

# AOBA Utility Committee

## *Budgeting for Utilities In the Face of Constantly Changing Rates*

*Surcharges, Taxes and Automatic Adjustment Clauses Grow as  
a Proportion of Total Billed Charges for Utility Services*

Presented By

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*November 10, 2010*

# Outline of Presentation

## \* Budget Considerations for Utility Services

### ➤ Electric Utility Services

- ✓ Dominion Virginia Power
- ✓ Pepco – DC
- ✓ Pepco – MD

### ➤ Gas Utility Services

- ✓ WGL – VA
- ✓ WGL – DC
- ✓ WGL - MD

## \* Competitive Energy Market Considerations

# Introduction

- ✳ Surcharges and Cost Pass-Throughs create new Budgeting challenges for building managers
- ✳ Over the last couple decades utility rates comprised:
  - A set of Base Rate charges that change infrequently (e.g., one every three years or longer)
  - A monthly Fuel (or gas) Adjustment Charge
- ✳ Now utility rates typically include:
  - A set of Base Rate charges
  - A monthly Fuel (or gas) Adjustment Charge
  - An array of rate surcharges (*often not shown separately on customers bills*) that may change frequently or sporadically and are difficult to estimate or anticipate.
- ✳ Most utilities in the Washington Area now have multiple rate surcharges that are billed to customers each month.
- ✳ The significance of rate surcharges as a percentage of total billed charges is also increasing.
- ✳ Jurisdictions, such as Montgomery County, Maryland, have further compounded these matters by increasing its already high Energy Taxes.
- ✳ Even Competitive Service Providers are increasingly passing through cost increases over and above their contracted rates.

# Electric & Gas Utility Rates

*Detail of what is known and anticipated  
regarding Washington Area utility  
charges for Gas and Electric Service*

# Dominion Virginia Power

## *A Utility that Never Met a Surcharge it Didn't Like*

- ✧ Virginia Power's Base Rates -- **NO increase** during 2011, But ...
- ✧ Rider Credits Terminate 12/31/10
- ✧ Surcharges Abound and can be expected to continue to grow in both number and size
- ✧ Existing Surcharges
  - Rider "S"                      New Coal Plant (Virginia City Hybrid Energy Center)
  - Rider "R"                      Gas-fired Combined Cycle (Bear Garden)
  - Rider "T"                      All Transmission (including new projects)
  - Rider "A"                      Fuel Charge
  - Rider "C1"                     Energy Conservation Program Costs
  - Rider "C2"                     Demand Side Management Program Expenditures
- ✧ Likely New Surcharges
  - 2<sup>nd</sup> New Gas-Fired Generating Plant
  - New Nuclear Plant

**Detail of Current and Proposed Virginia Power Rate Rider Charges  
For Demand Billed Commercial Customer Accounts**

	GS-2 Demand		GS-3		GS-4 Primary	
<b>Rider T</b>						
Rider T - Transmission Charge (eff. thru 12/31/10) 1/	1.143	\$/kW	1.359	\$/kW	1.404	\$/kW
Rider T - Transmission Credit (eff. thru 12/31/10) 1/	-0.418	\$/kW	-0.527	\$/kW	-0.527	\$/kW
Rider T - Net Charge Currently Applicable	0.725	\$/kW	0.832	\$/kW	0.877	\$/kW
<b>DVP Proposed Rider T (eff. 01/01/11)</b>						
Effective Increase Over Net 2010 Charge	0.954	\$/kW	1.252	\$/kW	0.656	\$/kW
Effective Percent Increase Over Net 2010 Charge	132%		150%		75%	

Rider R						
Rider R - Bear Garden Charge (eff. thru 12/31/10)	0.00094	\$/kWh	0.378	\$/kW	0.392	\$/kW
Rider R - Bear Garden Credit (eff. thru 12/31/10)	-0.00094	\$/kWh	-0.378	\$/kW	-0.392	\$/kW
Rider R - Net Charge Currently Applicable	0.00000	\$/kWh	0.000	\$/kW	0.000	\$/kW
DVP Proposed Rider R (eff. 01/01/11)	0.00111	\$/kWh	0.488	\$/kW	0.462	\$/kW
Effective Increase Over Net 2010 Charge	0.00111	\$/kWh	0.488	\$/kW	0.462	\$/kW
Effective Percent Increase Over Net 2010 Charge	NM		NM		NM	

Rider S						
Rider S - Hybrid Energy Center Charge (eff. thru 3/31/11)	0.00226	\$/kWh	0.907	\$/kW	0.941	\$/kW
Rider S - Hybrid Energy Center Credit (eff. thru 12/31/10)	-0.00112	\$/kWh	-0.416	\$/kW	-0.496	\$/kW
Rider S - Net Charge	0.00114	\$/kWh	0.491	\$/kW	0.445	\$/kW
DVP Proposed Rider S (eff. 4/01/11)	0.00258	\$/kWh	1.139	\$/kW	1.080	\$/kW
Effective Increase Over Net 2010 Charge	0.00144	\$/kWh	0.648	\$/kW	0.635	\$/kW
Effective Percent Increase Over Net 2010 Charge	126%		132%		143%	

	Rider T Demand Charge applied to Maximum Demand in all months.
	Rider Charges billed on the basis of kWh use.
	Demand Charges for Riders R and S applied to Summer On-Peak Demands.

***Detail of Current and Proposed Virginia Power Rate Rider Charges  
For Demand Billed Commercial Customer Accounts***

	<b>GS-2 Demand</b>	<b>GS-3</b>	<b>GS-4 Primary</b>
<b>Rider A</b>			
Rider A - Fuel Charge (eff. thru 6/30/10)	0.02927 \$/kWh	0.02927 \$/kWh	0.02927 \$/kWh
<b>DVP Proposed Fuel Rate Rider A (eff. 07/01/10)</b>	<b>0.02803 \$/kWh</b>	<b>0.02803 \$/kWh</b>	<b>0.02803 \$/kWh</b>
<b>Other Rate Riders</b>			
Rider C1 - Peak Shaving (eff. 4/1/10 through 3/31/11)	0.00008 \$/kWh	0.00006 \$/kWh	0.00005 \$/kWh
Rider C2 - Energy Efficiency (eff. 4/1/10 through 3/31/11)	0.00035 \$/kWh	0.00030 \$/kWh	0.00024 \$/kWh
Financial Transmission Rights Credit (eff. 5/1/10 - 6/30/10)	-0.01168 \$/kWh	-0.01168 \$/kWh	-0.01168 \$/kWh

Rider Charges billed on the basis of kWh use.



# Summary of Projected Calendar Year 2011 Rate Impacts

	GS-2 Demand	GS-3	GS-4 Primary
<b>Demand (kW) Based Surcharges</b>			
<b>Winter Months (October - May)</b>			
Present Non-Base Rate kW Charges	1.143 \$/kW	1.359 \$/kW	1.404 \$/kW
Present Non-Base Rate kW Credits	-0.418 \$/kW	-0.527 \$/kW	-0.527 \$/kW
Net Non-Base Rate kW Charges	0.725 \$/kW	0.832 \$/kW	0.877 \$/kW
<b>DVP Proposed Rider T</b>	<b>1.679 \$/kW</b>	<b>2.084 \$/kW</b>	<b>1.533 \$/kW</b>
Increase in Net Effective Winter Month Demand Charges	0.954 \$/kW	1.252 \$/kW	0.656 \$/kW
Effective Percentage Increase	132%	150%	75%
<b>Summer Months (June - September)</b>			
Present Non-Base Rate kW Charges	NA	2.644 \$/kW	2.737 \$/kW
Present Non-Base Rate kW Credits	NA	-1.321 \$/kW	-1.415 \$/kW
Net Non-Base Rate kW Charges	NA	1.323 \$/kW	1.322 \$/kW
<b>DVP Proposed Riders R, S &amp; T</b>	<b>NA</b>	<b>3.711 \$/kW</b>	<b>3.075 \$/kW</b>
Increase in Summer Month Demand Charges	NA	2.388 \$/kW	1.753 \$/kW
Effective Percentage Increase	NA	180%	133%
<b>Energy (kWh) Based Surcharges</b>			
Current Net Non-Base Rate kWh Charges	0.03290 \$/kWh	0.02963 \$/kWh	0.02956 \$/kWh
Proposed 2011 Increase in Combined Net Charges	0.03215 \$/kWh	0.02839 \$/kWh	0.02832 \$/kWh
Effective Percentage Increase	-2.3%	-4.2%	-4.2%
<b>Estimated Overall Rate Increase in Surcharges (\$/kWh)</b>			
Current Est Combined Demand & Energy Surcharges (\$/kWh)	0.03290 \$/kWh	0.03240 \$/kWh	0.03241 \$/kWh
Proposed 2011 Combined Demand & Energy Surcharges (\$/kWh)	0.03215 \$/kWh	0.03656 \$/kWh	0.03443 \$/kWh
Increase in Estimated Combined Demand & Energy Surcharges	-0.00075 \$/kWh	0.00416 \$/kWh	0.00202 \$/kWh
Estimated Effective Overall Percentage Increase in Surcharges	-2.3%	12.9%	6.2%



