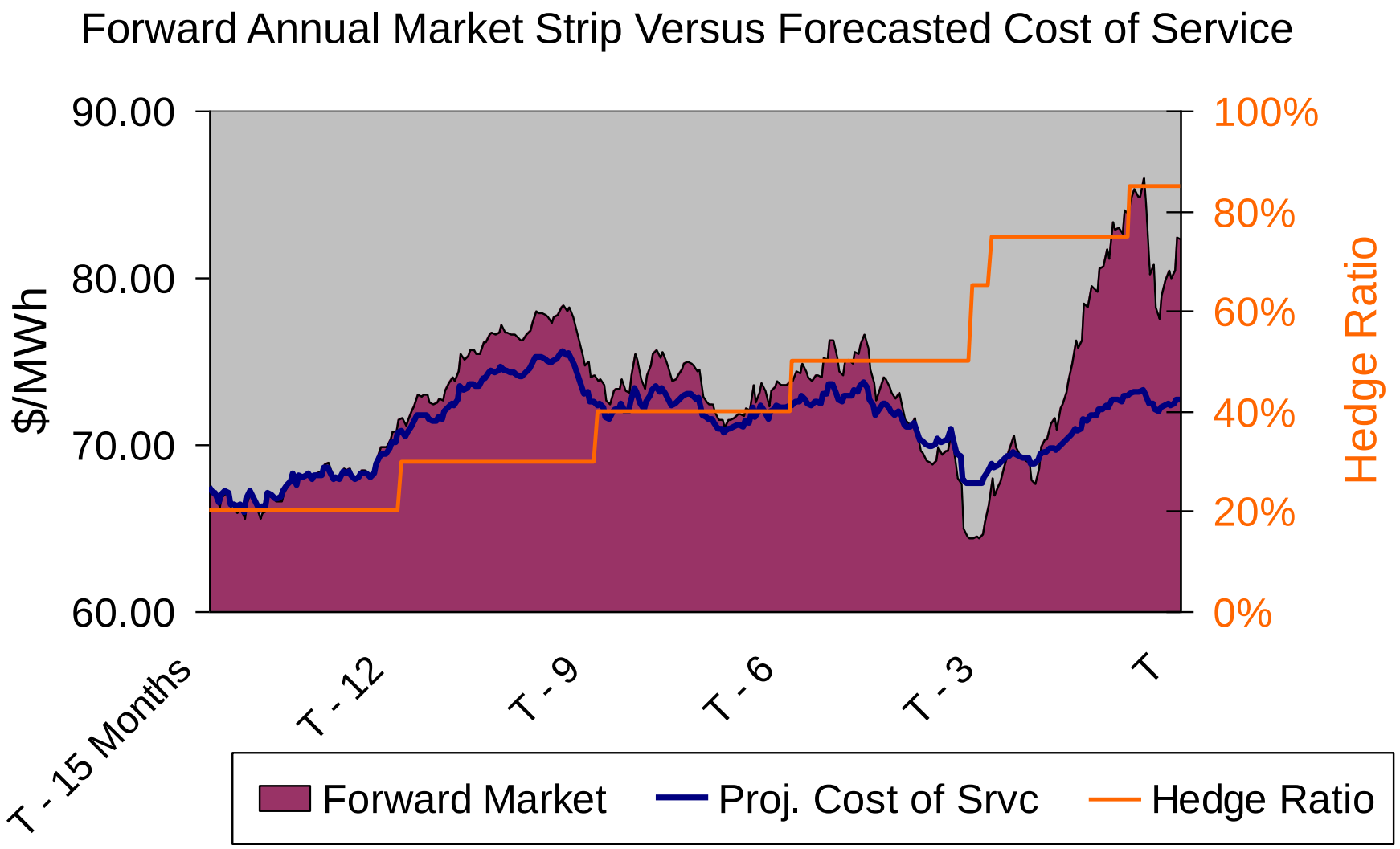




Developed systematic program based on Dover's risk tolerances:

- Improves budget certainty
- Creates opportunity to participate in favorable price changes, while minimizing exposure to adverse market conditions
- Keeps decision making with Dover

Impact of a Hedged Portfolio on Cost of Service



Energy Management



Reducing time & resources by bolting on an Energy Management function that manages $2 billion in transactions.



Reducing counterparty premiums by utilizing the competitive wholesale marketplace and maintaining a diverse set of counterparties.



Minimizing costs associated with balancing real time load against forecasted load by utilizing sophisticated load forecasting systems.



Mitigating contract risks by leveraging deep commercial and legal expertise.

Benefits of Dover's Generation Assets

Hedge energy price volatility

- High priced peaking units lead to a more than tripling in prices.
- Dover's generation hedges this exposure
  - Displacing higher priced units
  - Generating revenues at high prices providing a hedge

