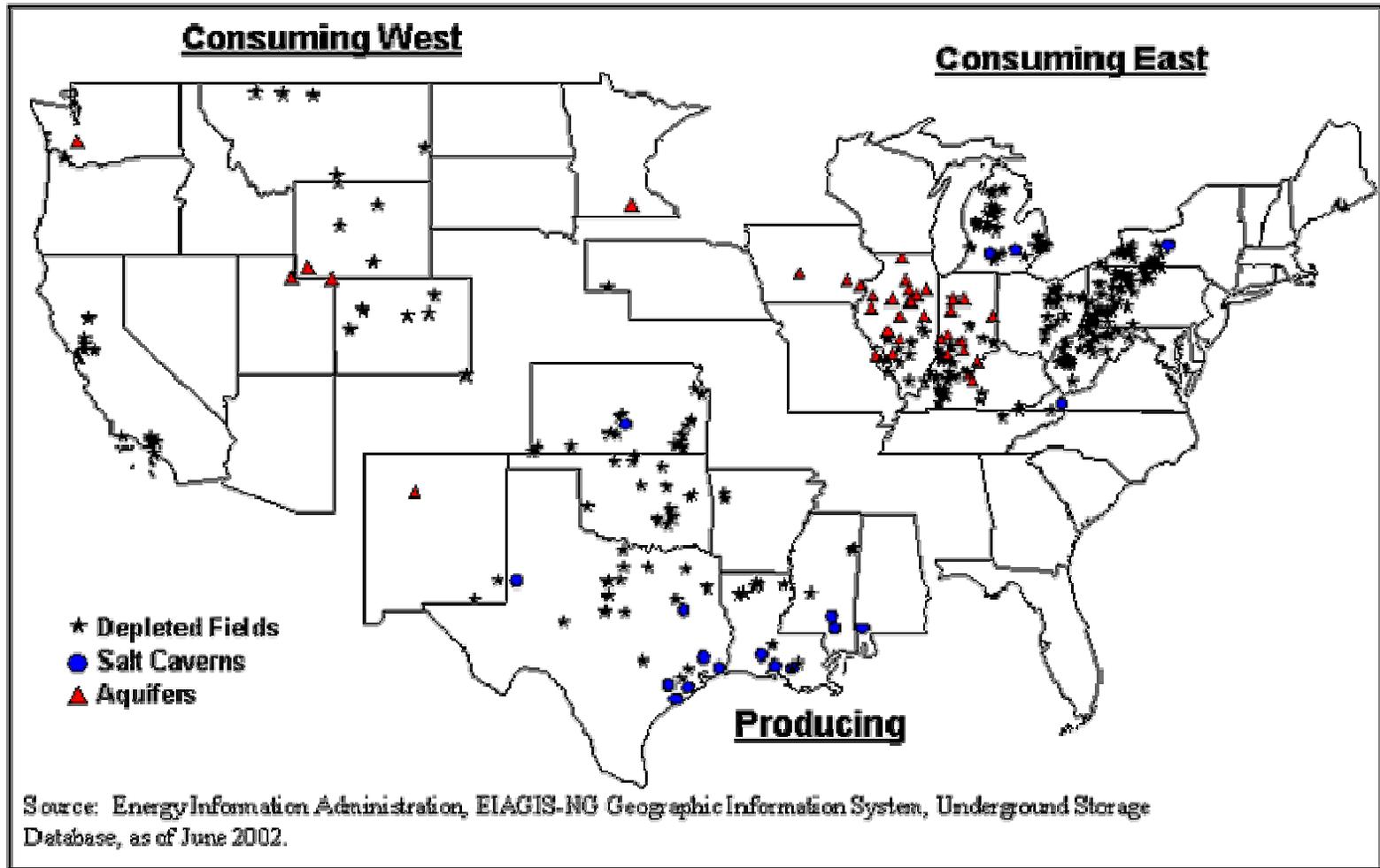
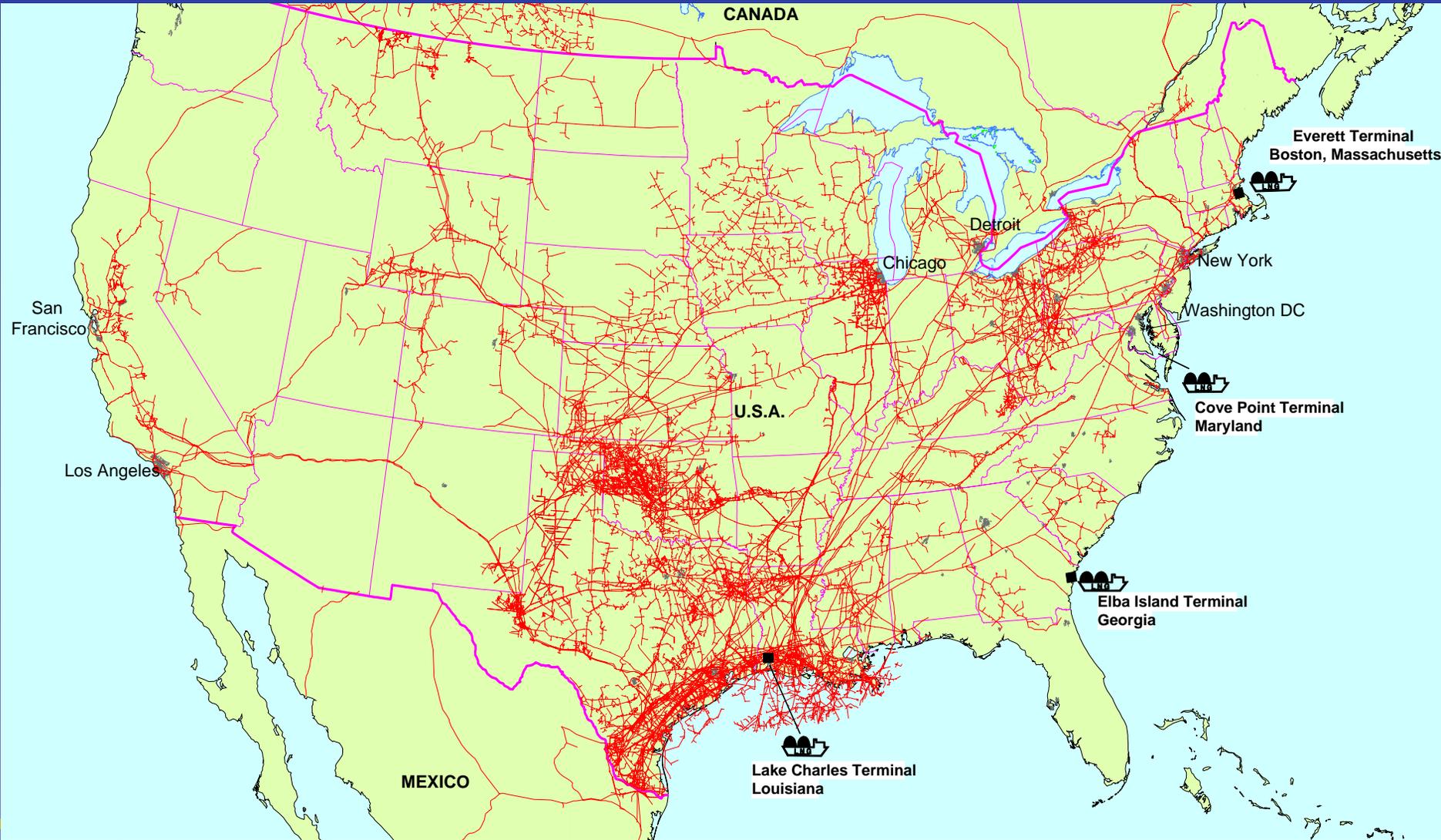