# Pepco: District of Columbia

## Rates and Rate Issues

Affecting Commercial Office Buildings  
and Master Metered Apartment Projects

# Pepco: District of Columbia Rates

- ✧ Base Rate Increase (*Formal Case No. 1076*)
  - *Initial rates effective 3/23/2010*
  - *Further revised Base Rates effective 7/21/10*
- ✧ Retail Transmission Rate Increase – *effective 7/1/2010*
- ✧ Rider BSA – Bill Stabilization Adjustment (*changes monthly*)
- ✧ EATF and RAD Surcharges
- ✧ Rider SETF Surcharge
- ✧ Pepco \$6.0 Million DSM Surcharge Proposal
- ✧ Advanced Metering Infrastructure (AMI) Cost Recovery
- ✧ Future Base Rate Increase
  - *Expect new base rate case to be filed in DC in the first half of 2011*
  - *New base rates most likely will not become effective until late 2011 or early 2012*

# Results of Recent Pepco Rate Proceedings In the District of Columbia

- ✧ Base Rate Increase
  - Request: \$51.7 million
  - Initial Order Granted: \$19.8 million effective 3/23/10
  - Order on Reconsideration Granted: \$ 20.3 million\* eff. 7/21/10
- ✧ Bill Stabilization Adjustment (“BSA”) Surcharge Request – *Granted* (Effective 11/01/09 with first monthly rate adjustments applied in January 2010)
- ✧ AMI Regulatory Asset Request – *Granted* (Based on Emergency Legislation passed by DC City Council)
- ✧ Pension Regulatory Asset Request – *Rejected*
- ✧ Retail Transmission Rate Increase – *Approved* eff. 7/01/10
- ✧ \$6.0 Million DSM Surcharge – *Denied* 11/8/10

\* On DCPSC Reconsideration of its initial decision, Order No. 15864, issued June 23, 2010 grants Pepco an additional \$513,000 base rate increase.

# Pepco DC Base Rate Increase by Class

**Base Rate Increase Granted: \$20.3 Million**

	<u>Requested</u>	<u>Approved</u>
* Residential (R) (MMA)	29.3%	17.3%
* Res All Electric (AE) (MMA)	34.7%	20.7%
* GS Non-Demand	11.3%	5.1%
* GS Demand	10.9%	5.1%
* GS Primary (GS-3A)	10.6%	5.1%
* GT-LV	12.8%	9.1%
* GT-3A	4.6%	-0.4%

# Pepco DC - Retail Transmission Rate Increase

- ✧ Reflects FERC Approved Transmission Rate increases for:
  - New Transmission Projects
  - Transmission Enhancements
- ✧ Pepco's DC Retail Transmission Rates increased \$13.8 million or an average of 46.1%
  - Residential (R) 37.1%
  - Res All Electric (AE) 43.5%
  - GS-LV 58.8%
  - GS-3A Increase 90.0%
  - GT-LV Increase 48.8%
  - GT-3A Increase 48.9%
- ✧ Increase effective July 1, 2010

# Pepco DC Rider BSA

- \* Rider “BSA” Stands for “Bill Stabilization Adjustment”
- \* Rider “BSA” does **NOT** Stabilize customer’s bills; only stabilizes Pepco’s Revenue
- \* Became effective 11/1/2009 with first rate adjustments applied in January 2010
- \* Adjustments calculated on a monthly basis and applied with a **two month lag** (i.e., revenue collected in January forms the basis of the adjustment billed in March)
- \* **Commercial** customers’ monthly BSA rate adjustments have generally been positive, reflecting rate increases (many at the **10% maximum** monthly adjustment)
- \* **Residential** customers, including Master Metered Apartments, have consistently received rate **credits**.

# DC RAD and EATF Surcharges

- \* **Order of Magnitude** Increase in Residential Aid Discount “RAD” Charges
- \* LIHEAP Charges increase by nearly **seven fold**

## Illustrative RAD and LIHEAP (EATF) Surcharges for DC Office and Apartment Buildings

Surcharge	Peak Demand	kWh/year	<u>Annual Charges</u>	
			Old	New
➤ RAD	0.25 MW	1,095,000	\$ 55	\$ 551
➤ RAD	0.50 MW	2,190,000	\$ 110	\$1,102
➤ RAD	1.00 MW	4,380,000	\$ 219	\$2,203
➤ LIHEAP	0.25 MW	1,095,000	\$ 438	\$ 66
➤ LIHEAP	0.50 MW	2,190,000	\$ 876	\$ 133
➤ LIHEAP	1.00 MW	4,380,000	\$1,752	\$ 266
➤ TOTAL	0.25 MW	1,095,000	\$ 493	\$ 617
➤ TOTAL	0.50 MW	2,190,000	\$ 986	\$1,235
➤ TOTAL	1.00 MW	4,380,000	\$1,971	\$2,469



# Pepco DC - Other

## ✧ AMI Implementation and Cost Recovery

- Pepco moving forward with deployment of Advanced Metering Infrastructure in DC
- AMI metering equipment installation began in September 2010
- Pepco is deferring AMI costs and will seek recovery of those costs in its next base rate case (Could be >\$40 Million Plant Addition)
- Customers will also have to pay for costs of retiring existing meters which on average have over 25 years of useful life remaining.

# Pepco: Maryland

*November 10, 2010*

# Pepco: Maryland Rates

- ✧ Base Rate Increase (*Case No. 9217*)
  - \$7.5 million *Approved 8/6/2010*
  - *New rates effective 8/19/2010*
- ✧ Retail Transmission Rate Increase
  - \$17.8 million *increase effective 7/10/2010*
- ✧ Rider BSA – Bill Stabilization Adjustment (*changes monthly*)
- ✧ Montgomery County Surcharges
- ✧ Advanced Metering Infrastructure (AMI) Cost Recovery

# New Pepco Base Rates for Maryland

- ✳ Pepco Originally Requested a \$40 million Base Rate Increase (Case No. 9217)
- ✳ On August 6, 2010 MDPSC granted Pepco an increase of \$7.5 million.
- ✳ Base Rate Increase became effective August 19, 2010

	<u>Requested</u>	<u>Approved</u>
➤ Residential (R)	11.2%	3.07%
➤ Residential (TOU)	13.8%	3.07%
➤ GS LV	18.5%	3.07%
➤ MGT-LV	9.8%	1.15%
➤ MGT-3A	7.4%	1.15%
➤ GT-LV	11.8%	1.15%
➤ GT-3A	15.2%	1.15%

# Pepco MD: Future Base Rate Increases

- ✧ Expect new base rate case to be filed in MD in the first quarter of 2011
- ✧ New base rates most likely will not become effective until late 2011 or early 2012
- ✧ Pepco states it expects to file new Base Rate Case **every year and a half**.
- ✧ In addition, Pepco's CEO Joseph Rigby stated that:

*“... going into 2011 and beyond...” Pepco will be seeking additional “..writers, trackers, formulas...” to automatically adjust customers' bills.*

# Pepco MD: Transmission Rates

- ✧ Reflects FERC Approved Transmission Rate increases for:
  - New Transmission Projects
  - Transmission Enhancements
  
- ✧ Pepco Retail Transmission Rates Increase reflects an average of **41.5%**
  - Residential (R) 33.5%
  - Residential (TOU) 33.1%
  - GS Increase 43.4%
  - MGT-LV Increase 45.2%
  - MGT-3A Increase 50.0%
  - GT-LV Increase 51.3%
  - GT-3A Increase 53.2%
  
- ✧ **Large Annual Transmission Rate increases** must be anticipated for each of the next several years based on transmission construction projects already being pursued.

