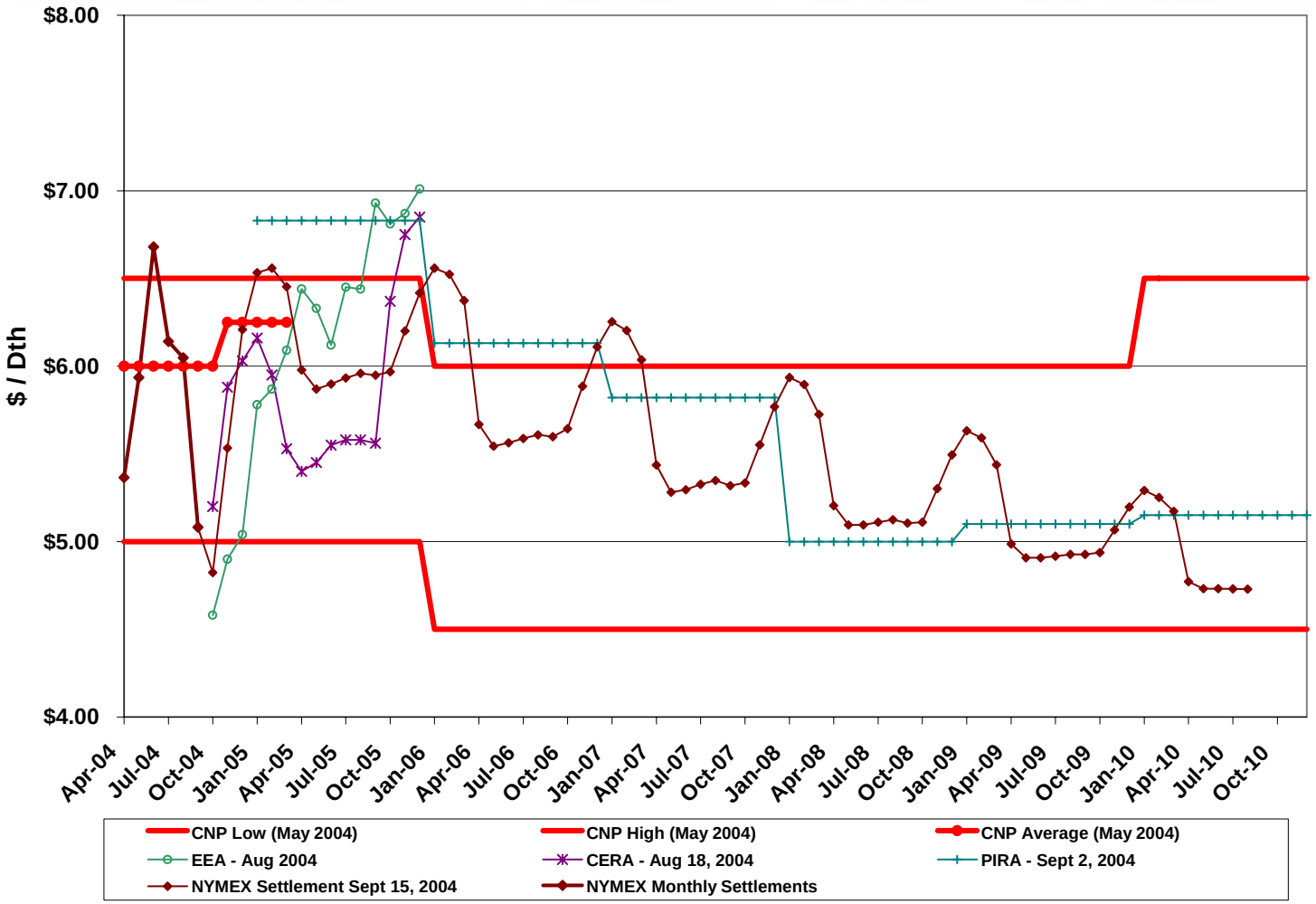
CenterPoint Energy

CenterPoint Energy Arkla

Natural Gas Supply & Price Outlook

September 21, 2004

Price Forecast



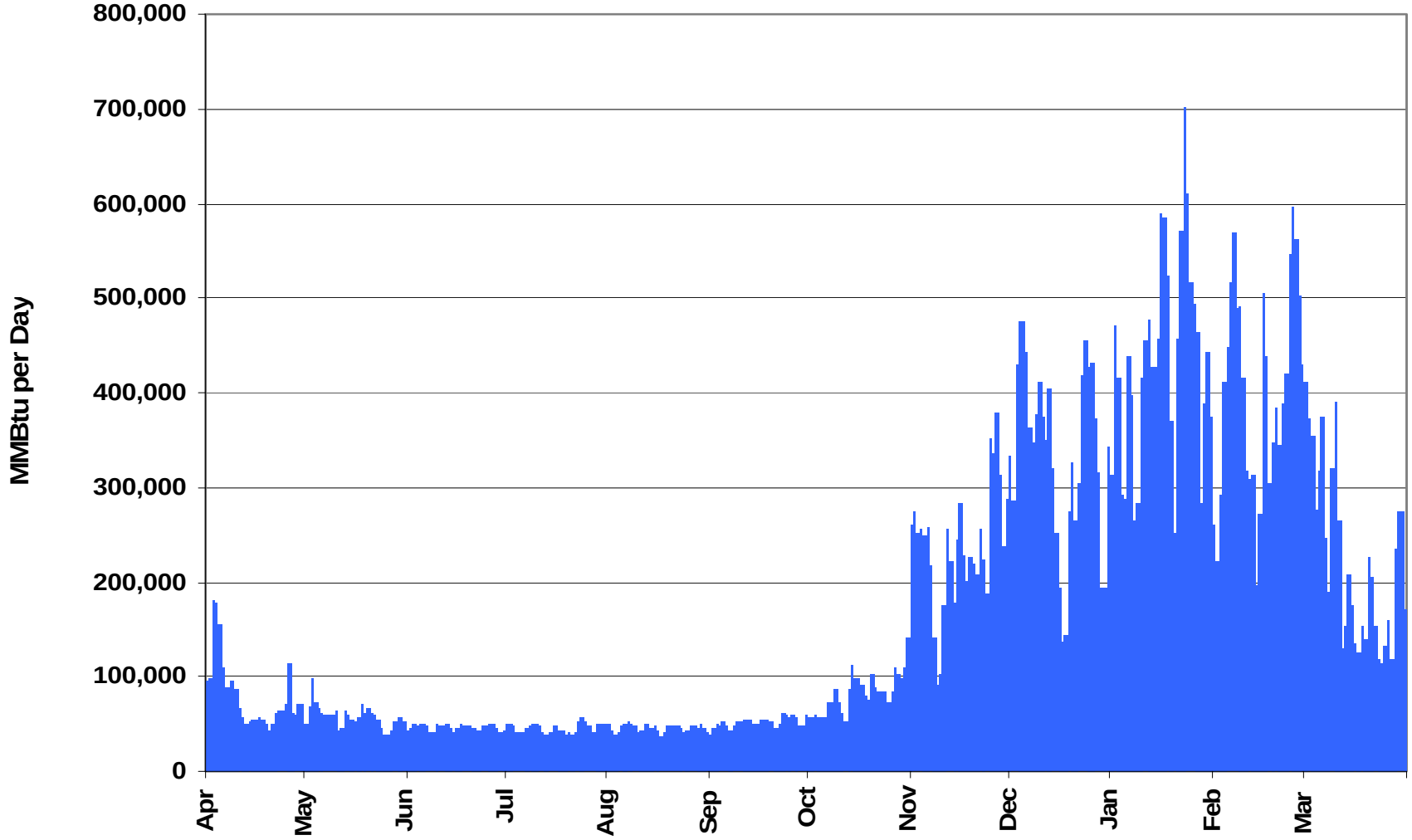
Factors Influencing Natural Gas Prices

- **Supply**
  - Production Levels
  - Exploration / Drilling Rig Count
  - Replacement of Reserves
  - Imports / LNG
  - Storage Levels
- **Demand**