Natural Gas System

Figure 2. Underground Natural Gas Storage Facilities in the Lower 48 States



Natural Gas System



PRICE DISCOVERY OF NATURAL GAS THE COMMODITY

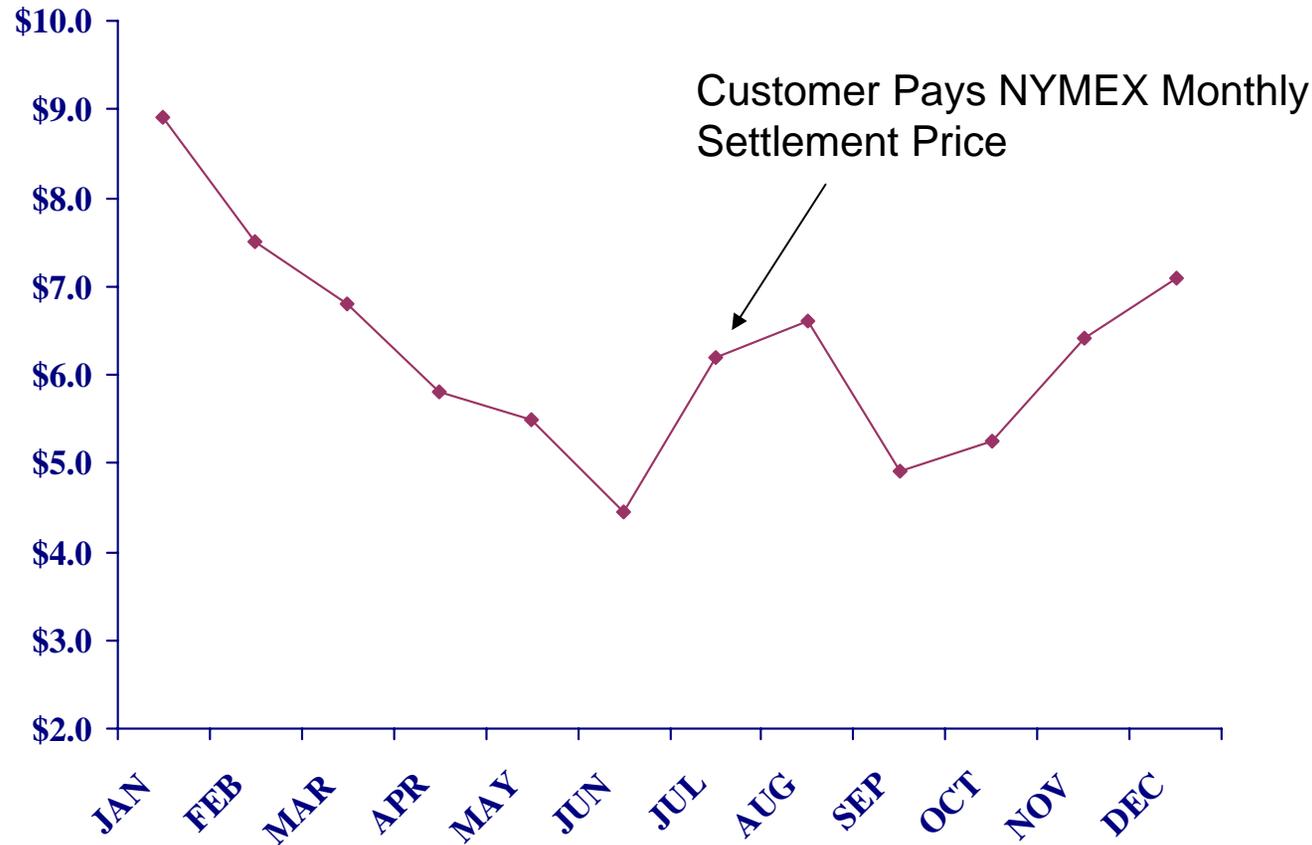
Today, Futures and Option Contracts are traded on the NYMEX Division of the New York Mercantile Exchange to assist in limiting price risks, as well as providing for price discovery