Hedge capacity price

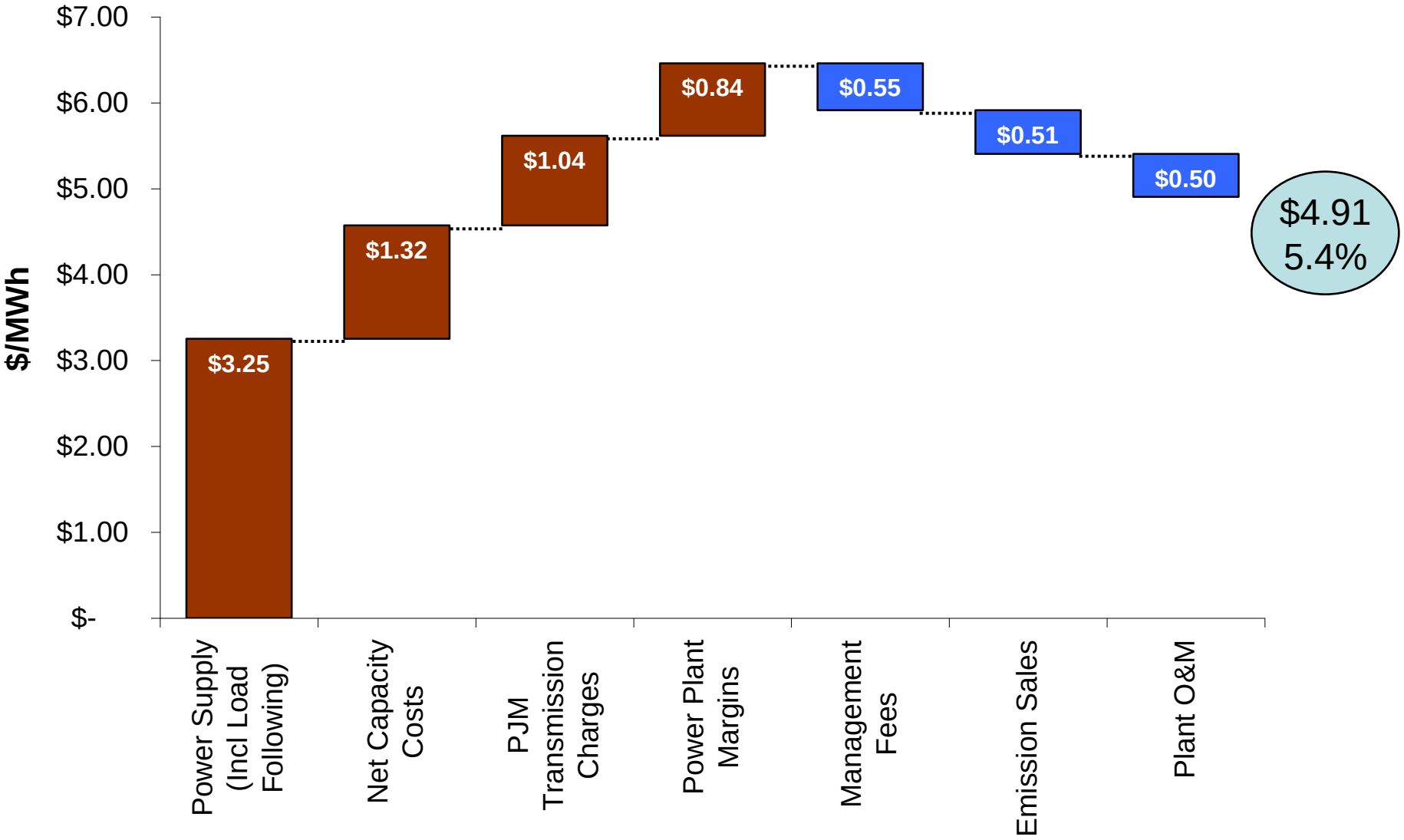
- PJM East experiences high capacity prices
- Dover's generation covered 97% of its capacity obligation for the 2007/2008 and …
- … will cover 87% of the capacity obligation for the 2008/2009

Provide emission allowances revenues

- Dover's generation provide excess NOX and SO2 allowance creating revenue for Dover.
- Over last several years Dover has sold excess allowances for $1 million plus on an annual basis.