# Pepco MD: Other Rate Changes

## ✧ Monthly BSA Charges

- Since first implementation in 2007, Commercial classes frequently subject to **Maximum Monthly 10%** Adjustment
- Large Deferred Balances have accumulated for **MGT-3A, GT-LV, and MGT-LV** classes
- Those **Large Deferred Balances** ensure that those classes will continue to pay Maximum Monthly rate adjustments well into the future

## ✧ Montgomery County Energy Tax – **Electric Legislated Increase**

- Current Tax Rate \$0.01384 per kWh
- New Tax Rate \$0.02210 per kWh
- Increase in Rate \$0.00826 per kWh
- Percentage Increase 59.7%



# WGL Rates

By Jurisdiction

# WGL: Virginia Rates

- ✧ No Base Rate Increase during 2010.
- ✧ No New Rate Case can be filed prior to January 1, 2011, and new rates cannot be effective prior to October 1, 2011.
- ✧ WGL must file either a PBR proposal or new Base Rate Case by February 1, 2011.
- ✧ Gas Energy Efficiency Programs Approved for implementation.
- ✧ Weather Normalization Adjustment “WNA” mechanism approved for implementation.
- ✧ Monthly WNA Adjustments will be shown separately on customers’ bills.

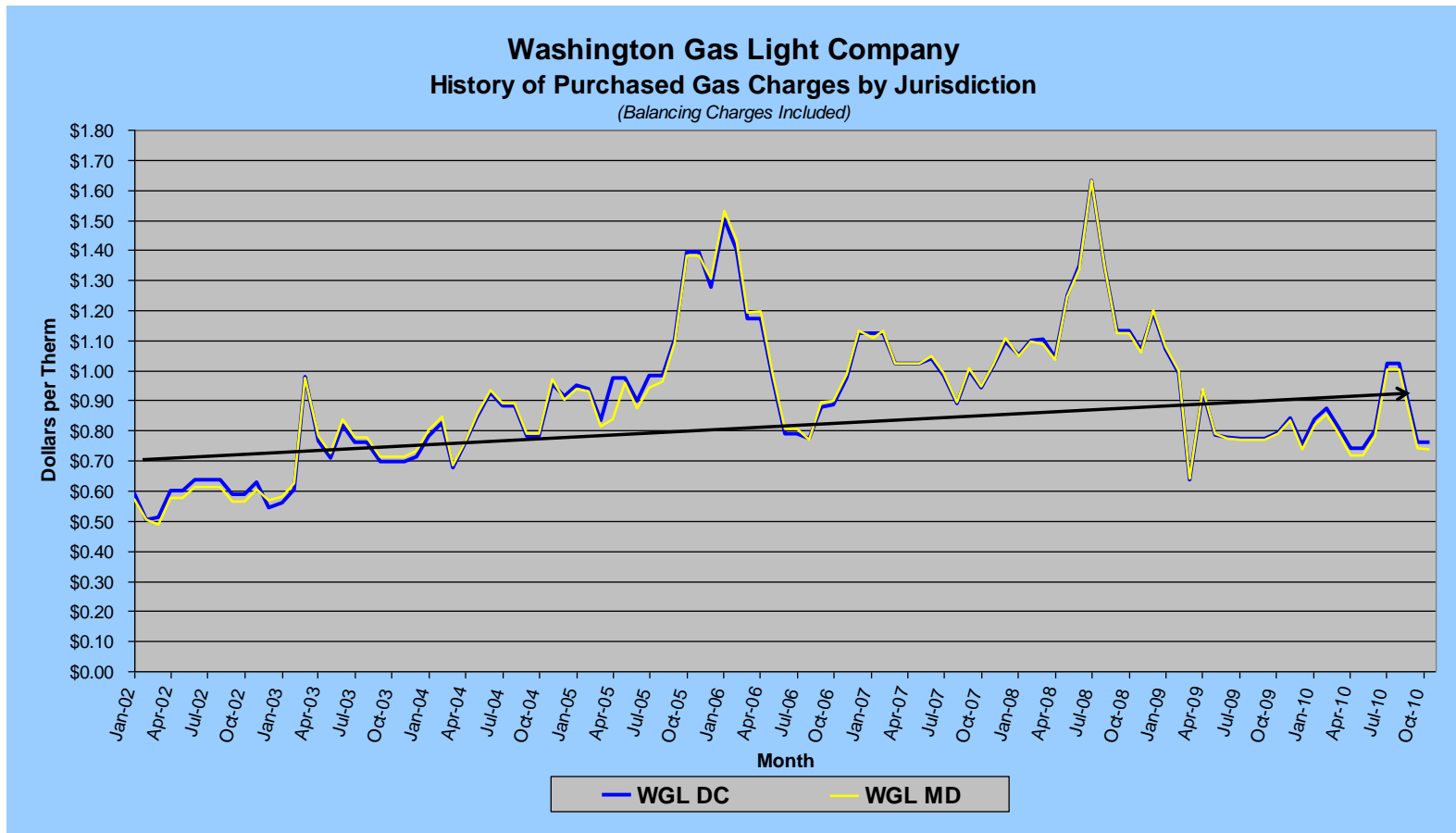
# WGL: District of Columbia

- ✧ No new Base Rate increase can be filed prior to January 1, 2011
  - Should expect new Base Rate Increase request to be filed in the first half of 2011 with new rates effective in late 2011 or early 2012
  - No new rates can be effective prior to October 1, 2011
- ✧ Revenue Normalization Adjustment (“RNA”) still pending before DCPSC
  - Company seeks assurance of revenue
  - Commission has accepted RNA in concept, but implementation problems identified by AOBA delay approval of the Company’s proposal
- ✧ Hexane surcharge implemented
  - Charges Capped at \$4 million per year for seven (7) years
  - Recovered through PGA for Sales customers
  - Recovered via Balancing Charge for Delivery Service customers
- ✧ Company proposes Natural Gas Energy Efficiency Programs for DC
  - Proposals included for both Residential and Commercial customers
  - No funding presently available for FY 2011 programs

# WGL: Maryland Rates

- ✧ Base Rates last increased in fall of 2008
- ✧ RNA Adjustments – Applied monthly and most often result in additional charges for large commercial customer classes
- ✧ Montgomery County Energy Tax
  - Current Tax Rate \$0.11921 per therm
  - New Tax Rate \$0.19025 per therm
  - Increase in Rate \$0.07104 per therm
  - Percentage Increase 59.6%

# WGL's Purchase Gas Charges Remain Generally Below Trend Line



# Competitive Energy Market Considerations

# The Electric Market

*November 10, 2010*



# Reliability Pricing Model (RPM)

## *Locational Generation Capacity Costs*

### *For Pepco & BGE Service Territories*

2007-08    2008-09    2009-10    2010-11    2011-12    2012-13    2013-14

(Dollars per Megawatt Day)