New York Mercantile Exchange - NYMEX

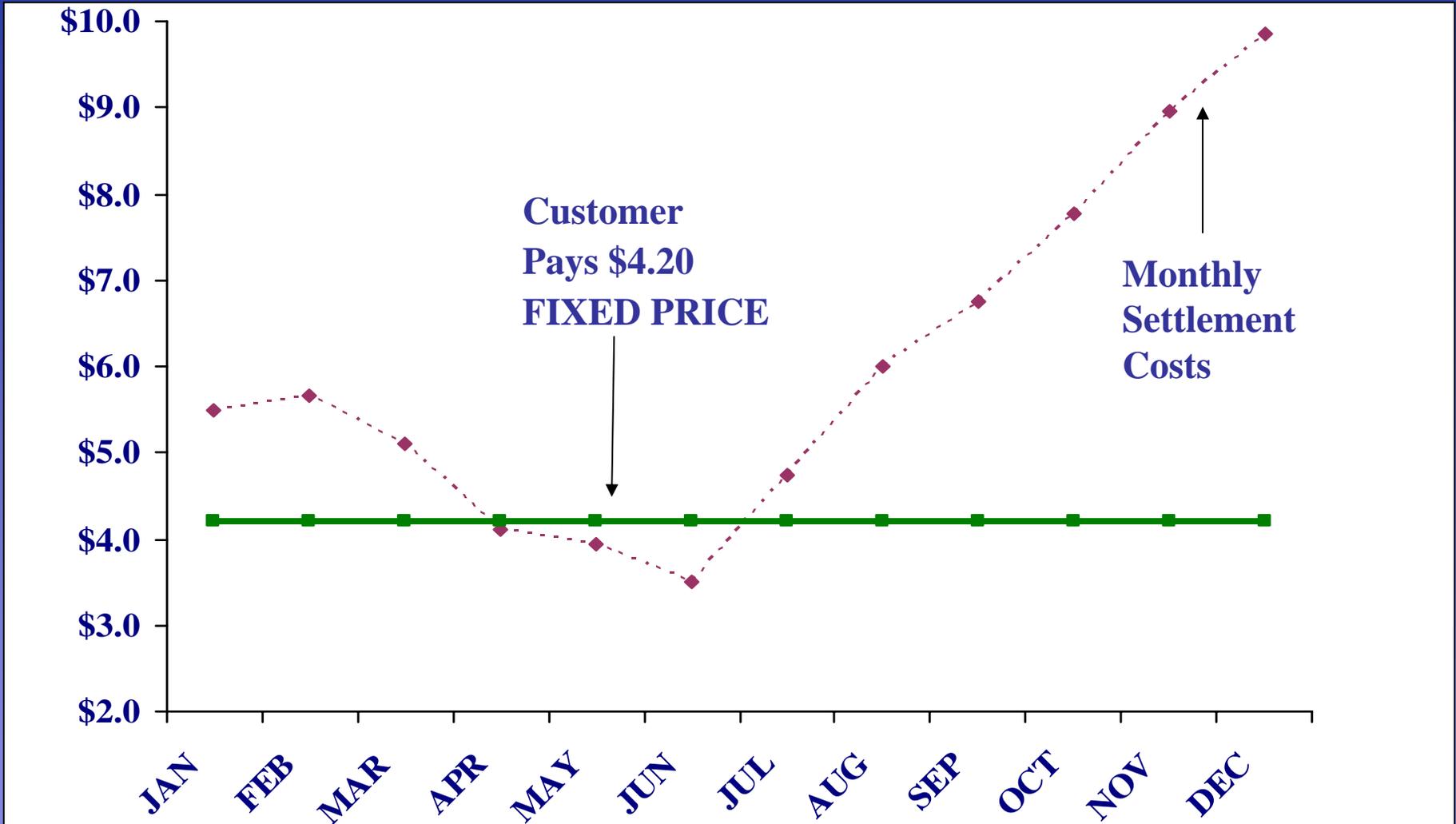
INDEX PRICING METHODOLOGIES

Fixed Index
Index with Floor
Index with a Cap
Index with a Collar

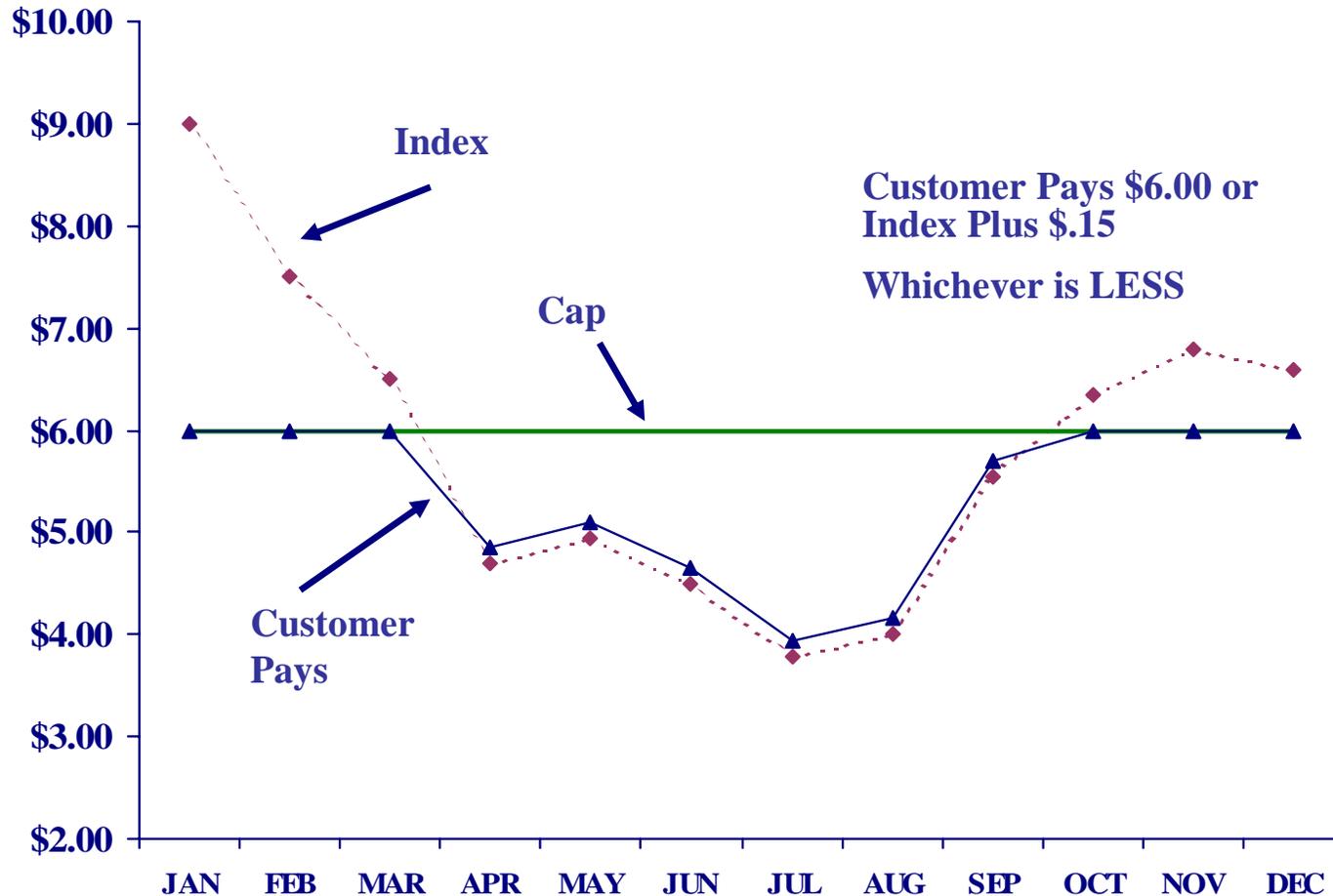
Example Price - Index



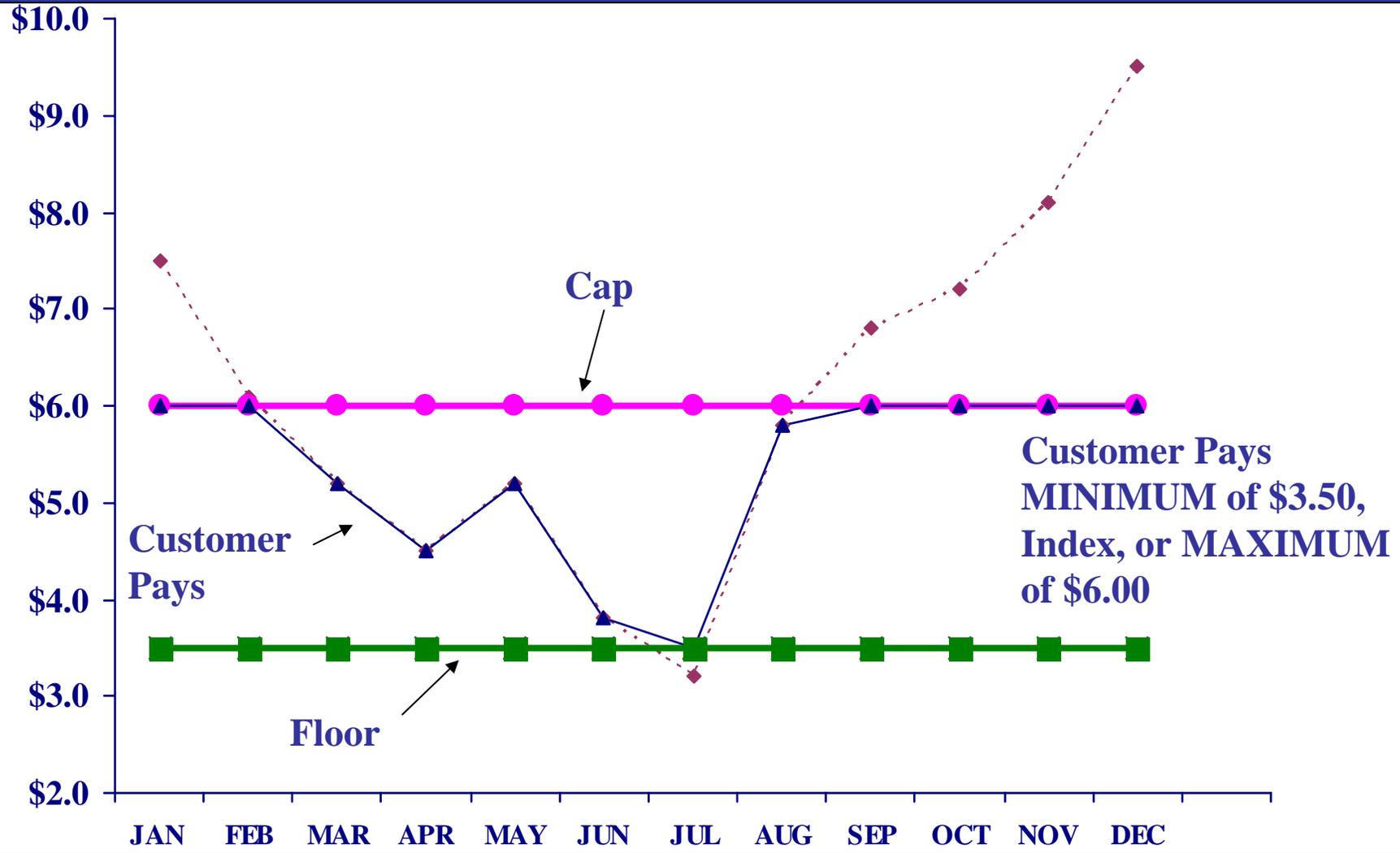
Example Price - Fixed



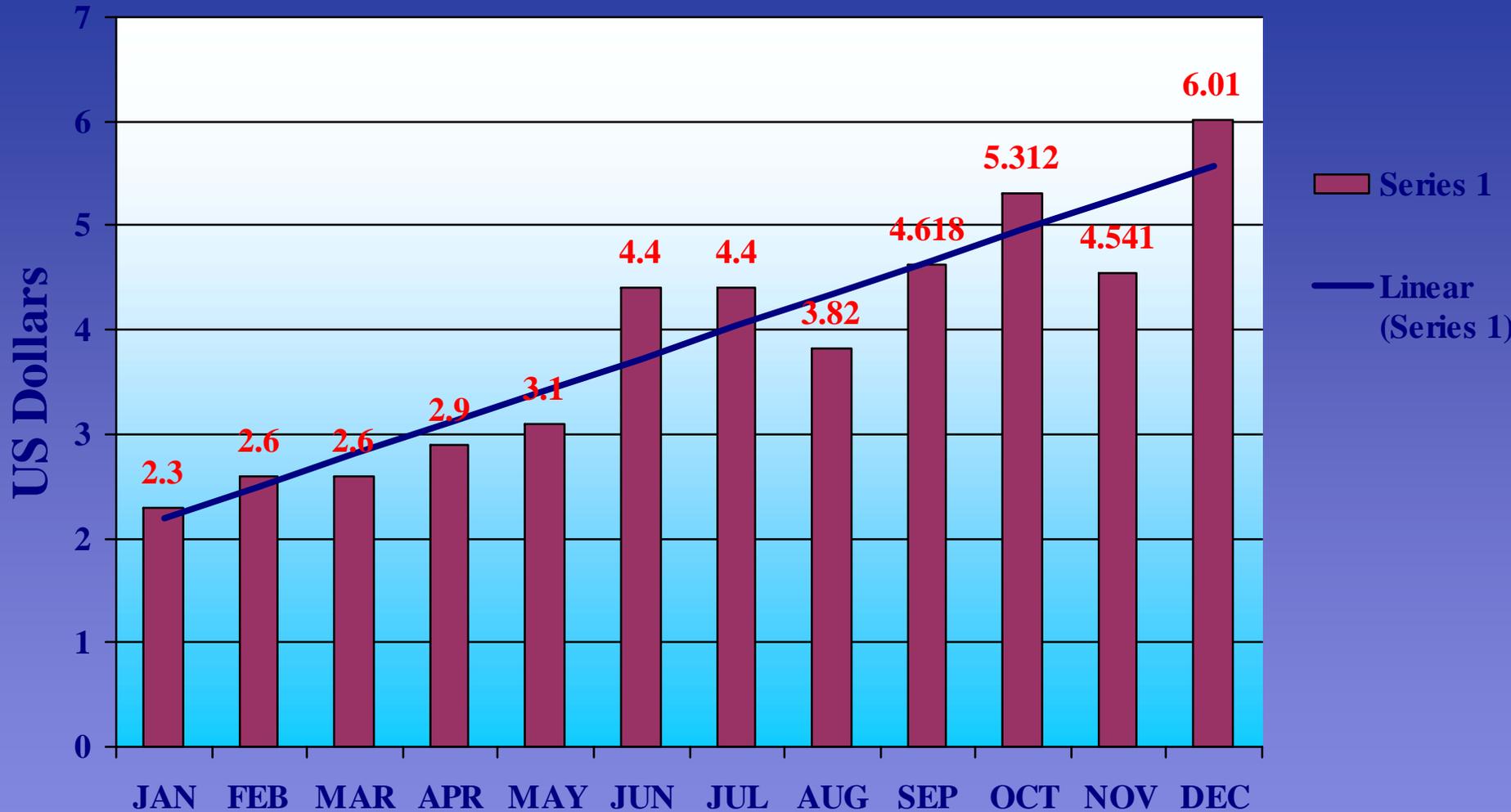
Example Price - Cap



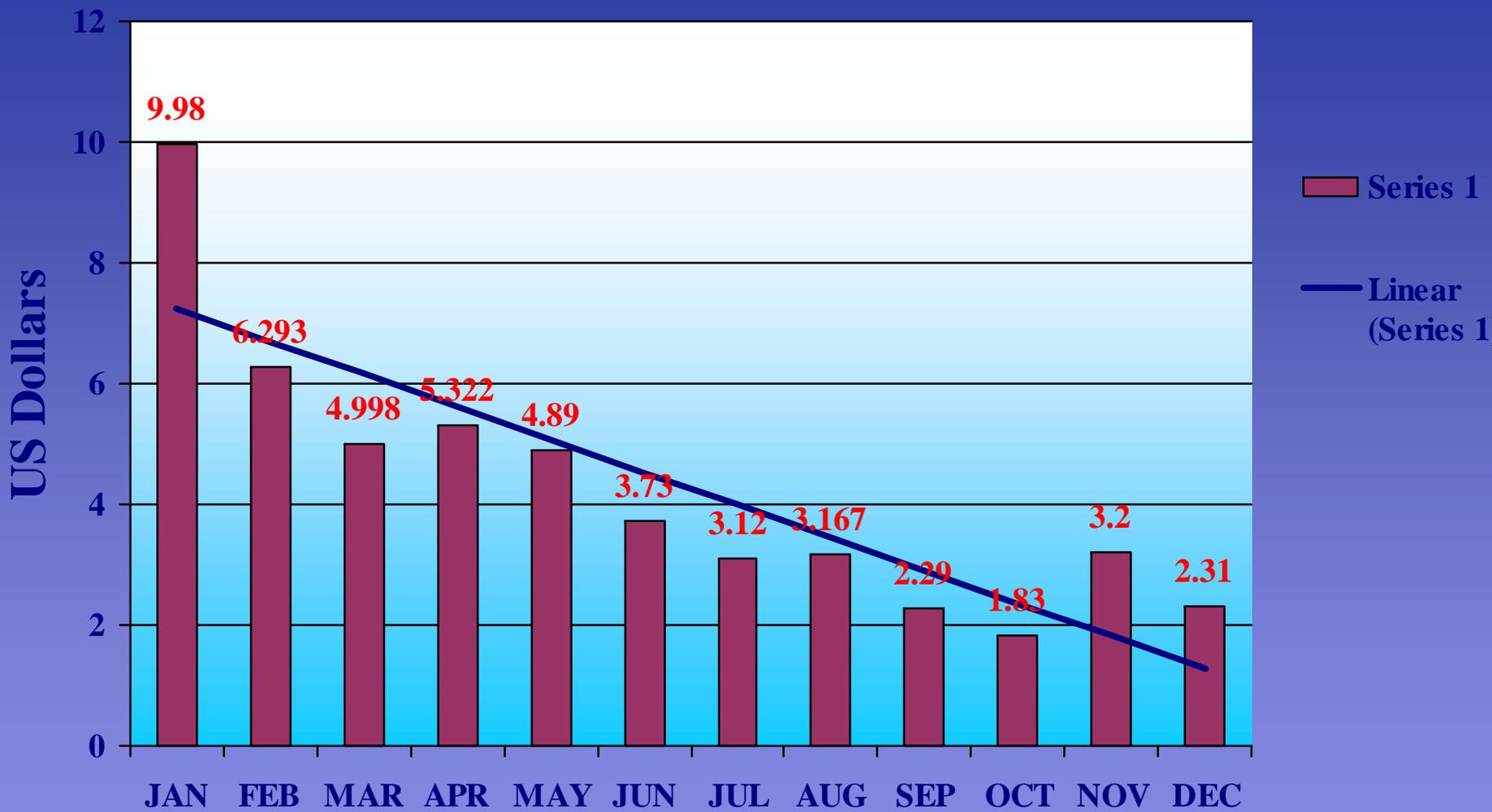
Example Price - Collar



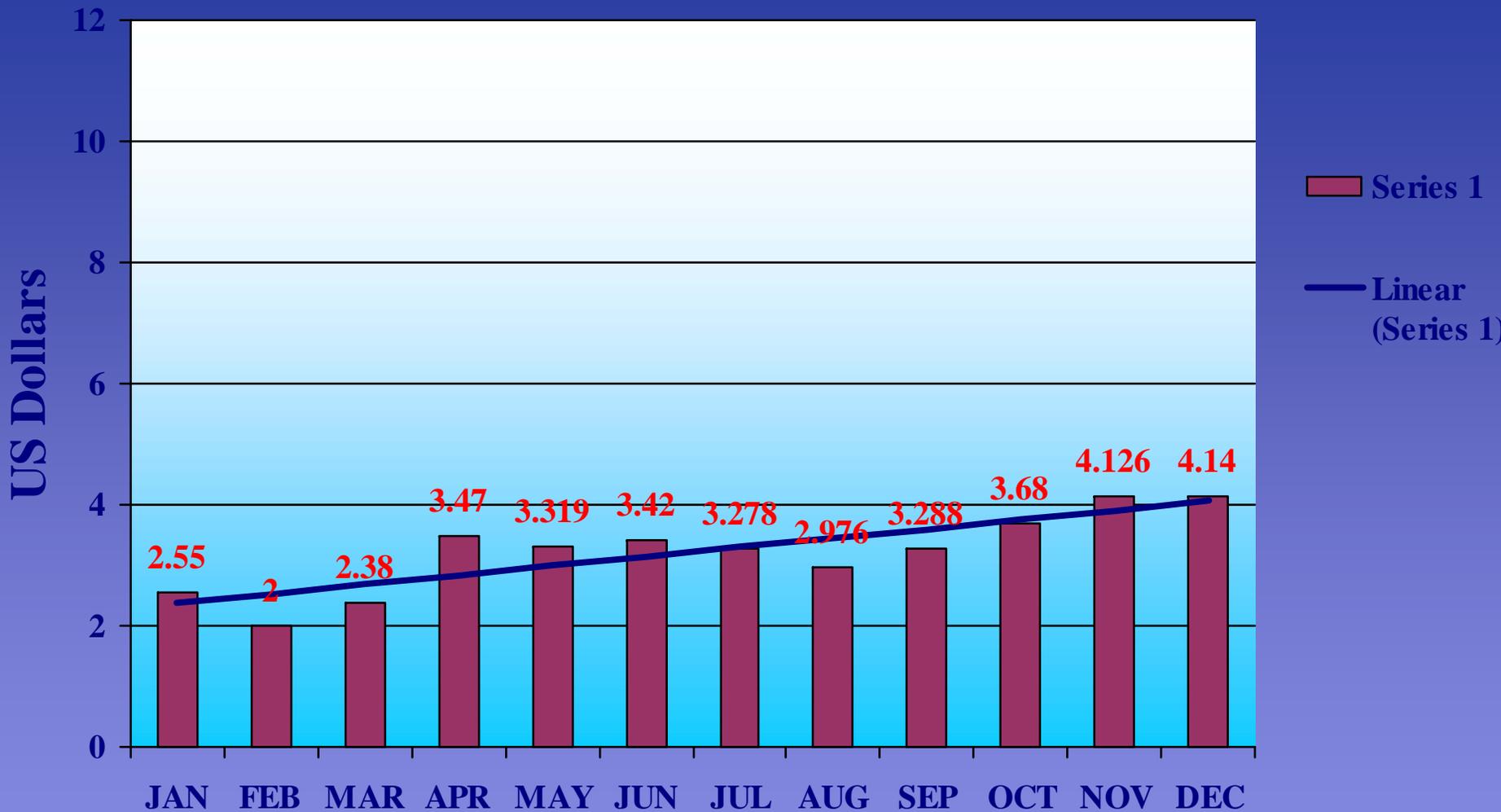
Natural Gas – NYMEX Settlement - 2000



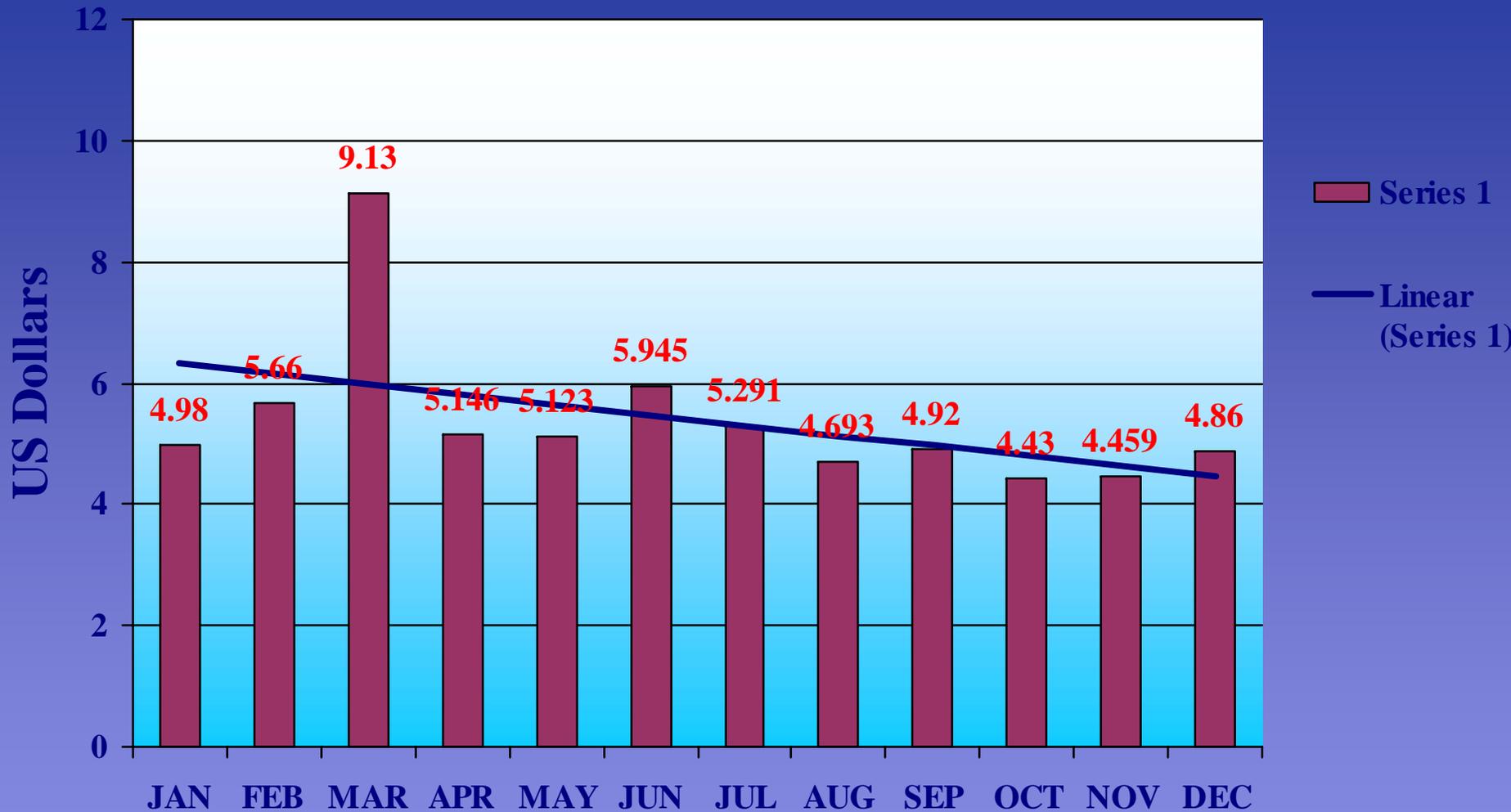
Natural Gas – NYMEX Settlement - 2001



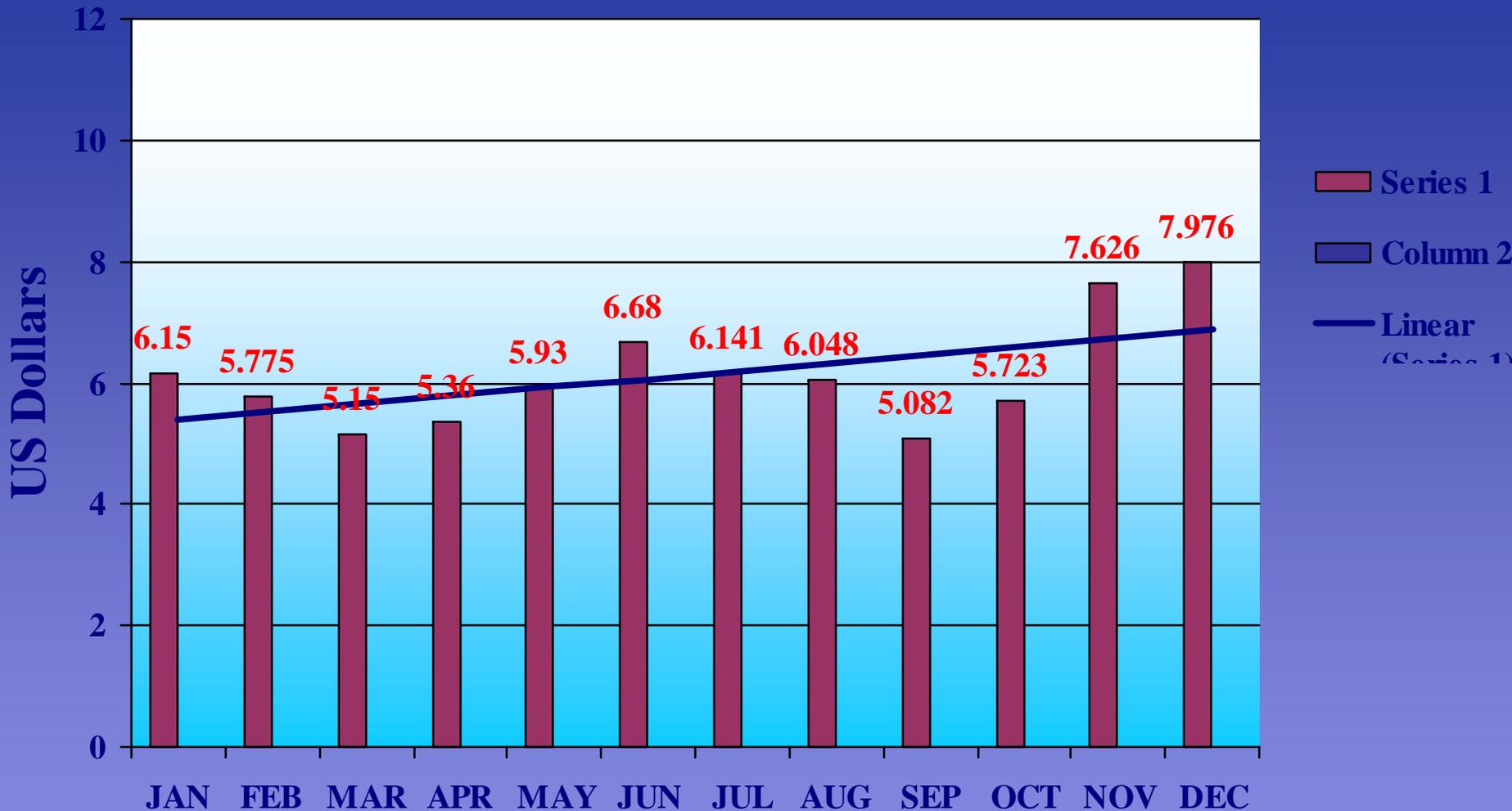
Natural Gas – NYMEX Settlement - 2002



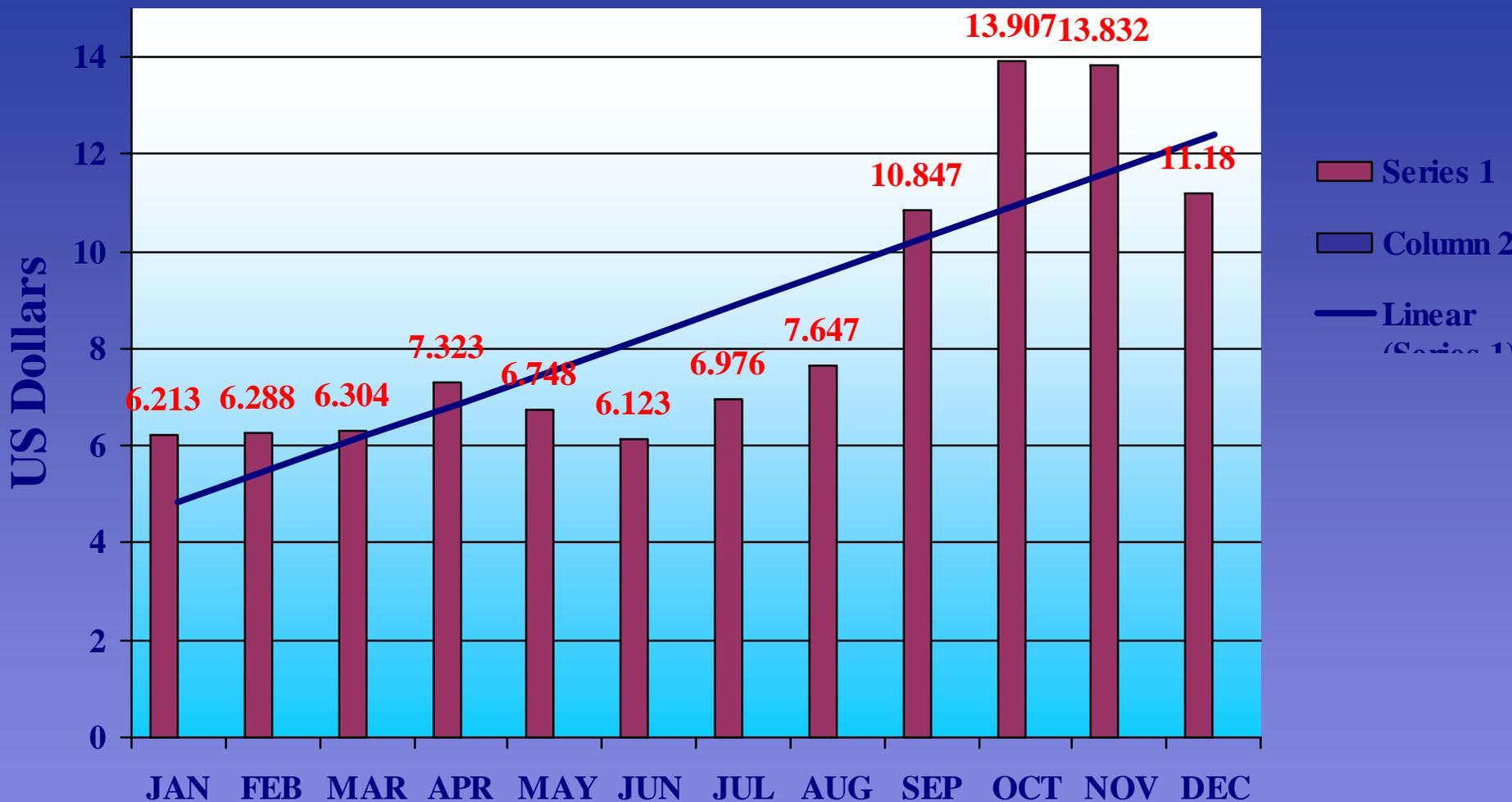
Natural Gas – NYMEX Settlement - 2003



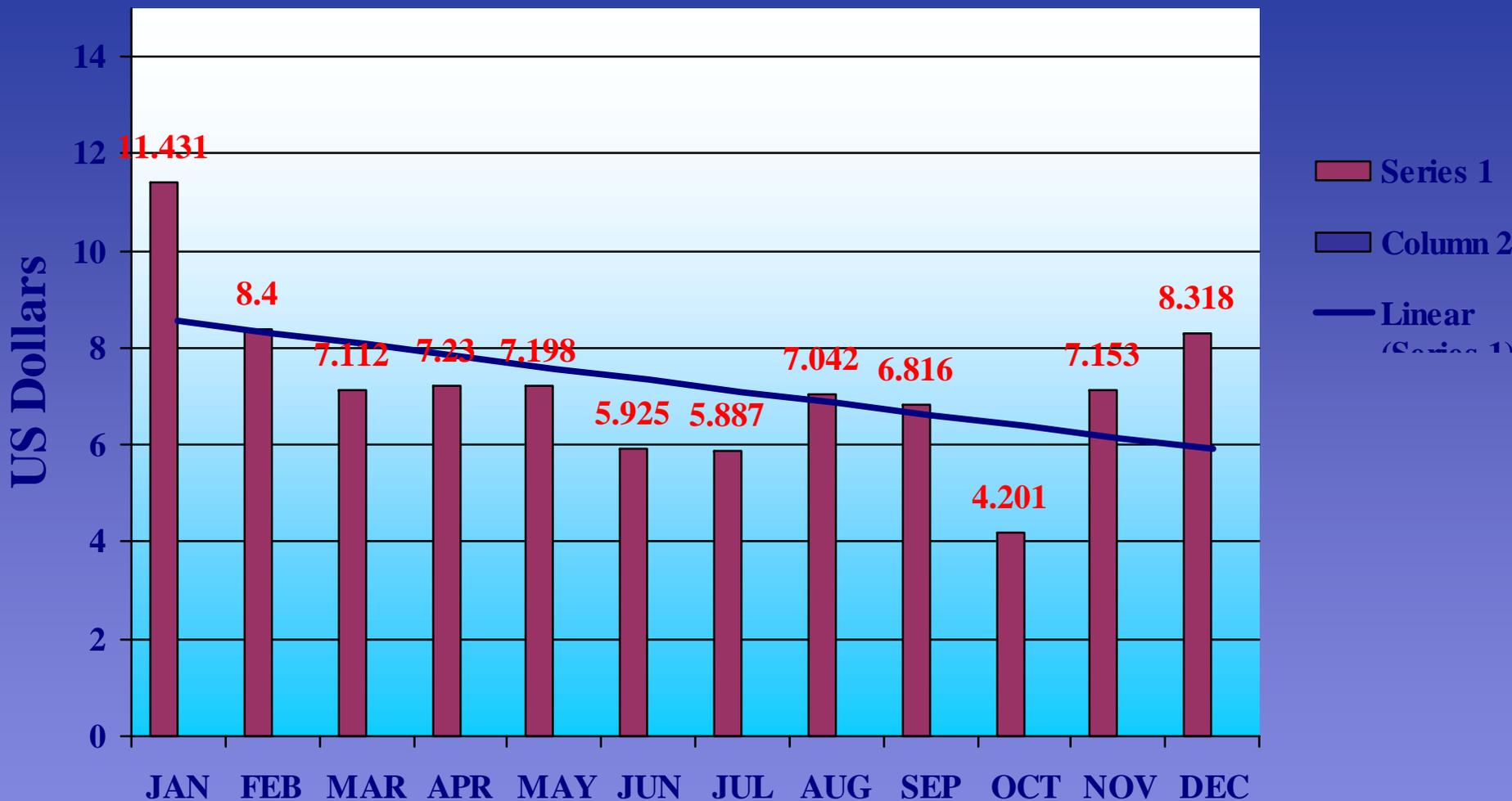
Natural Gas – NYMEX Settlement - 2004



Natural Gas – NYMEX Settlement - 2005



Natural Gas – NYMEX Settlement - 2006



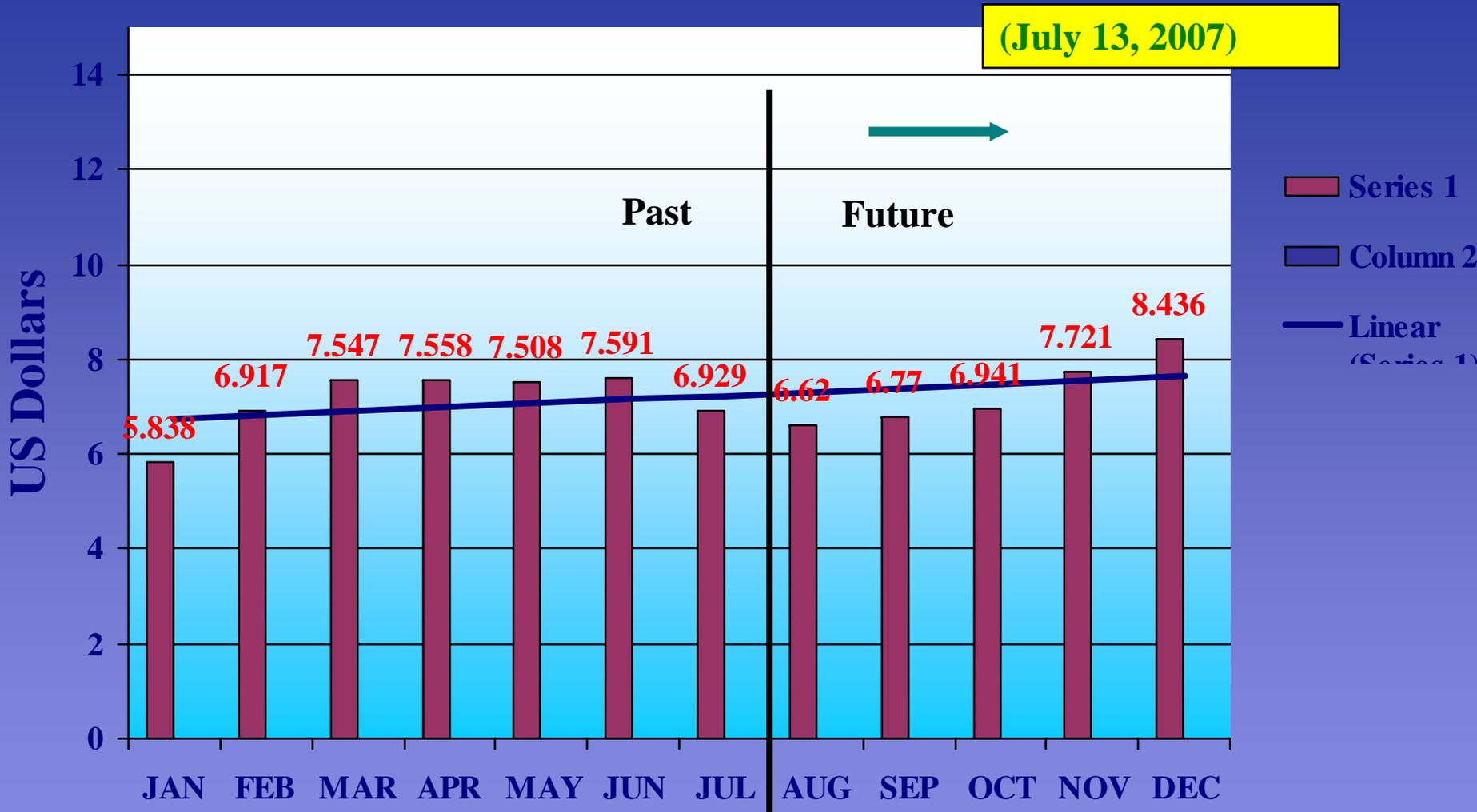
GovEnergy
www.govenergy.gov



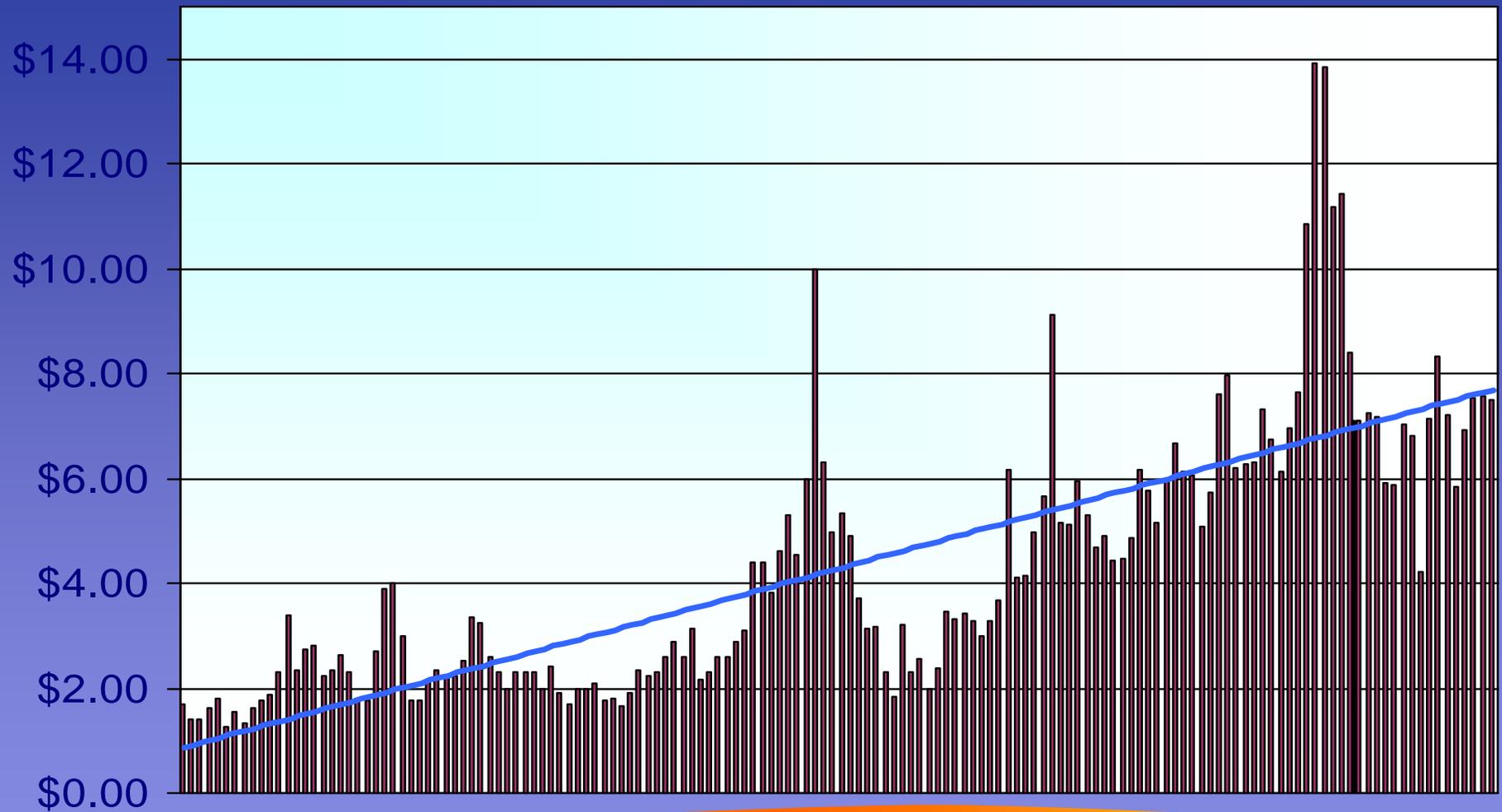
Rich Costello

August 6

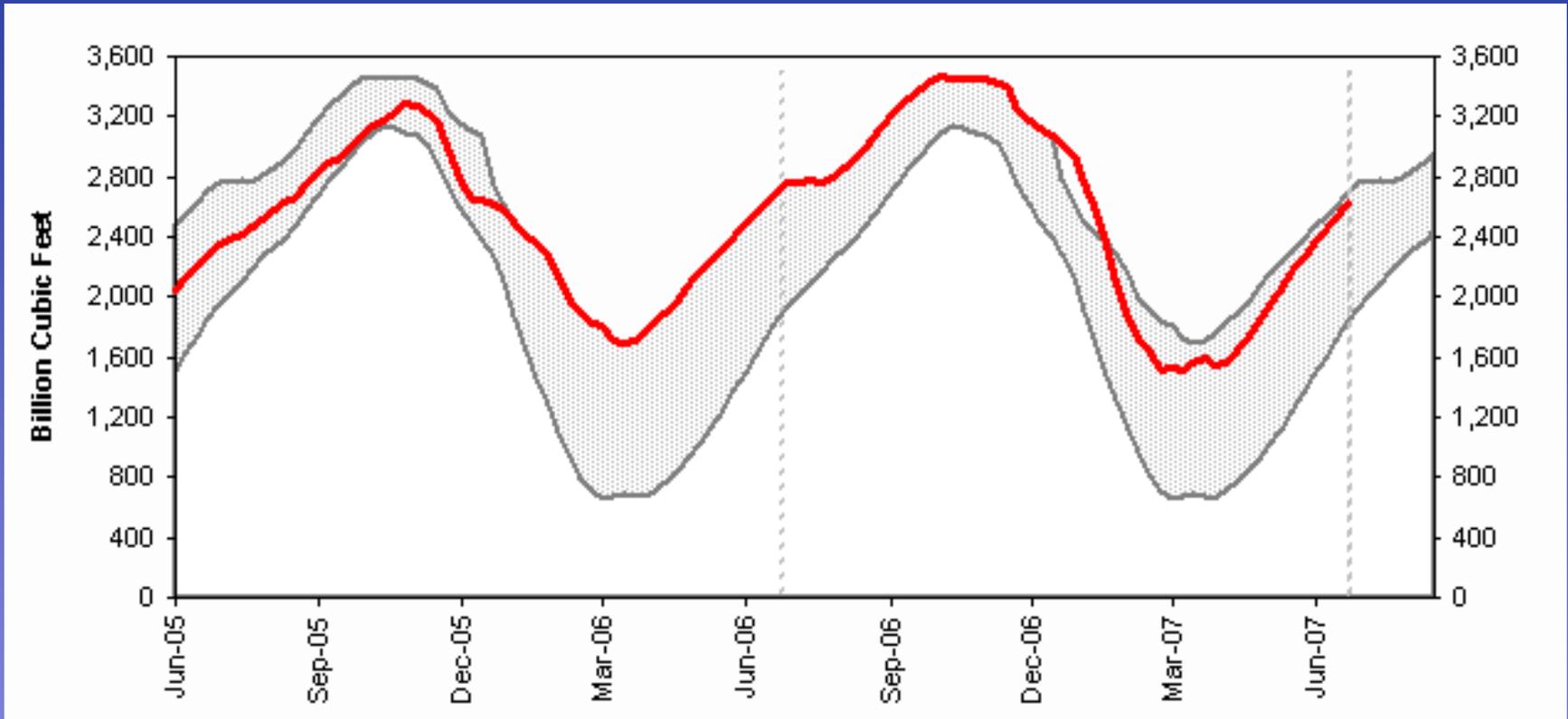
Natural Gas – NYMEX Settlement - 2007



Natural Gas – NYMEX Settlement – 2000 to 2007



Natural Gas Storage Levels