  - 22.5 Tcf in 2003
  - Peak requirements are growing
- **Supply / Demand Imbalance**
  - In a market driven system, an unexpected change in supply or demand can cause a rapid shift in price
- **Fundamental and Technical Factors**
  - Weather induced supply or demand changes (e.g., hurricanes, cold, etc.)
  - Financial / Speculative Trading

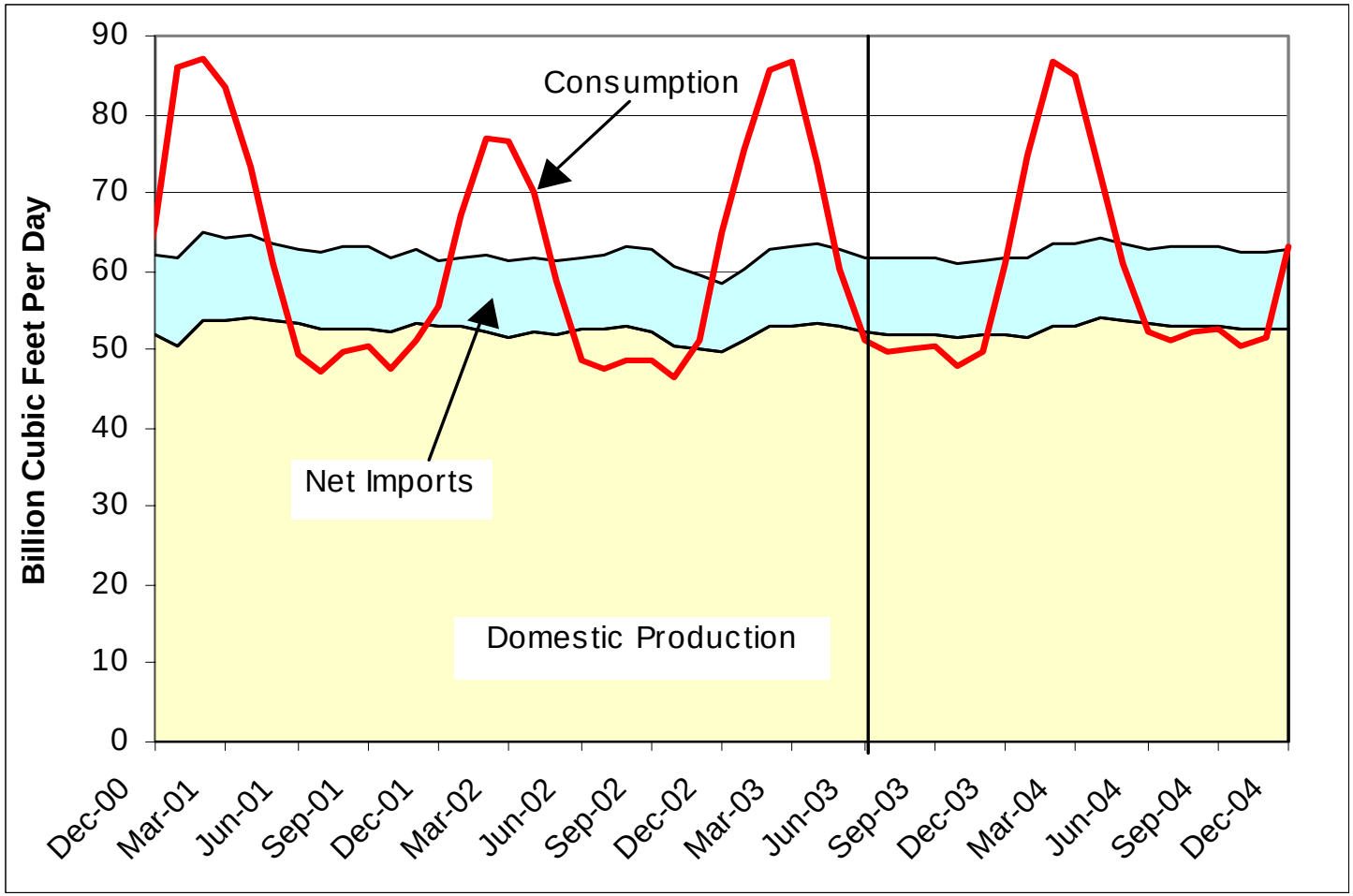
Why do we need storage?