Impact to 2008/2009 Budget

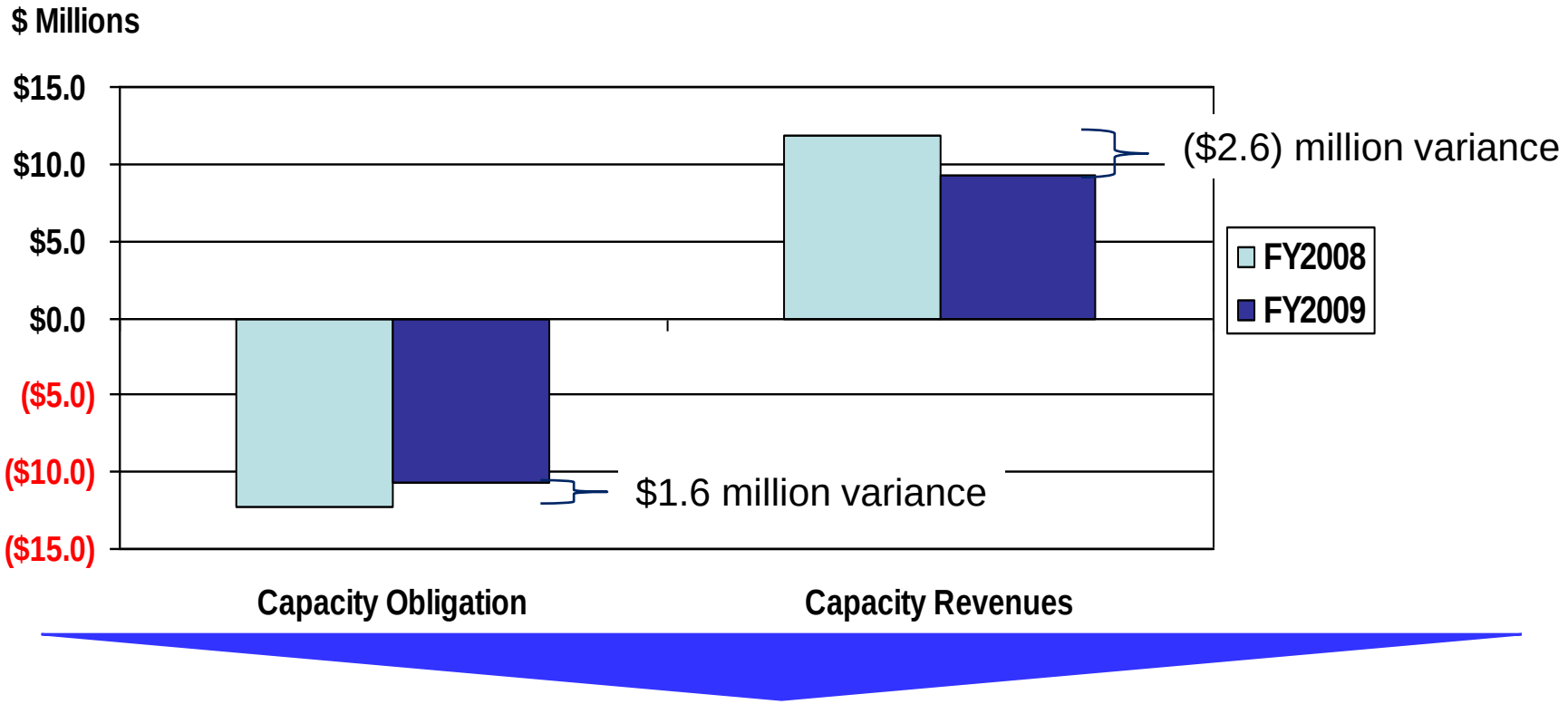
Budget Variances: FY 08/09 Budget Versus FY 07/08 Budget



Net Purchased Generation Capacity Cost Increase

Capacity obligation: provide sufficient capacity to ensure reliable service for rate payers.

Capacity revenue: value provided for the ability to generate when called upon



$1 million net cost increase to city of Dover for FY 2009.

Effect of Dover's Proactive Management on FY08/09 Rates

- Without risk management, customers would be experiencing a 13% increase in power supply costs (budgeted market prices) however, …
- … risk management contained cost increase to 5.4%.
- In aggregate, the hedge positions have saved the rate payers $5.2 million on a year over budget year basis.
- In addition, if generation assets were retired the rate payers would bear an additional $5 million cost and rates would have increased 20% on a year over budget year basis.
- In summary, Dover has been able to manage through extraordinary energy price increases through proactive management of risk, and the optimization of the plant values.

Electric Cost of Service Study and Rate Adjustment Considerations

Presented to the

City of Dover, Delaware

May 12, 2008

Agenda

- Need for Adjustments
- Net Margins
- Cost of Service Considerations
- Potential Rate Adjustments