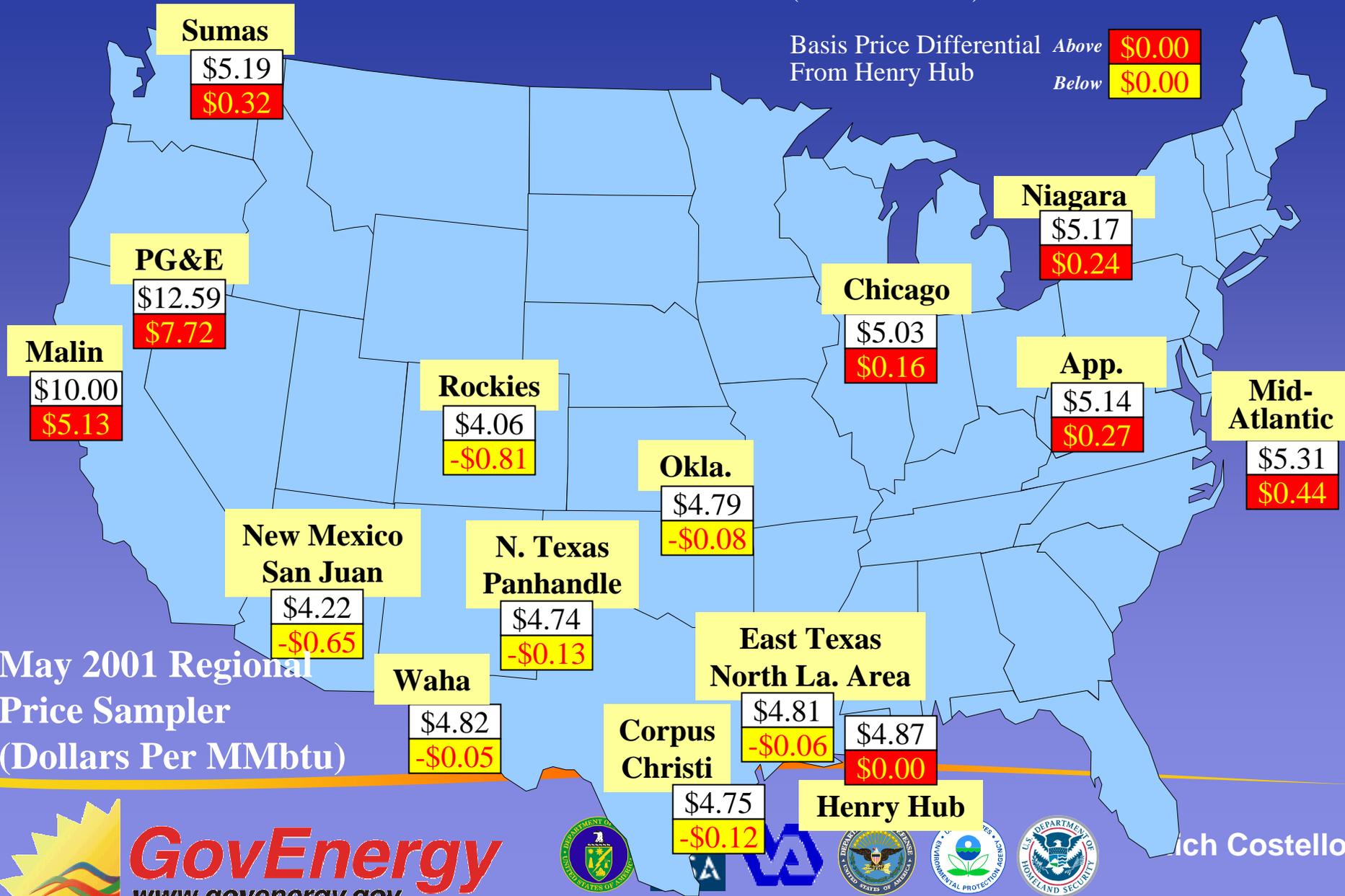


Data Released July 12 2007 - DOE

Legend: Example May 2001
Regional Price Sampler
(Financial Times)

\$0.00

Basis Price Differential *Above* \$0.00
From Henry Hub *Below* \$0.00



May 2001 Regional
Price Sampler
(Dollars Per MMBtu)



Energy Procurement Process



Who Decides the Path Taken

The Facility Manager
The Energy Manager
The Purchasing Dept.
The VP of Operations
The CEO
The Accounts Payable Clerk



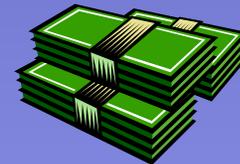
Time and Resources Allocation Issues

Time to carry out the procurement process.

Sufficient knowledge to comfortably carry out the process.

Internal support of other departments within the Institution.

Funding available to acquire outside assistance if desired.



Competitive Process

Create an Energy Team

Facilities
Accounting
Legal
Purchasing
Experienced Energy
Procurement Consultant
or Energy Procurement
Company
If Desired



Assembling the Necessary Information

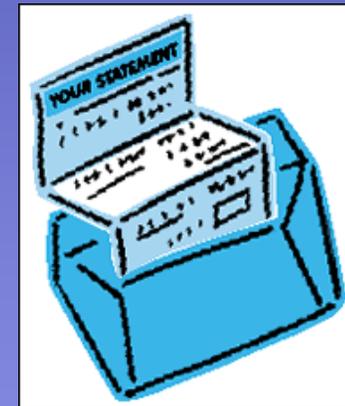
Non-Energy Related Information

Facilities Physical Information (Maps, plant descriptions, etc.....)

Financial Information (Annual Report type info)

Corporate General Information (Public Relations type material)