Clearing Price	\$188.54	\$210.11	\$237.33	\$174.29	\$110.00	\$133.37	\$247.14*
Capacity Transfer Credit	<u>\$ 48.38</u>	<u>\$ 29.53</u>	<u>\$ 19.21</u>	<u>\$ 0.00</u>	<u>\$ 0.00</u>	<u>\$ 0.00</u>	<u>\$ 0.00</u>
Net Load Price	\$140.16	\$180.58	\$218.12	\$174.29	\$110.00	\$133.37	\$247.14

(Cents per Kilowatt-Hour)

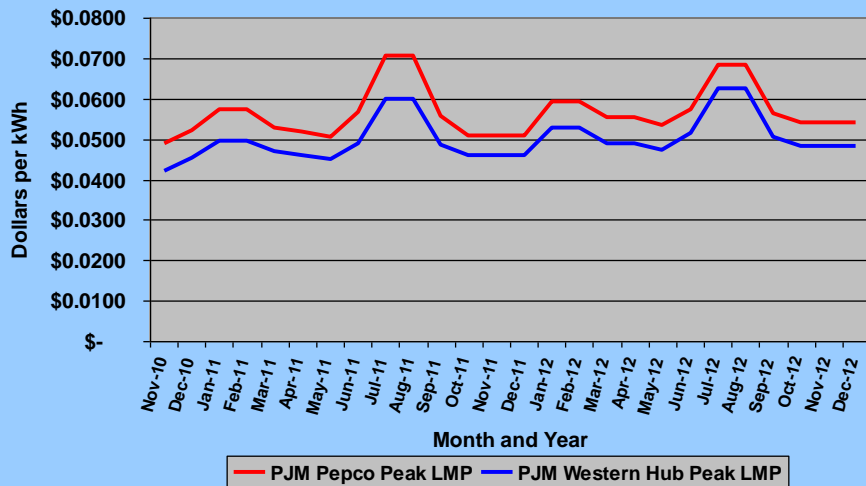
Clearing Price	1.571	1.751	1.978	1.453	0.917	1.111	2.060
Capacity Transfer Credit	<u>0.403</u>	<u>0.246</u>	<u>0.160</u>	<u>0.000</u>	<u>0.000</u>	<u>0.000</u>	<u>0.000</u>
Net Load Price	1.168	1.505	1.818	1.453	0.917	1.111	2.060

**Note:** Each RPM Pricing Year runs from June 1 through May 31.

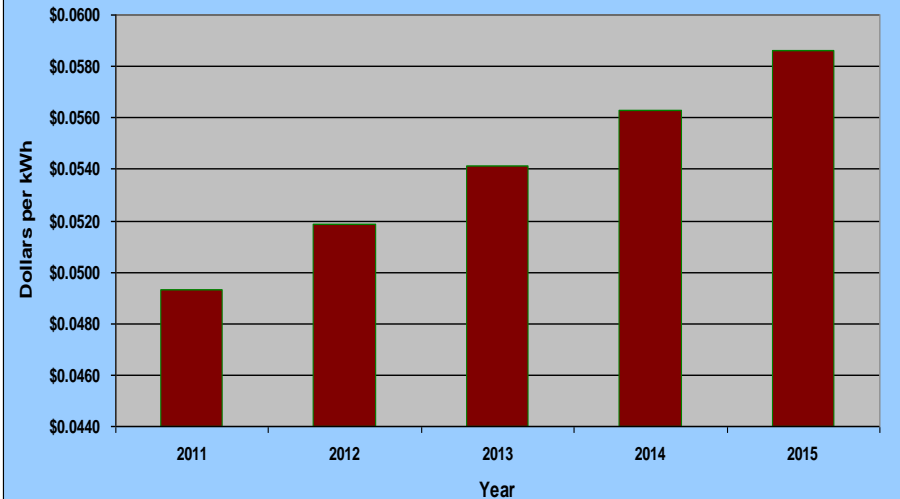
\* BGE Zone RPM Price for 2013-14 is \$245.00 per MW/Day.

# Expectation of Slowly Rising Electric Commodity Prices

Comparison of Electric Commodity Futures Prices  
For Pepco and PJM Western Hub



PJM Western Hub Electric Commodity Futures  
Annual Average Prices



# Illustrative Forward Looking Retail Electricity Supply Prices by Cost Component

*(for DC and MD Electric Markets)*

06/10 – 5/11  
As of Nov 2010

06/11 – 5/12  
As of Nov 2010

	Cents per kWh	
* <i>Estimated Electric Energy Cost</i>	3.81	4.18
* <i>Locational Capacity Costs</i>	1.45	0.92
* <i>Congestion Charges</i>	0.54	0.65
* <i>Transmission Costs</i>	0.29	0.43
* <i>Ancillaries</i>	0.23	0.28
* <i>Marketer Costs</i> <sup>1</sup>	0.92	0.97
* <i>Distribution Losses</i>	<u>0.43</u>	<u>0.45</u>
* <b>Estimated Total Retail Supply Cost</b>	<b>7.67</b>	<b>7.88</b>

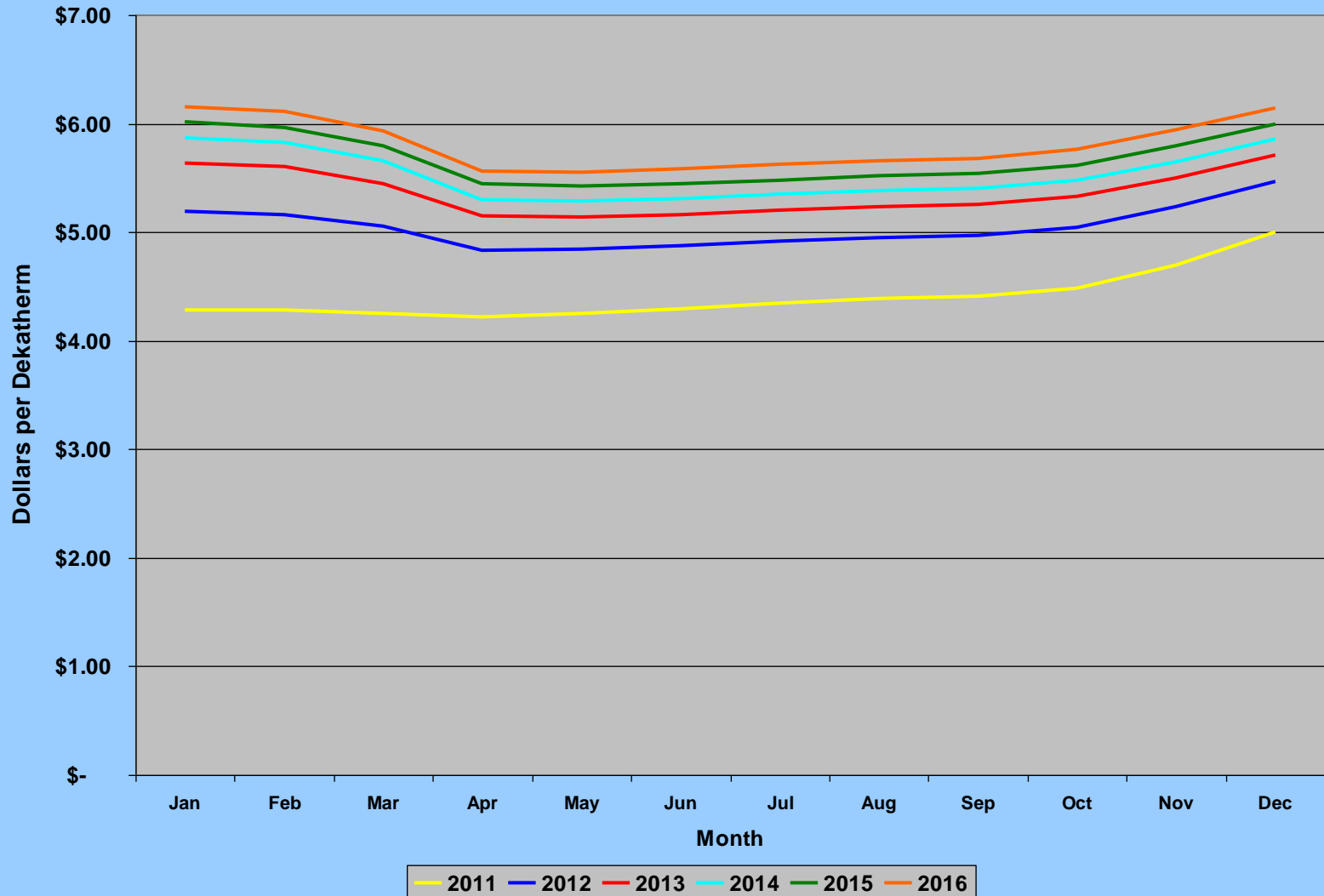
1 *Includes administrative, marketing, collateral and billing costs as well as marketer risk and profit.*