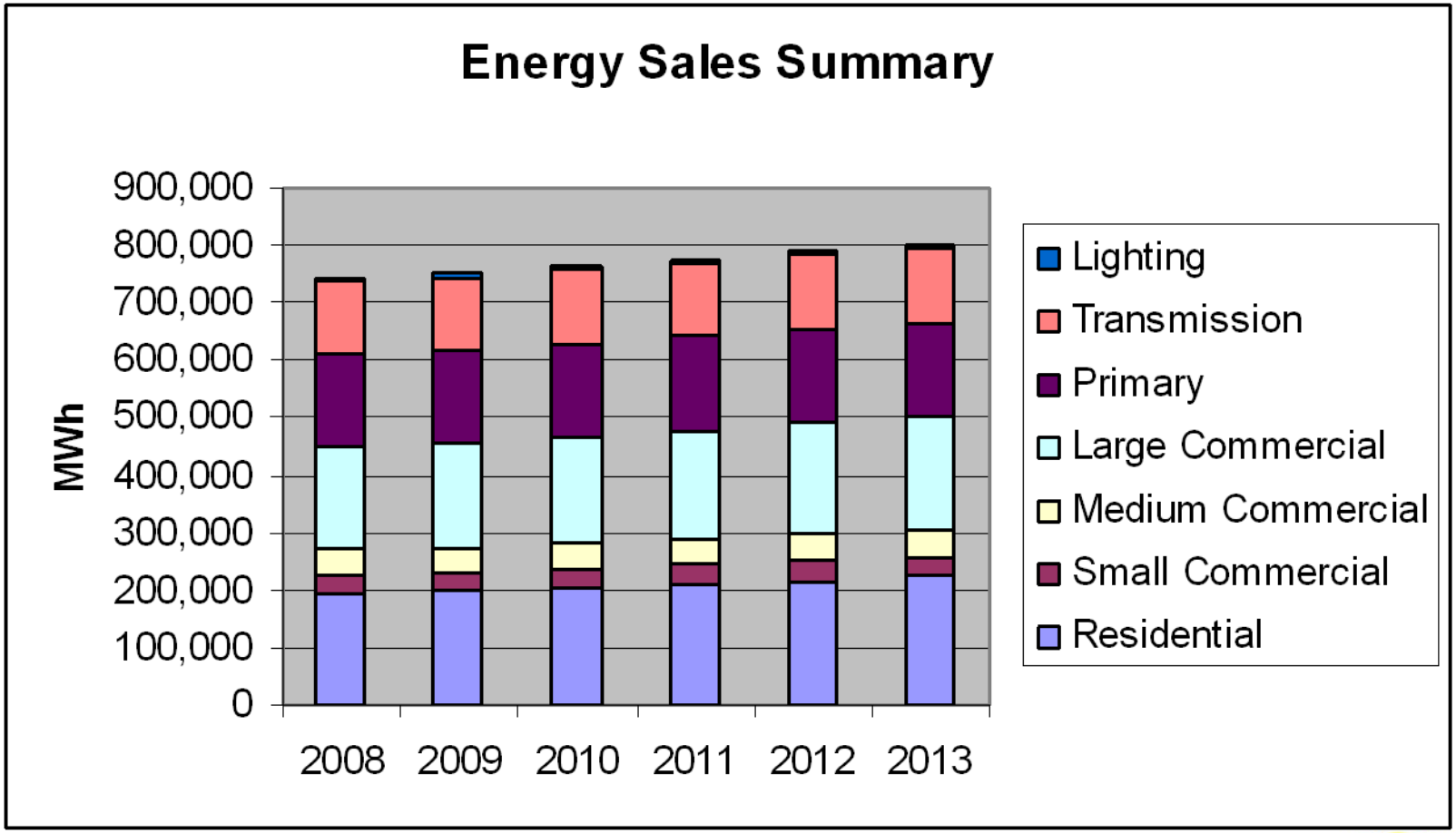
Need for Rate Adjustments

- Current Rates Implemented July 1, 2007
- Expected Additional Changes
- Updated Financial Forecast
- Purchased Power Costs Updated
- System Capital Requirements

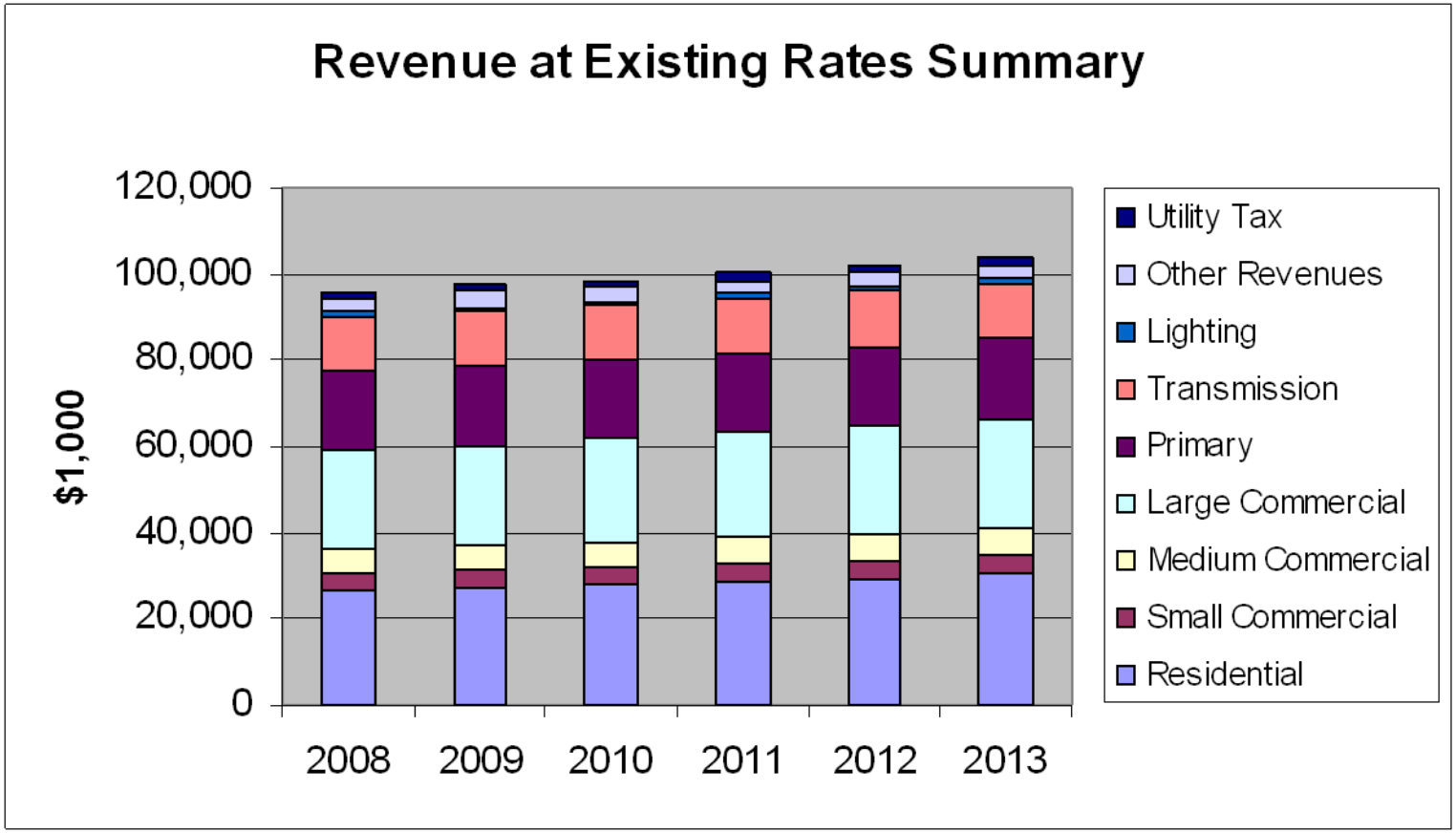
Key Assumptions

- Projected Customer Growth
  - Less than 1.0 percent annually
- Projected Energy Sales Growth:
  - 0.86 percent in FY 2009
  - 1.65 percent in FY 2010
- Projected Expenses Increasing:
  - Purchased Power Expenses – Up 10.4 Percent
  - Total Electric Operating Expenses – Up 7 Percent
  - Major Capital Improvements – $22 M in New Debt