Gathered energy information and bills (very time consuming)



Assembling the Necessary Information Continued

Energy Related Data

1 or 2 years worth of Gas bills
or usage information from
Gas LDC

One Clean copy of an entire
Gas bill for each Account,
preferable the most recent

Any other data available from
the LDC

Some Utilities Charge for
Information, Some Do Not

nicor 1 888 NICOR 4U

Services for
John Doe
123 Energy St.
Anytown

Account 1-23-45-678 9
M...
R...

Payment Information
Previous acct. balance 62.36
Payment rec'd thank you 62.36

Meter Reading Section

Meter Reading
Current: 7368 Estimated Meter Reading - February 3, 2007
Previous: 7275 Actual Meter Reading - January 2, 2007
Difference: 93 (32 days)
Conversion to Therms: 93 x 1.013 BTU F

Delivery Charges Section

Delivery Charges
Monthly Customer Charge: 8.85
First 20 Therms 20.00 @ .1473 = 2.95
21 - 50 Therms 30.00 @ .0579 = 1.74
Over 50 Therms 44.21 @ .0519 = 2.29
Environmental Recovery Cost 94.21 @ .0035 = .33
Franchise Cost = .24
Governmental Agency Adj. = .08 **\$16.48**

Natural Gas Cost Section

Natural Gas Cost
94.21 Therms X 0.6700 **\$ 63.12**

Taxes Section

Taxes
State Tax 94.21 @ .024
Utility Fund Tax 79.60 @ .10%