- Operationally critical for meeting winter heating demand
- Acts as a buffer for sudden shifts in intra-day demand
- Accommodates stable production

Storage Helps to Cover Rapid Changes in Demand

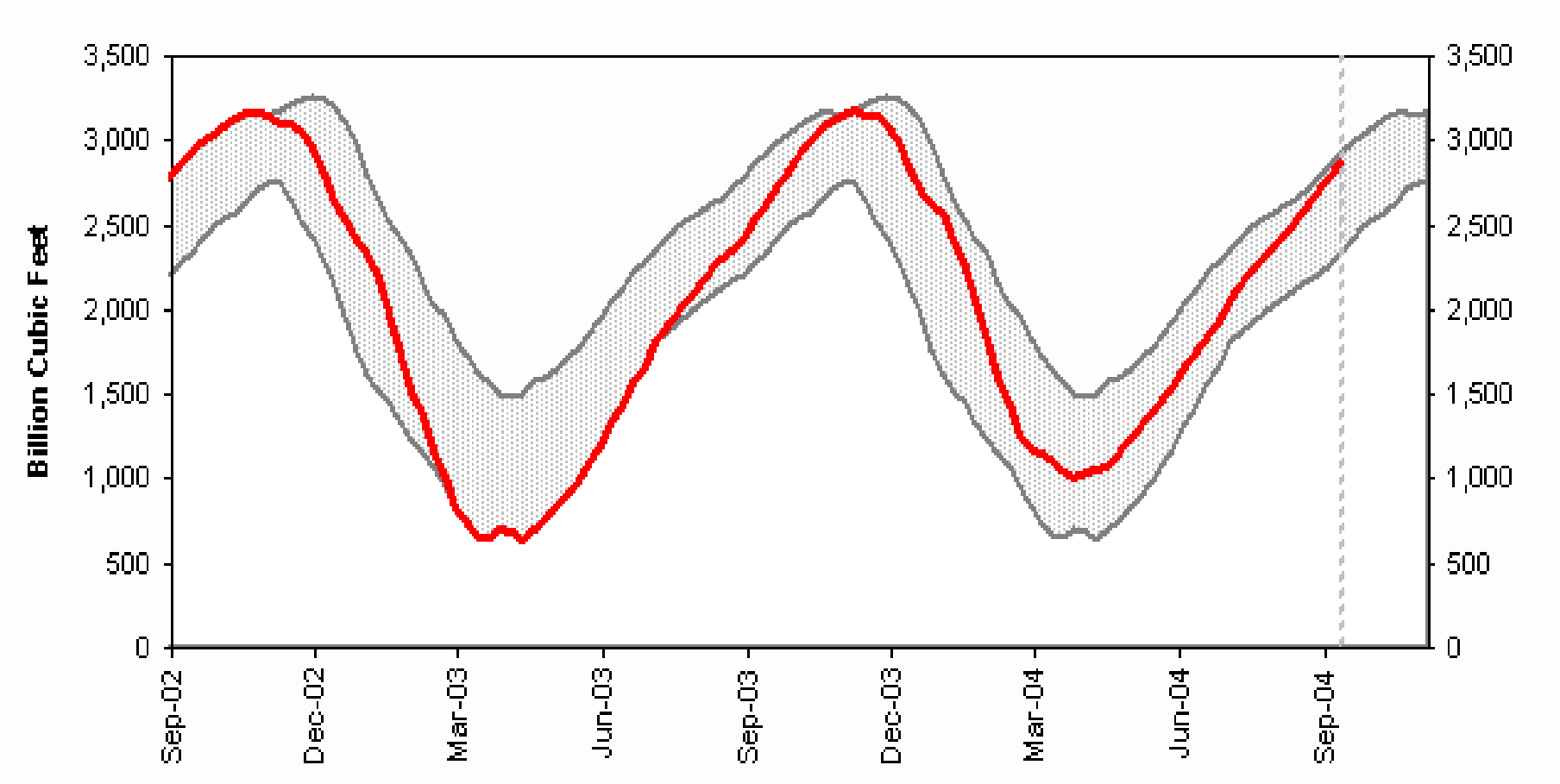


Storage Helps Satisfy Seasonal Demand Peaks



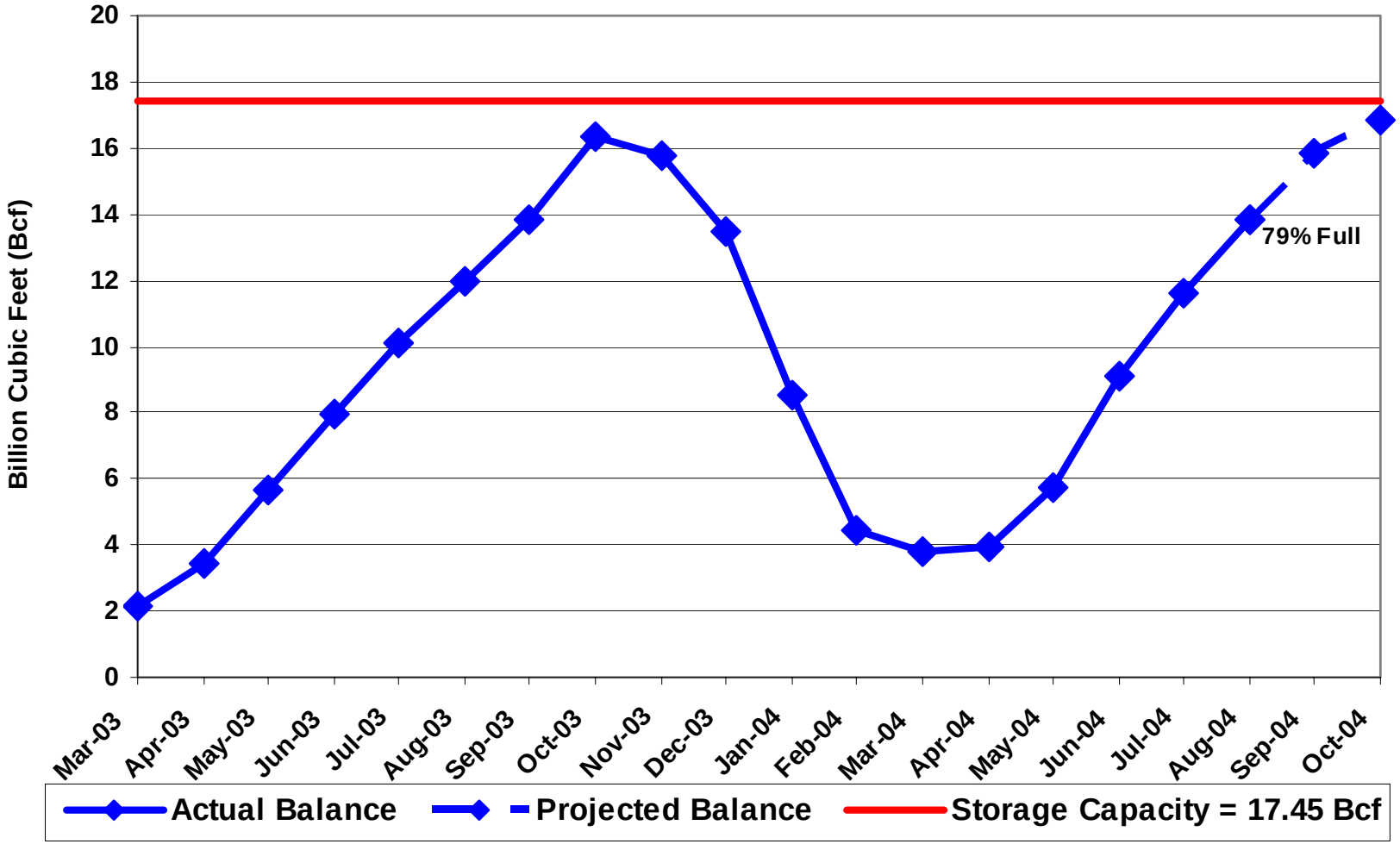
Source: EIA June 17, 2003

Natural Gas Storage Trend



Source: EIA - through Sept. 10, 2004; released Sept. 16, 2004

Arkla Arkansas Storage



Heating Degree Day Forecast

Temperature and Heating Degree Day Forecast of 2004-2005 Winter Season