# Natural Gas Market

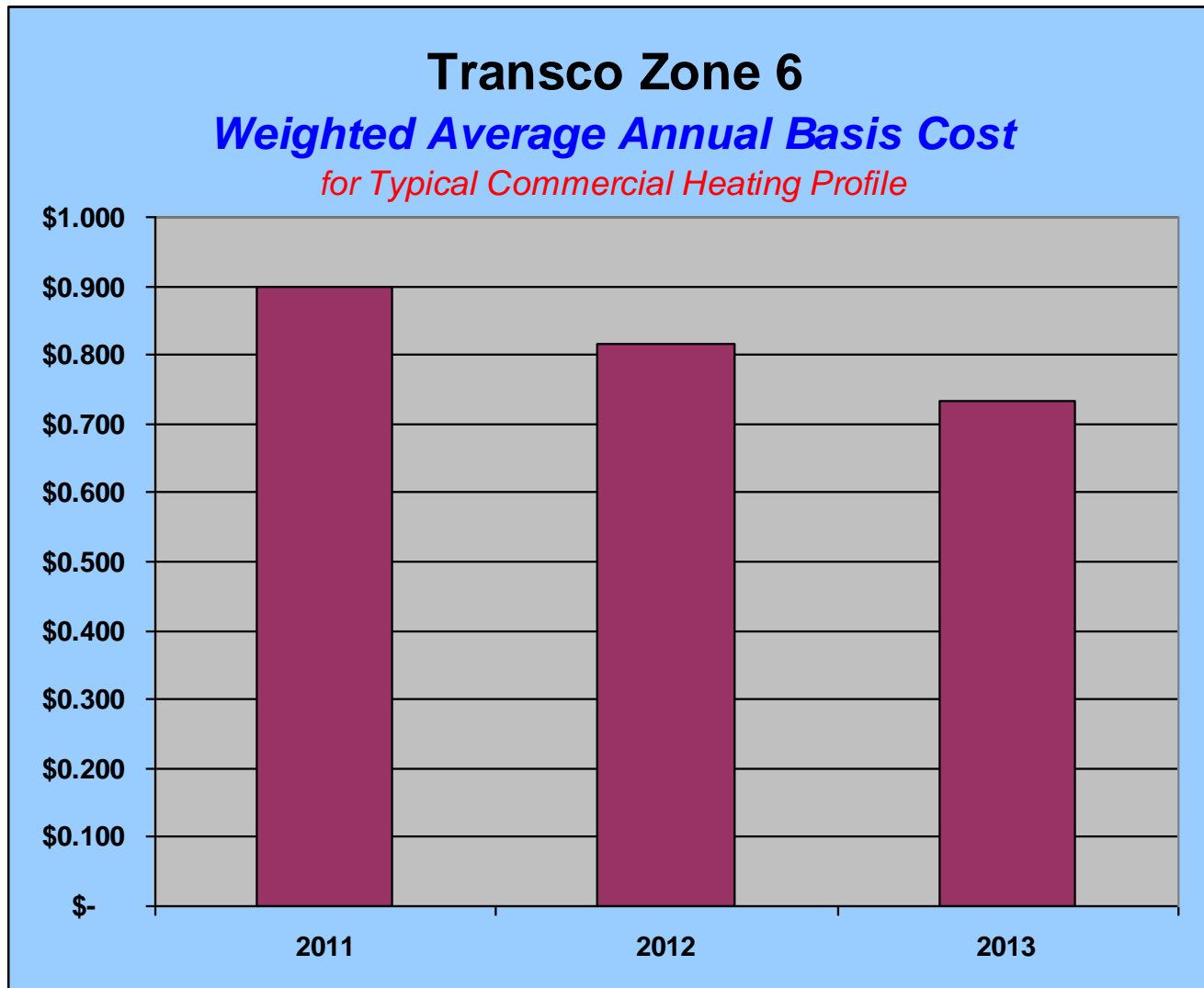
*November 10, 2010*

## Natural Gas Futures Prices by Calendar Year 2011 - 2016

*As of November 8, 2010*



# Declining Basis Costs for Natural Gas



# General Energy Market Perspective

*November 10, 2010*

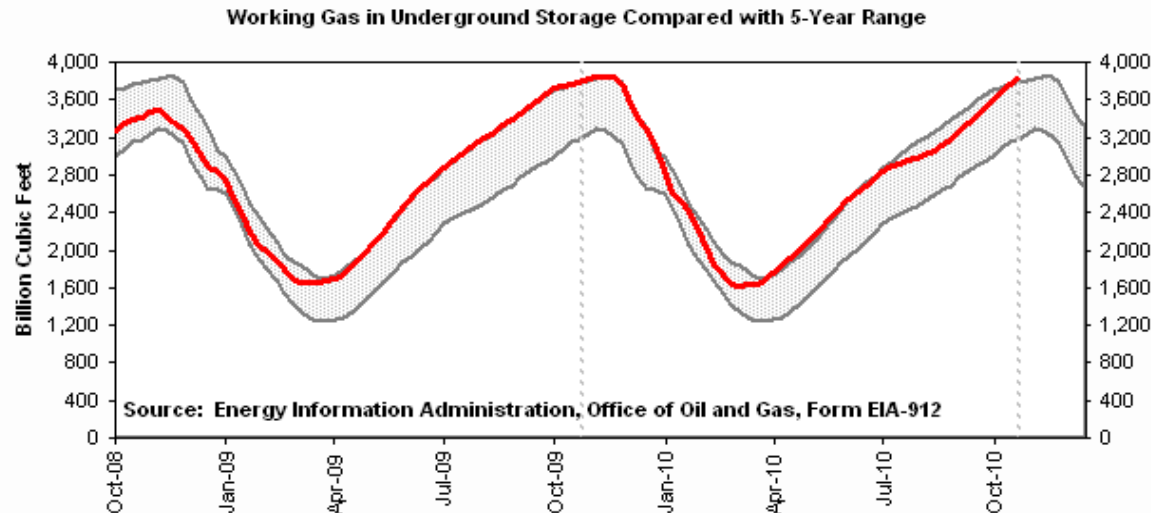


# Energy Market Drivers

## *Don't be Lulled to Sleep by Current Market Pricing*

- ✧ Continued Growth in U.S. Domestic Production of Natural Gas
  - *Increased production fueled by development of Marcellus Shale deposits in Appalachian States*
  - *Sustainability of recent growth in production must be questioned*
- ✧ Surge in Natural Gas use by Electric Generation and Industrial Customers
  - *7.5% Growth in Electric Generation use of Natural Gas in last 12 months*
  - *6.4% Growth in Industrial use of Natural Gas in last 12 months*
- ✧ Failure to successfully kick start Nuclear construction program
- ✧ Unacceptability of construction of new coal-fired power plants