Municipal Tax 79.60 @ 5.15% **\$6.44**

Tot current bill **\$ 86.04**

Have you considered... You can equalize your monthly payments to cushion the... bills.

Thank you for your prompt payment record. We are pleased to have you as our customer.

Total Amount Due **\$ 86.04**

Which Energy Service Providers Do I Solicit?

How Many Gas Marketers will you solicit?

Are They Licensed in the State?

National, Regional, and/or Local
Financial Capabilities,

ESPs Relationship to Local
Distribution Company (LDC) &
Others



Writing the Request for Proposal

Introduction

General Conditions (Typical)

Questions Relative to Gas Marketers (Financial, Existing Clients, etc....)

Detailed Questions on Energy Services

Pricing - Methods to present pricing

Legal language - General Corporate Purchasing language along with specific power purchase agreement language desired.

Energy Data - Properly presented in hard copy or preferably electronically



Issuing the Request for Proposal

Receive Faxed or emailed
Confidentiality Statements.

Mail/email all Request for
Proposals at the same time.

Verification of Receipt.

Written Questions Received and
Answers Distributed.

Most Gas Procurements are done
electronically, via email.



Reviewing the Proposals

Non Economic

- ESP retail experience
- ESP financial position
- Strength in answering the RFP, references

Economic

- Terms and Conditions of Contract



Major Areas of Concern in the Natural Gas Purchasing Contract

- Gas Usage Upper & Lower Limits - Bandwidth
- Early Termination and Results, +/-
- What are you actually buying – Defined, ie Shrinkage
- Force Majeure
- What does the word Firm, All Requirements mean?
- Selling or Buying a Facility
- What does Reciprocal Mean? – Indemnification, liquidations.
- Exact Term of the Contract
- Evergreen Clauses
- Credit Requirements

The Natural Gas Purchase Agreement

Negotiate a contract with advantageous terms and conditions tailored to your particular load profile.

The proper terms & conditions are extremely important, often times more important than price differences.

Once you are comfortable with several contracts, then begin to ask for prices.

Also keep in mind, the quicker you can make a decision, the less risk premium will be built in by the Natural Gas Marketer

Review of the Natural Gas Procurement Process

- Develop and Facilitate Client Energy Teams
- Select Qualifying Energy Service Providers
- Obtain the Proper Utility Usage Demand Data
- Issue Request for Proposals to Energy Service Providers
- Evaluate Proposals – Economical & Non-Economical
- Negotiate Energy Purchase Agreements
- Check LDC Rules
- Monitor Energy Service Providers
- Review Contract Adherence
- Evaluate Prices; Fixed, Variable or NYMEX based, ie timing
- Analyze Risk
- Attention to LDC

Things to Remember

Always investigate all your energy usage alternatives.

Begin gathering your energy information now.

Start or complete selection of Energy Team Members.

Don't forget about existing and future opportunities with the various LDC's. - Window's of Opportunities

Things to Remember Continued

The competitive process has a successful history of generally providing the best results.

Treat the energy procurement process in a similar manner to other type of purchasing process, yet understand the differences and risks associated with energy pricing.

Concentrate on the procurement process, and keep a good record of the process and the results



Thank you very much

Any Questions ?

Richard Costello

Richard.costello@acelaenergy.com

Don't forget to fill out and drop off your session evaluations.



GovEnergy
www.govenergy.gov