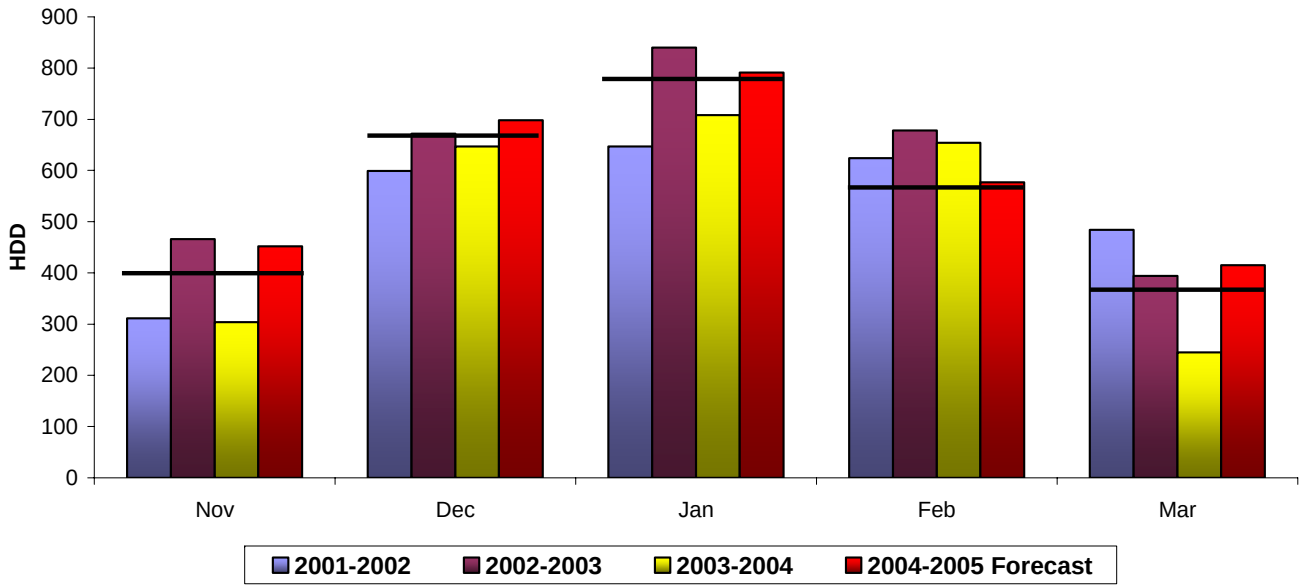
	7 Year Average HDD	30 Year Normal HDD	Normal Temperature	Forecast* °F Departure from Normal Temperature	Forecast* Temperature	Forecast* HDD
November	380	400	51.7	-1.75	49.95	452
December	703	666	43.5	-1.00	42.50	698
January	704	775	40.0	-0.50	39.50	791
February	534	563	44.9	-0.50	44.40	577
March	402	369	53.1	-1.50	51.60	415
Total	2,723	2,773				2,933
25% Colder	3,404	3,466		Departure from 7 Year Average =		8%
25% Warmer	2,042	2,080		Departure from 30 Year Normal =		6%