# Natural Gas Storage Inventories Again Reach Record Levels

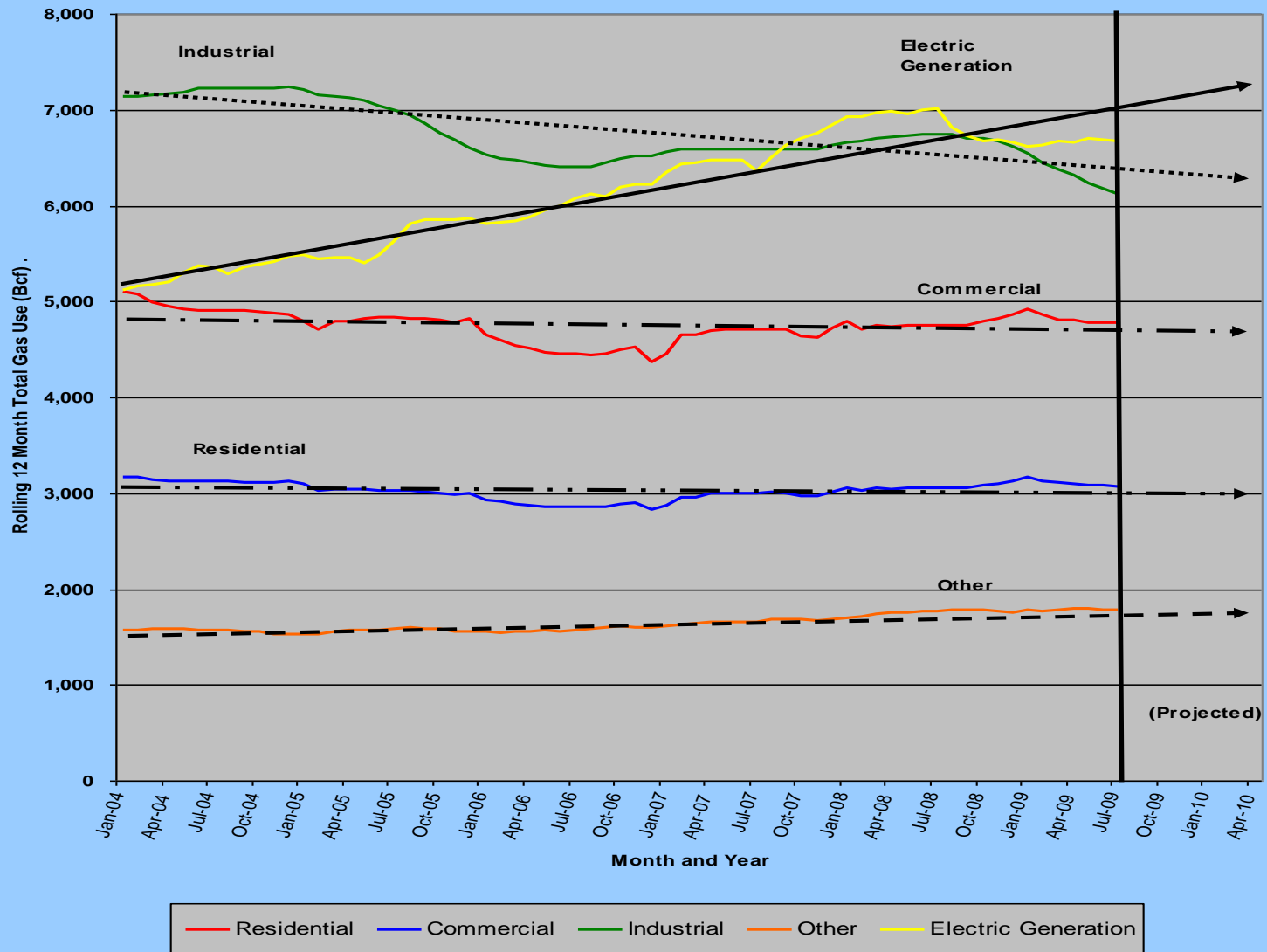


EIA: Working Gas in Underground Storage, Lower 48 States

Region	Stocks in billion cubic feet (Bcf)			Historical Comparisons			
	10/29/10	10/22/10	Change	Year Ago (10/29/09)		5-Year (2005-2009) Avg	
				Stocks (Bcf)	% Change	Stocks (Bcf)	% Change
East	2,087	2,048	39	2,081	0.3	1,992	4.8
West	516	514	2	514	0.4	468	10.3
Producing	1,218	1,192	26	1,189	2.4	1,009	20.7
Total	3,821	3,754	67	3,784	1.0	3,468	10.2

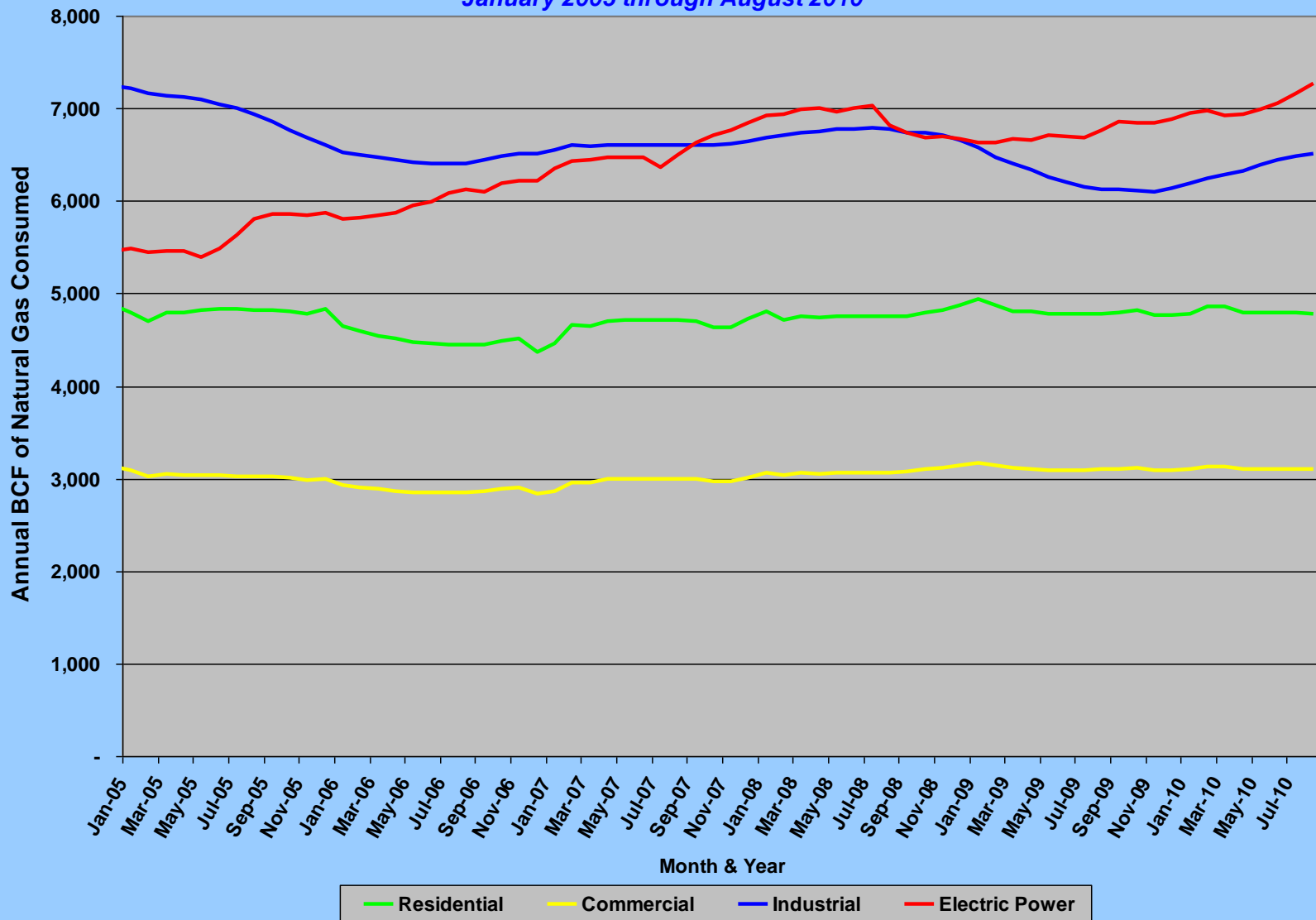
# US Natural Gas Use by Sector

(EIA Actuals through July 2009; Linear Trend Lines through March 2010)