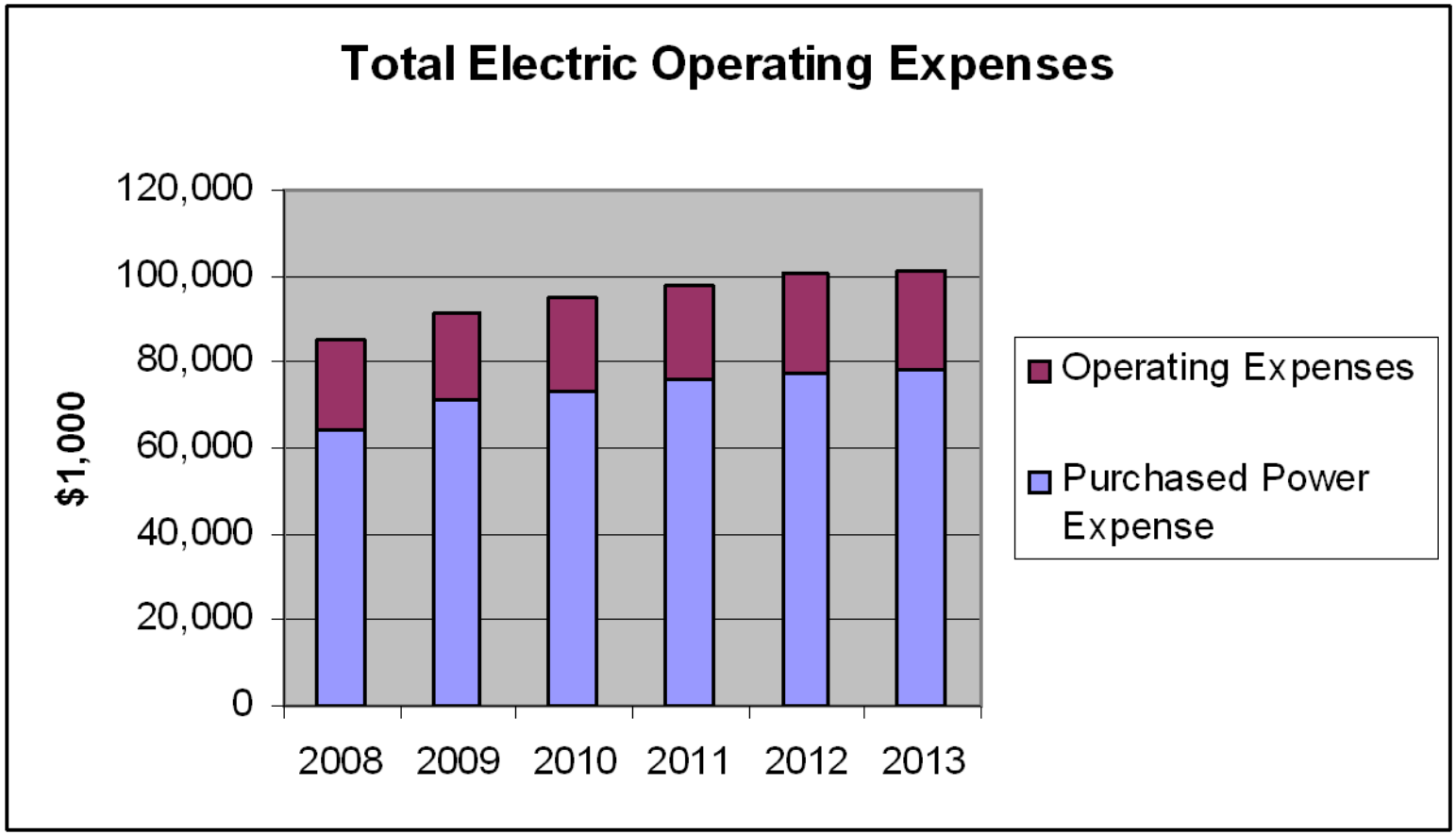
Financial Planning



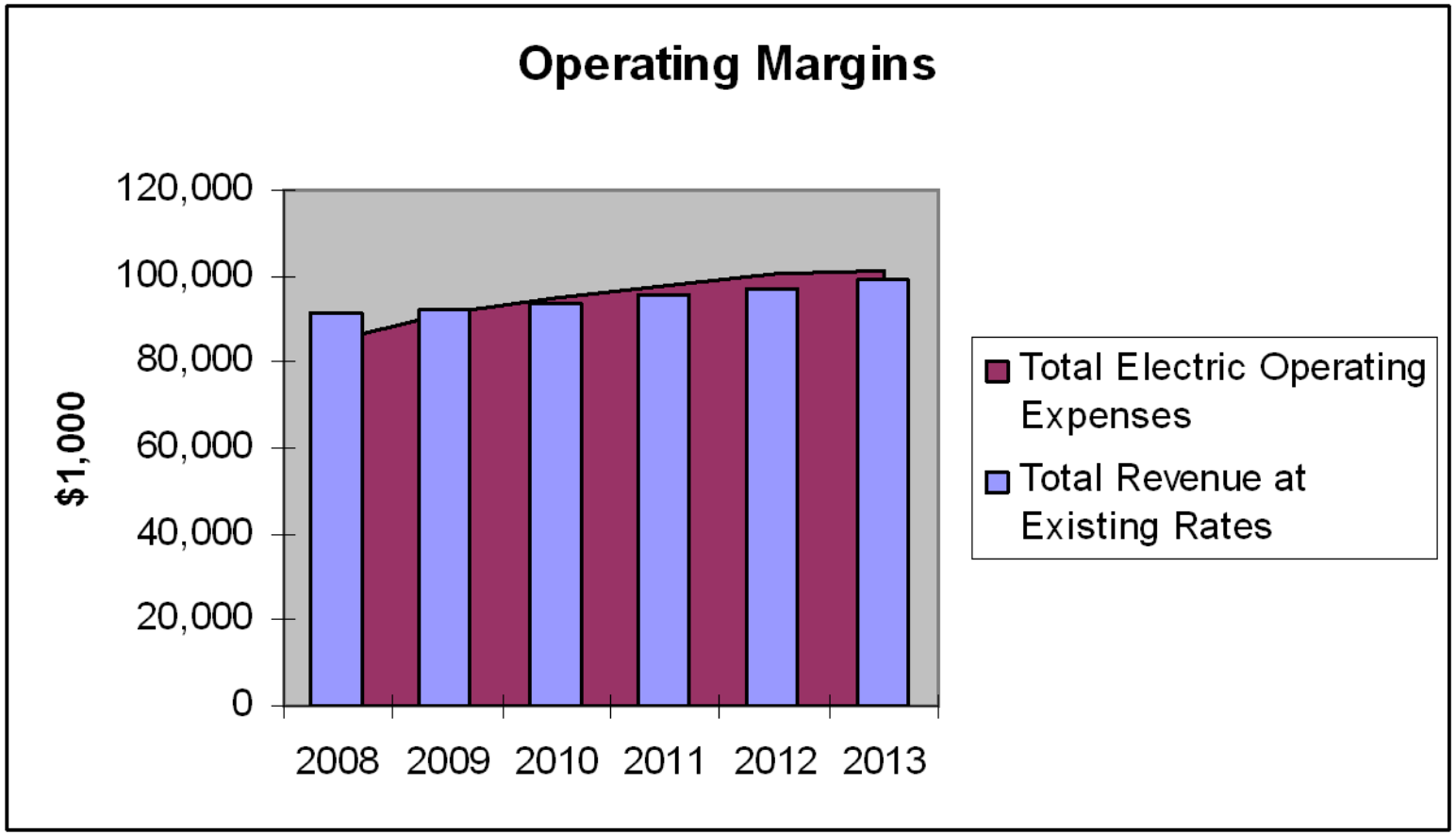
Financial Planning



Financial Planning



Financial Planning



Financial Forecast

- Reviewed Results
- Financial Targets:
  - Debt Service Coverage Requirements
  - Maintain Positive Net Margins
- Determined Revenue Adjustment
  - FY 2009 – 7.0 percent
  - FY 2010 – 4.5 percent
  - FY 2011 – 3.2 percent

Financial Forecast

	2008 ($)	2009 ($)	2010 ($)	2011 ($)	2012 ($)	2013 ($)
Operating Revenue - Retail Rates	91,239,700	92,081,400	93,694,100	95,348,500	97,030,600	98,737,600
Operating Revenue - Power Cost/Rate Adjustment	-	6,445,700	11,070,000	14,677,000	14,935,900	15,198,700
Operating Revenue - Other	2,871,319	4,117,372	3,081,000	3,100,000	3,119,000	3,138,000
Operating Revenue - Utility Tax	1,633,100	1,763,500	1,875,100	1,969,300	2,004,000	2,039,300
Total Revenue	95,744,119	104,407,972	109,720,200	115,094,800	117,089,500	119,113,600
Purchased Power Expense	(64,473,461)	(71,176,439)	(73,591,156)	(75,975,864)	(77,756,673)	(78,019,555)
Operating Expenses	(20,781,759)	(20,157,022)	(21,164,400)	(21,899,200)	(22,676,100)	(23,482,300)
Total Operating Expenses	(85,255,220)	(91,333,461)	(94,755,556)	(97,875,064)	(100,432,773)	(101,501,855)