* - Based upon Arkla interpretation of EarthSat charts

Heating Degree Day Forecast

Little Rock Heating Degree Days

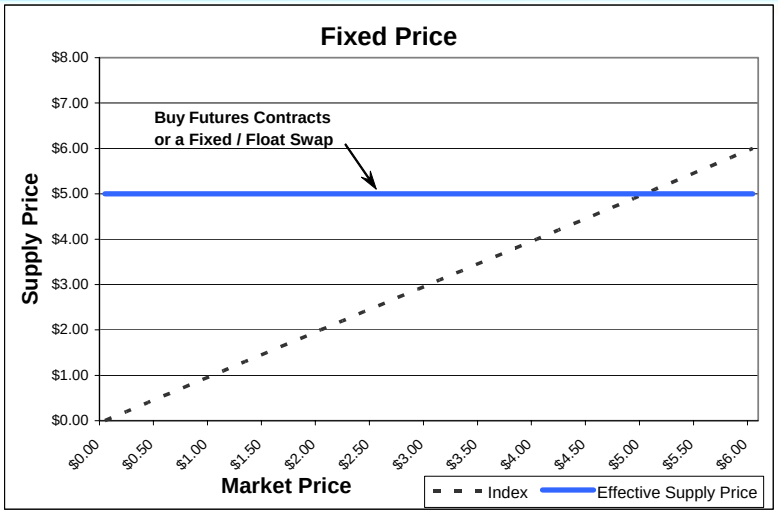
	Nov	Dec	Jan	Feb	Mar	Total
30 Year Normal	400	666	775	563	369	2,773
2001-2002	311	599	647	624	484	2,665
2002-2003	466	672	840	678	394	3,050
2003-2004	304	647	708	654	245	2,558
2004-2005 forecast	452	698	791	577	415	2,933

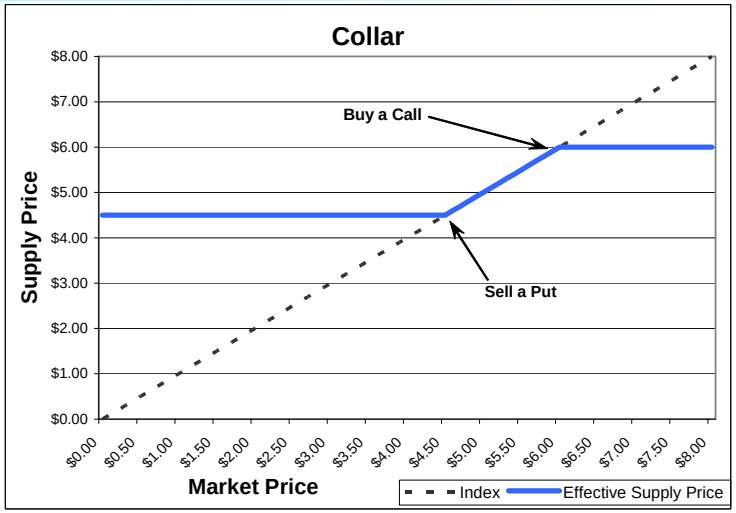


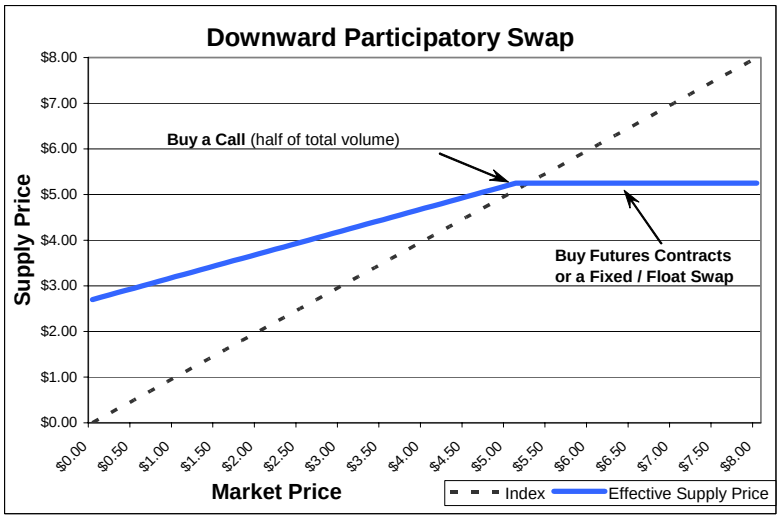
How can an LDC mitigate price volatility?

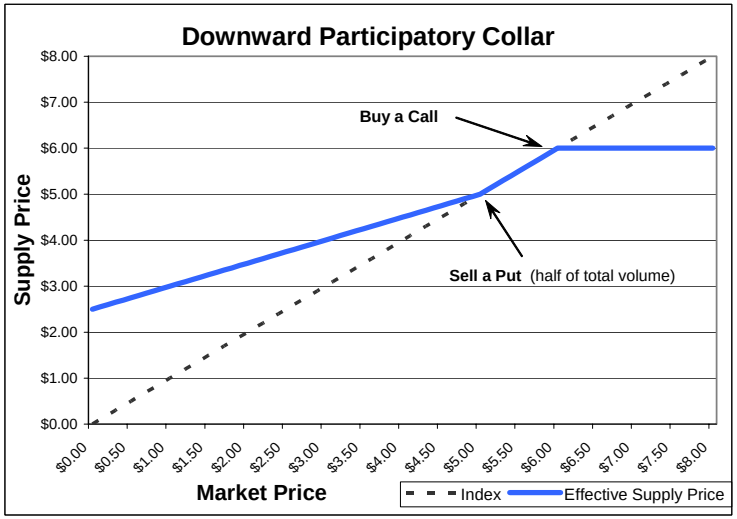
- **Storage**
  - **Acts as a natural price hedge:**
    inject during summer at market price
    withdraw during winter at average injection price
- **Price Hedging**
  - **Long-term forward pricing**
  - **Fixed prices, collars, etc.**
- **Consumer Education**
  - **Promote efficient use of natural gas in homes**
  - **Balanced billing**