## US Natural Gas Consumption by Sector

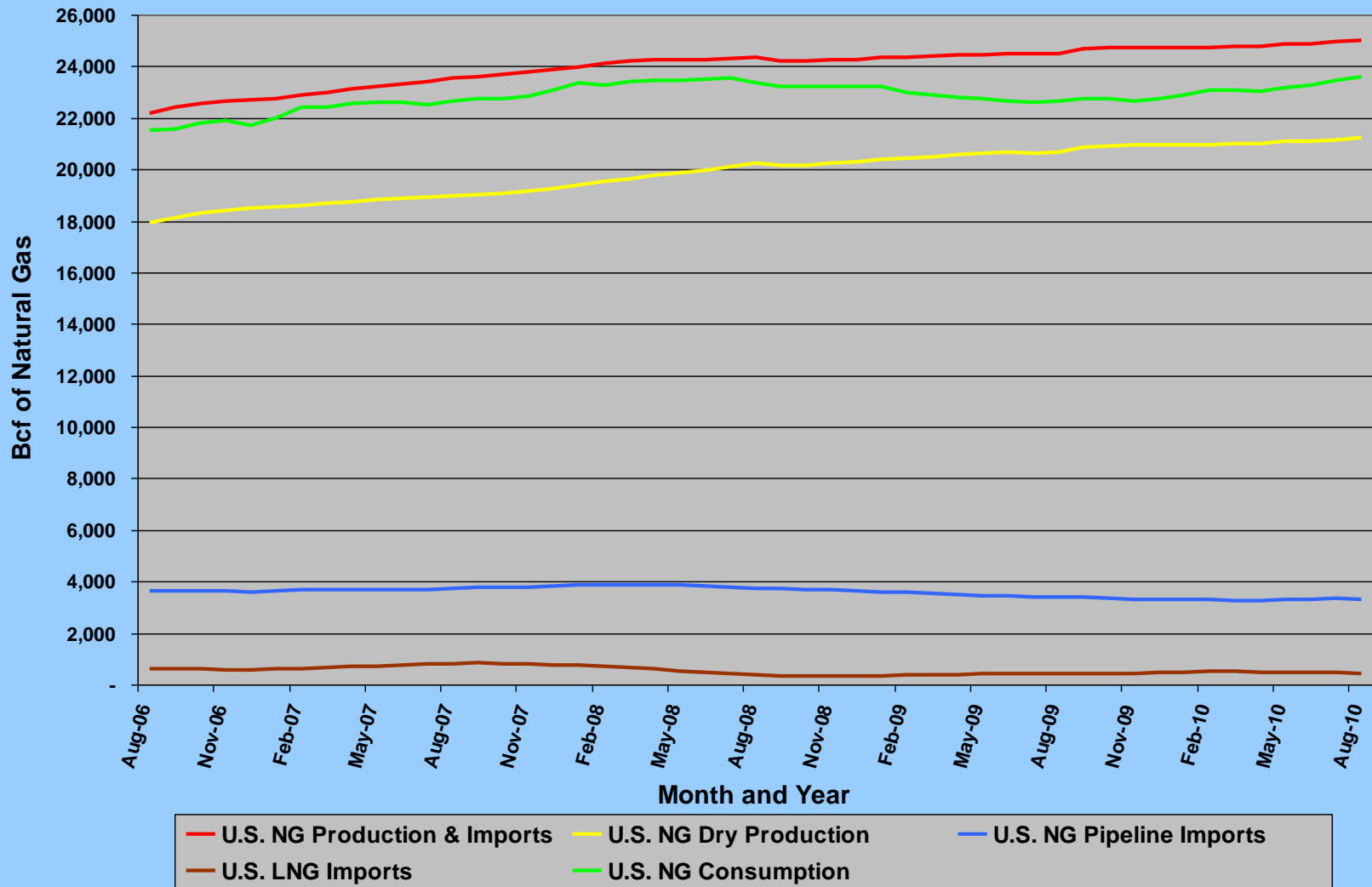
*January 2005 through August 2010*



# U.S. Natural Gas Supply & Demand

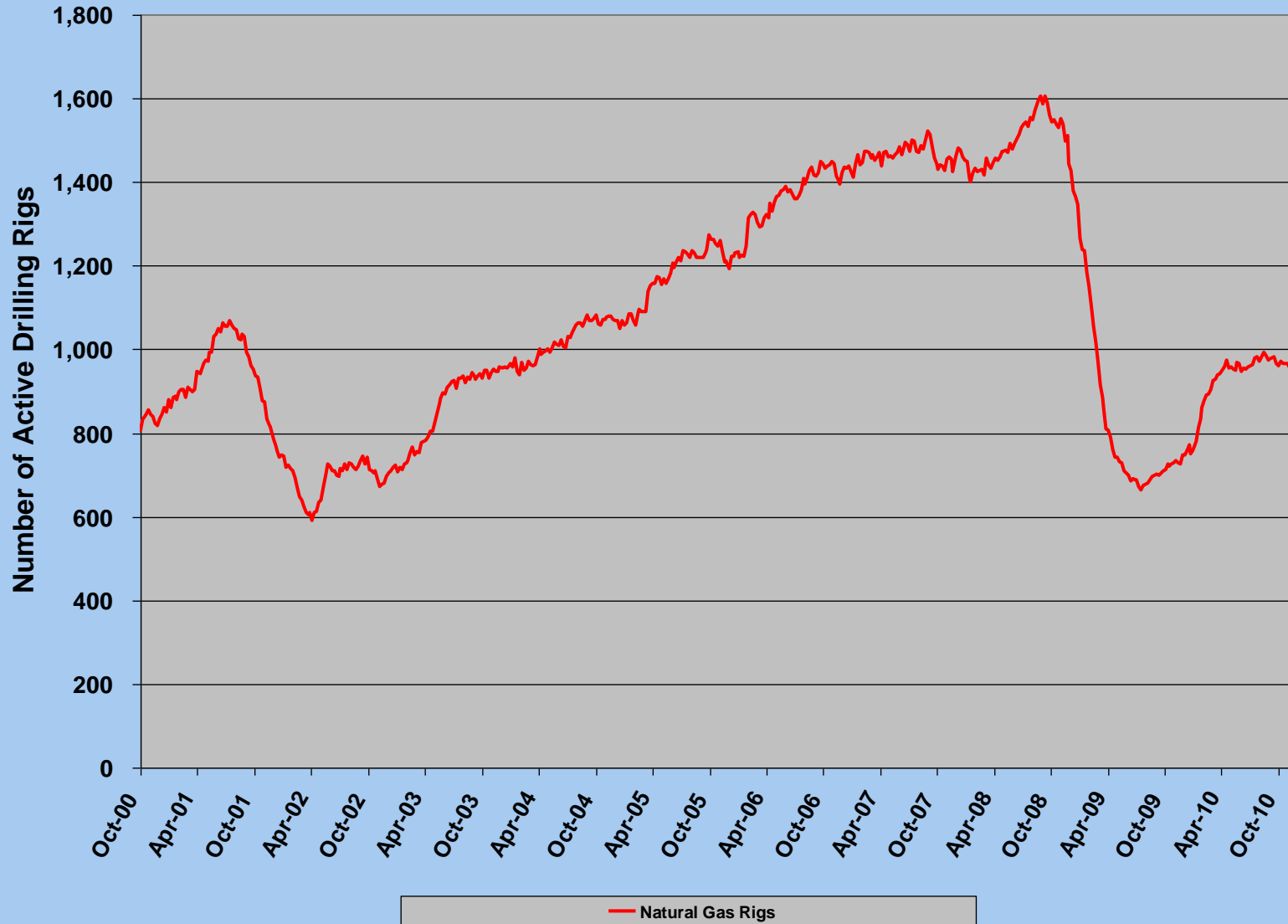
August 2006 - August 2010

(Rolling 12-Month Totals)