Operating Margin	10,488,899	13,074,511	14,964,644	17,219,736	16,656,727	17,611,745
Non-Oper. Rev. - Interest on Operating	630,000	453,000	453,000	453,000	453,000	453,000
Non-Oper. Rev. - Interest on Reserves	640,000	697,500	722,000	747,200	771,600	755,200
Operating Transfers - Out (6.5%)	(6,601,269)	(6,786,500)	(7,131,800)	(7,481,200)	(7,610,800)	(7,742,400)
Margins Available For Debt Service	5,157,630	7,438,511	9,007,844	10,938,736	10,270,527	11,077,545
Interest for Long-Term Debt	(797,100)	(1,555,900)	(1,813,100)	(1,702,700)	(1,582,608)	(1,453,333)
Cash From Operations	4,360,530	5,882,611	7,194,744	9,236,036	8,687,920	9,624,213
Debt Issue Cost Amort.-Outstanding Debt	(99,800)	(99,800)	(99,800)	(99,800)	(99,800)	(99,800)
Debt Issue Cost Amort.-New Debt	-	(22,200)	(22,200)	(22,200)	(22,200)	(22,200)
Depreciation Expense	(4,414,300)	(4,844,100)	(5,046,000)	(5,112,200)	(5,176,900)	(5,239,900)
Net Margins	(153,570)	916,511	2,026,744	4,001,836	3,389,020	4,262,313
Debt Service Coverage						
Margins Avail. for Debt Service	5,157,630	7,438,511	9,007,844	10,938,736	10,270,527	11,077,545
Total Debt Service	2,577,100	3,395,900	4,158,100	4,162,700	4,152,608	4,148,333
Debt Service Coverage Ratio	2.00	2.19	2.17	2.63	2.47	2.67