Hedging Products

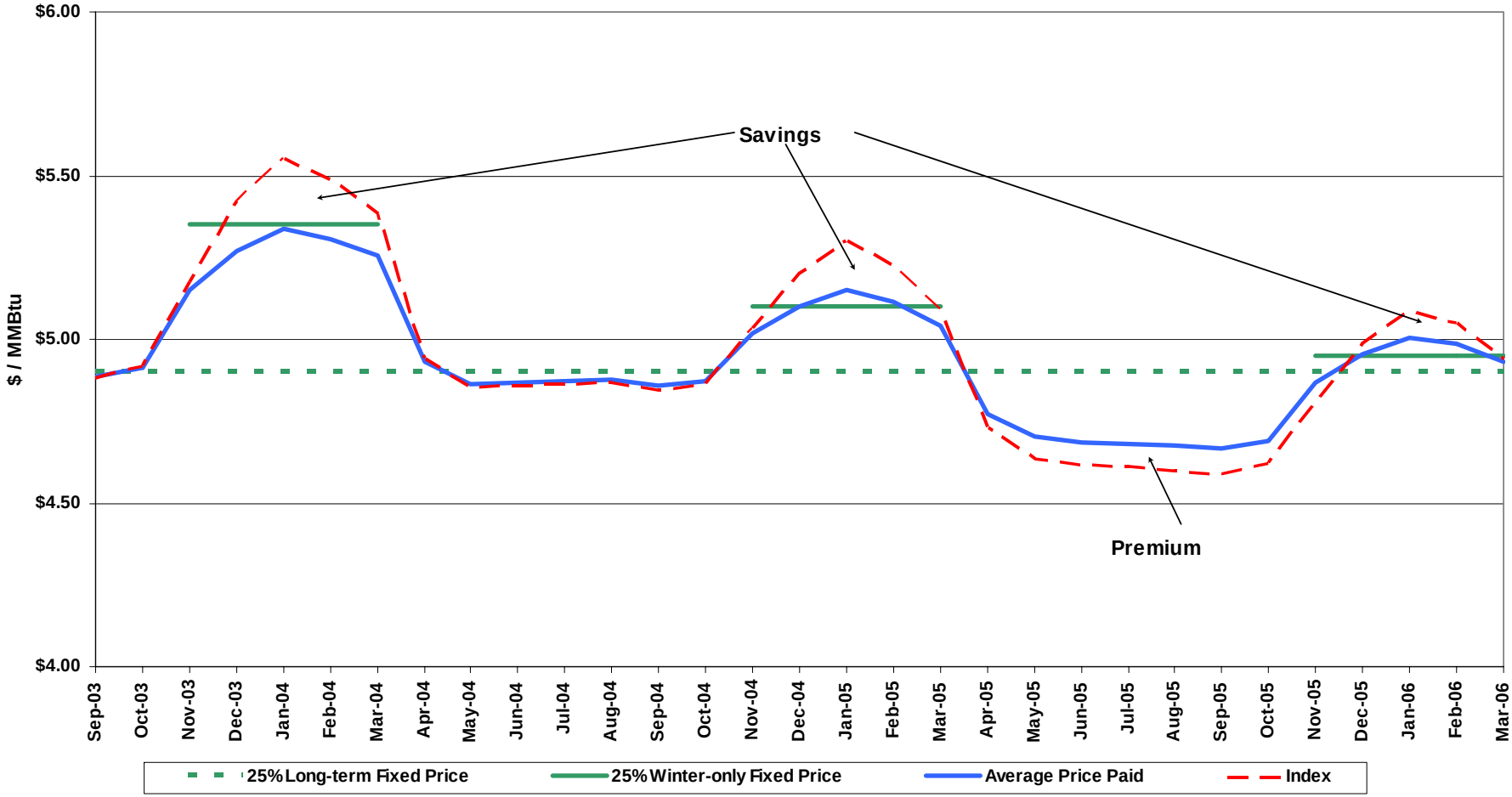






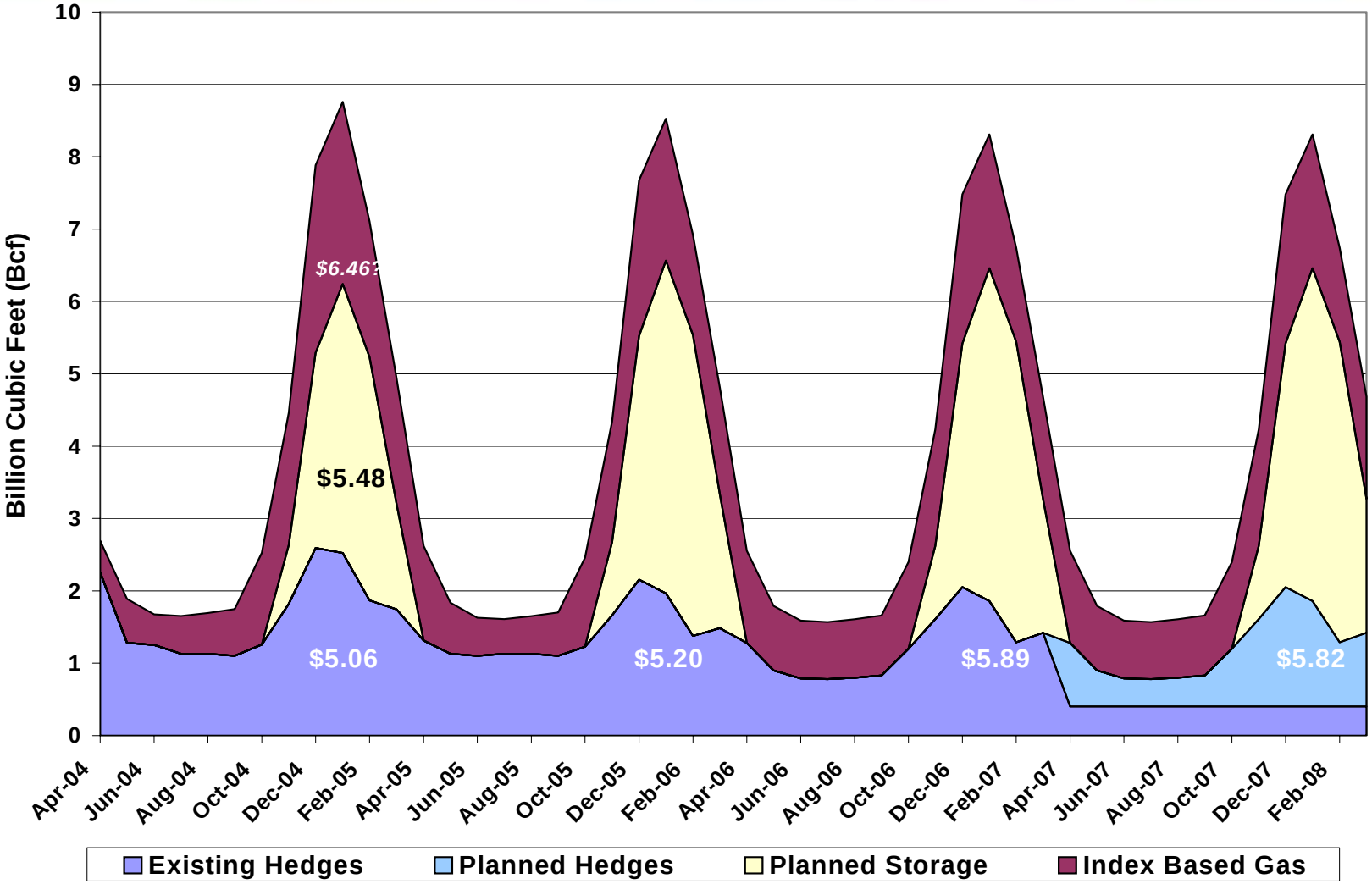


Hedging Example