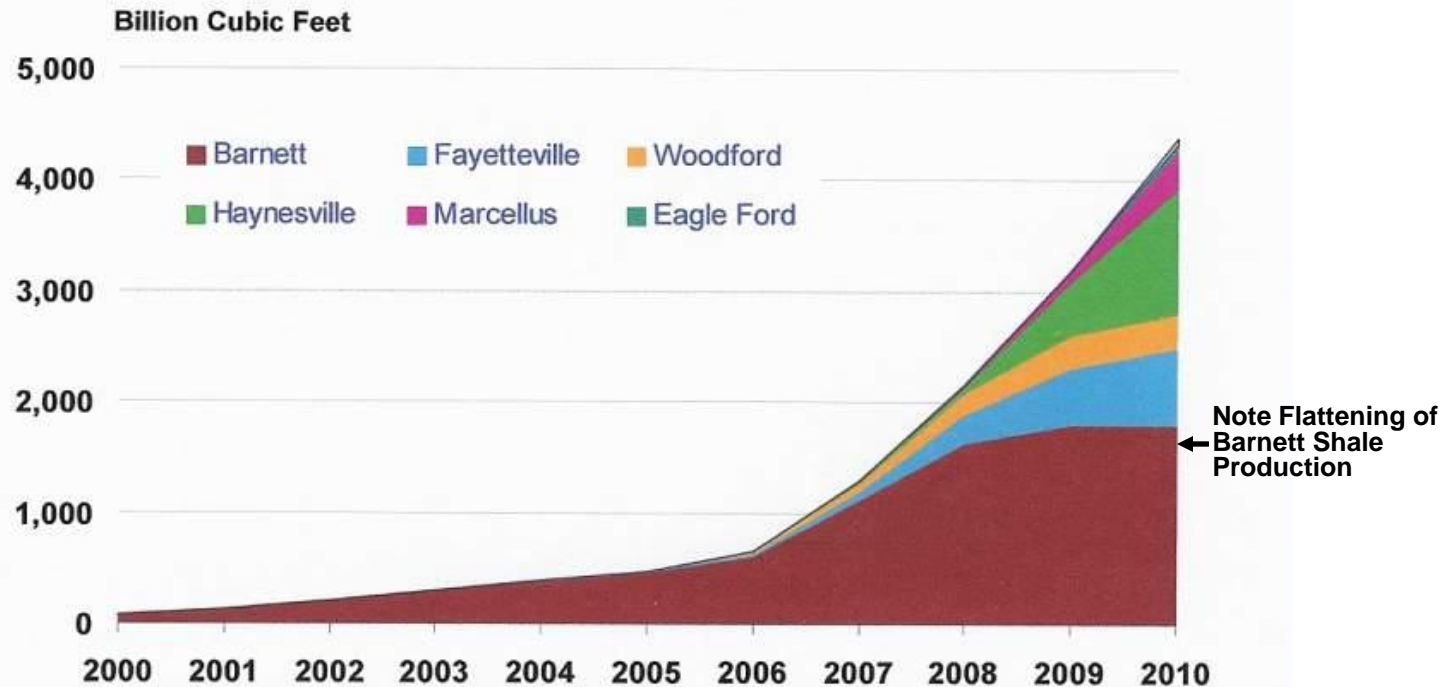


# U.S. Natural Gas Drilling Activity

*October 2000 to October 2010*



## Shale Production by Basin, 2000-2010

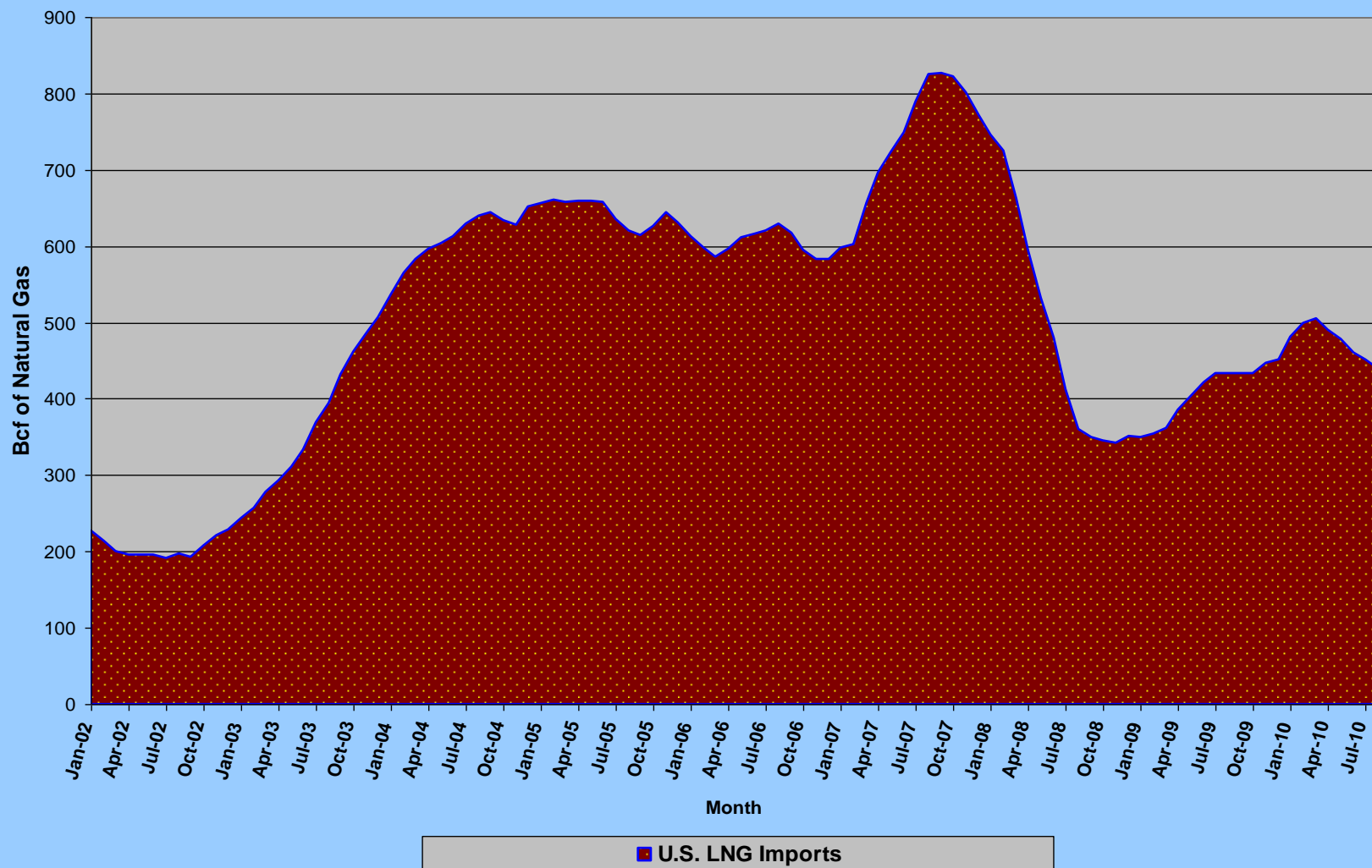


Source: EIA, Lippman Consulting (2010 estimated)



James M. Kendell, Houston, TX, October 19, 2010

## U.S. LNG Imports January 2002 Through August 2010 (Rolling 12-Month Totals)





# U.S. Pipeline Imports of Natural Gas

August 2000 - August 2010  
(Rolling 12-Month Totals)