Cost-of-Service Analysis

- Unbundled Revenue Requirements
  - Power Supply (Demand & Energy)
  - Transmission
  - Distribution
  - Customer
- Assigned Costs to Classes
  - Allocation Factors
- Summarized Results

Cost of Service Analysis

Current Breakdown of Electric Cost Components

	Total	Transmission	Small Commercial	Medium Commercial	Large Commercial	Primary	Residential	Lighting
Energy Cost:								
Energy Sales (kWh)	751,339,525	126,868,602	31,907,900	43,381,396	181,381,182	162,712,098	198,383,480	6,704,867
Total Cost	$66,361,193	$10,844,972	$2,856,250	$3,883,306	$16,236,420	$14,181,668	$17,758,388	$600,189
Cents/kWh	8.83	8.55	8.95	8.95	8.95	8.72	8.95	8.95
Demand Cost								
Contribution to Peak (kW)	180,396	21,921	9,268	11,200	46,829	33,558	57,621	0
Total Demand Costs	$30,840,530	$2,699,614	$1,741,990	$2,074,315	$8,672,882	$4,730,826	$10,830,612	$90,291
$/kW-mo	14.25	10.26	15.66	15.43	15.43	11.75	15.66	N/A
Customer Service:								
Number of Customers	28,575	4	1,423	501	383	25	17,415	8,824
Total Customer Cost	$1,327,356	$845	$89,257	$40,522	$40,468	$3,959	$919,386	$232,919
$/Customer/Month	3.87	17.60	5.23	6.74	8.80	13.20	4.40	2.20
Total Cost:								
Dollars	$98,529,079	$13,545,431	$4,687,498	$5,998,143	$24,949,769	$18,916,453	$29,508,386	$923,399
Cents/kWh	13.11	10.68	14.69	13.83	13.76	11.63	14.87	13.77
Comparison of Revenues ($)								
Revenue Requirement	$98,529,079	$13,545,431	$4,687,498	$5,998,143	$24,949,769	$18,916,453	$29,508,386	$923,399
Gen. by Existing Rates	92,081,400	12,635,400	4,058,800	5,617,600	23,562,100	18,279,300	27,003,600	924,600
Dollar Difference	$6,447,679	$910,031	$628,698	$380,543	$1,387,669	$637,153	$2,504,786	($1,201)

Current Electric Rates

Customer Class	Customer Charge ($/month)	Energy Charge ($/kWh)	Demand Charge ($/kW-month)
Residential	5.00	0.1343	-
Small Commercial Single Phase	5.00	0.1387	-
Small Commercial Three Phase	15.00	0.1387	-
Medium Commerical Single Phase	5.00	0.0950	9.75
Medium Commerical Three Phase	15.00	0.0950	9.75
Large Commercial *	15.00	0.0950	9.75
Primary *	10.00	0.0935	9.60
Transmission *	-	0.0886	6.25

* Large Commercial, Primary and Transmission customer classes have power factor adjustment.

Rate Design Analysis

- Need to Address Revenue Shortfalls
- Rate Implementation Strategy
  - Adjust Rates 7 Percent July 1, 2008
  - Consider Cost of Service Results
    - Rate Adjustments by Class May Vary

Electric Cost of Service Study and Rate Adjustment Considerations

Discussion and Questions

City of Dover
Utility Committee
May 12, 2008

Rate Stabilization Reserve

Current Policy

Rate Stabilization Reserve –

The City has established a rate stabilization reserve to provide for price fluctuations in the power markets. The funding source for this reserve shall consist of the following potential sources: (a) one-time non-recurring operating revenues, (b) all or some of positive carry forward balance variances (c) annual appropriations if available. The balance shall be maintained at a minimum of 3% not to exceed 10% of the purchase power cost in any given year.

Proposed Policy

Rate Stabilization Reserve –

Recognizing price fluctuations in the wholesale power markets the City has established a rate stabilization reserve. The purpose of using such a reserve is to level off the fluctuations in the wholesale power supply market and in turn provide stable rates to our customers. In those instances where the actual cost of power supply and generation are less/more than the budgeted cost of power supply and generation, the City will transfer the difference to/from the Rate Stabilization Reserve. The balance shall be maintained at a minimum of 3% not to exceed 10% of the purchase power cost in any given year.