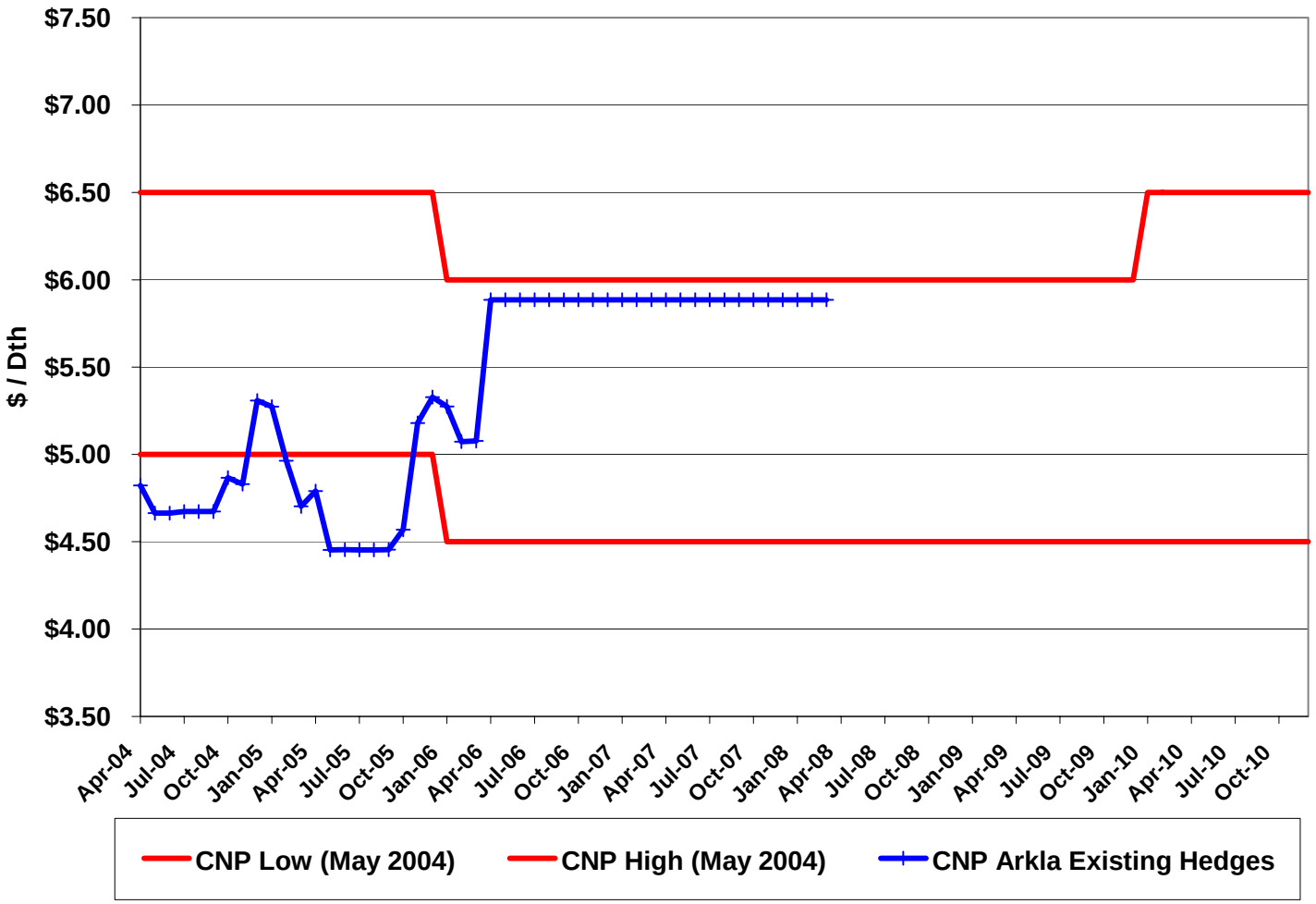


Winter Supply Mix

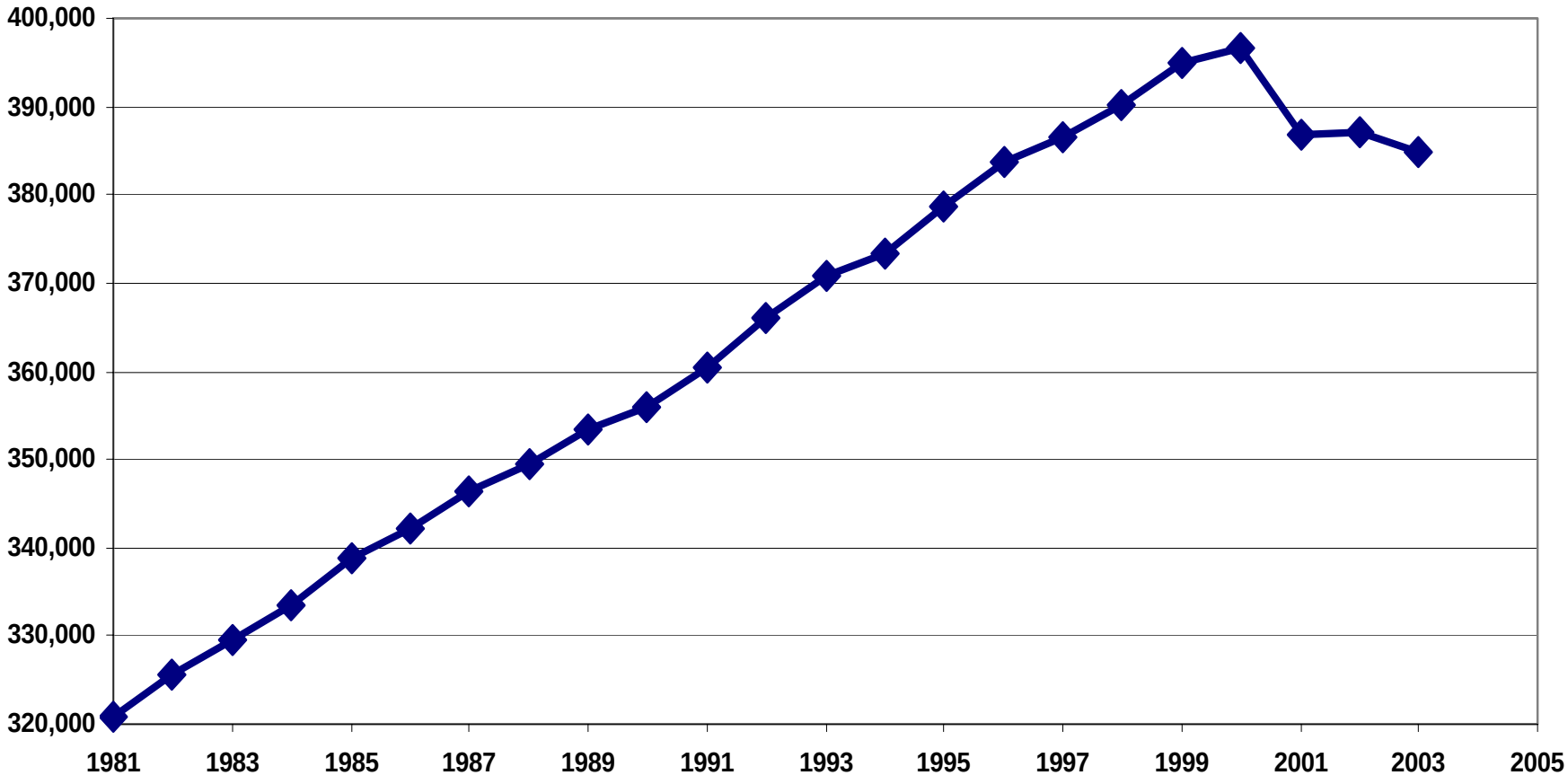
Annual Supply Mix



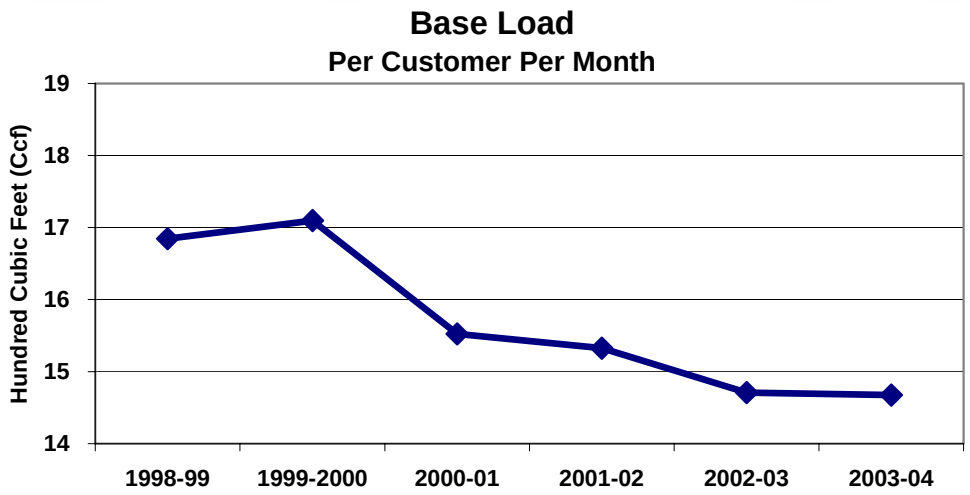