Adjustment to be calculated as follows – (Budgeted $ per mgwh less Actual $ per mgwh) x actual mgwh purchased and/or generated.

Policy change to be approved by Legislative, Finance, & Administrative Committee & Council.

Sample Calculation – 2008

	January	March
Megawatts Hours Purchased	62,853	57,037
Budgeted Megawatt Hour Rate	$ 90.995	$ 90.995
Actual Megawatt Hour Rate	$ 96.626	$ 83.216
Difference per Megawatt Hour	$ (5.631)	$ 7.779
Difference between Budget and Actual Cost	$ (353,925)	$ 443,691
Budgeted Power Supply	$ 5,719,309	$ 5,190,082
Actual Power Supply Cost	$ 6,073,234	$ 4,746,391
Transfer to Rate Stabilization Reserve	(353,925)	443,691
Total Reported Power Supply (as Budgeted)	$ 5,719,309	$ 5,190,082

Sample Calculation – 2008

	Year to Date
Megawatts Hours Purchased	586,393
Budgeted Megawatt Hour Rate	$ 90.995
Actual Megawatt Hour Rate	$ 87.532
Difference per Megawatt Hour	$ 3.463
Difference between Budget and Actual Cost	$ 2,030,679
Budgeted Power Supply	$ 53,358,831
Actual Power Supply Cost	$ 51,328,152
Transfer to Rate Stabilization Reserve	2,030,679
Total Reported Power Supply (as Budgeted)	$ 53,358,831

How does this help the customer?

Actual Purchased Megawatts	57,037 mgwh
Purchased Ahead (Hedged)	45,905 mgwh
Purchased on Open Market (19.5%)	11,132 mgwh

The open market power purchases are subject to market rate fluctuations. The reserve account would be used to bring the supply cost back into budget for any given month the rate is higher/lower than budget.

Using March 2008 results

Benefits

- This method protects the customer from rate increases attributed to supply and generation cost fluctuations driven by market conditions. Thus allowing the customer to better budget their energy bills.
- There will be no adverse impact on the operating budget by this proposed method of funding the Rate Stabilization Reserve.
- This method of managing the power supply cost is a more appropriate procedure and preferred by outside creditors and the rating agencies.

Questions

City of Dover

May 5, 2008

State of Delaware DNREC
Division of Air & Waste Mgt.
Air Quality Management Section
156 South State Street
Dover, DE 19901
Attn: Mr. Ali Mirzakhalili, Program Administrator

Reference: Withdrawal of Regulation 1146 Compliance Plan for City of Dover (COD) McKee Run Generating Station Unit 3.

Dear Mr. Mirzakhalili:

We appreciate your meeting with the COD and North American Energy Services (NAES) on April 7, 2007 to discuss the COD Regulation 1146 Compliance Plan for the Unit 3 at the McKee Run Generating Station. The candid and cooperative discussion was most helpful in understanding DNREC's concerns for a potential conversion of the McKee Run Units to distillate fuel firing and withdrawal of its current Regulation 1146 Compliance Plan. We also appreciate your quick response to our query regarding the form in which a withdrawal of the Regulation 1146 Compliance Plan would take.

As you recall the COD had submitted a Regulation 1146 Compliance Plan which was approved by DNREC on May 31, 2007. At the time of that submission, the COD had expected to continue use of residual oil at McKee Run and therefore would be required to develop such a plan. The Plan included the utilization of Selective Non Catalytic Reduction (SNCR) technology to achieve NOx reductions of the order needed to comply with Regulation 1146. However, we have since determined, through the competitive bid process with SNCR suppliers, that the technology chosen will not provide the expected NOx reductions needed to comply with the Regulation. We have subsequently reviewed the operational and financial implications of this finding and have determined that the appropriate action is to withdraw the COD Regulation 1146 Compliance Plan and convert the Unit 3 to distillate oil firing thereby exempting the McKee Run Unit 3 from Regulation 1146. In accordance with our discussions on this matter and consistent with our role as a steward for Delaware environment, COD is intending to perform all the work outlined in the previously submitted Regulation 1146 Compliance Plan with the exception of the SNCR installation. In so doing, we believe that we will achieve significant emissions reductions and in essence will be compliant with the intent of Regulation 1146. Whereas, persisting with a residual oil fired plan coupled with the

current compliance plan would not have resulted in the outcomes required by Regulation 1146.

By copy of this letter, this is to advise you that the City of Dover officially withdraws the Regulation 1146 Compliance Plan and will effectively make the McKee Run Unit 3 exempt from complying with Regulation 1146 by converting that Unit from firing residual oil and natural gas to firing distillate oil and natural gas effective January 1, 2009. Note also that the COD is intending to convert Units 1 and 2 at McKee Run to distillate oil and natural gas firing on or before May 1, 2009. We will be proceeding with the appropriate permitting processes to accomplish the work in the time frames specified and we look forward to working with your Department in this process. We hope you agree that this path identified through joint problem solving will benefit all parties through reduced emissions and continued electricity reliability for all of us.

Once again, I would like to thank you for the timely responses and cooperative effort put forth by you and your staff in addressing our questions and concerns regarding Regulation 1146 and potential issues associated with a conversion to distillate fuel firing. I look forward to discussing this matter further with you if so warranted.

Sincerely,

Anthony DePrima, AICP
City Manager

AJD/dej