Forward Price Hedge vs. Expected Price Range

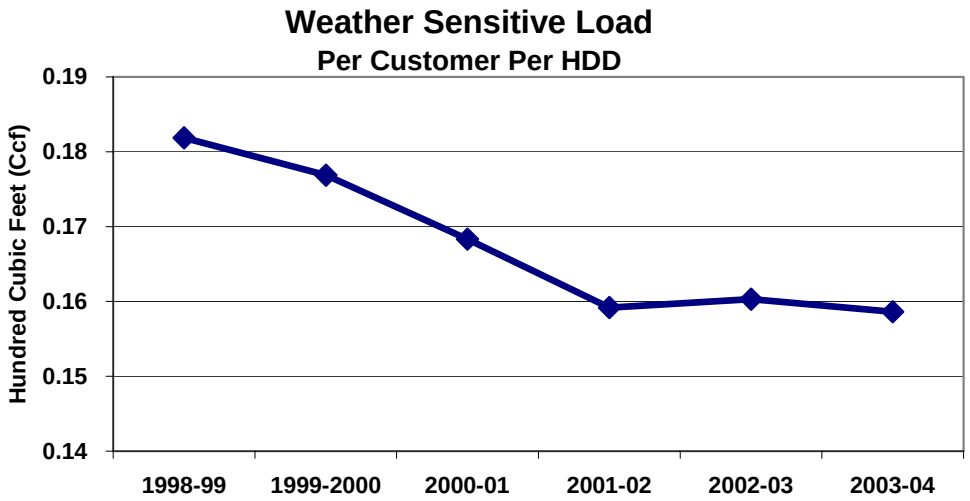


Residential Customer Count

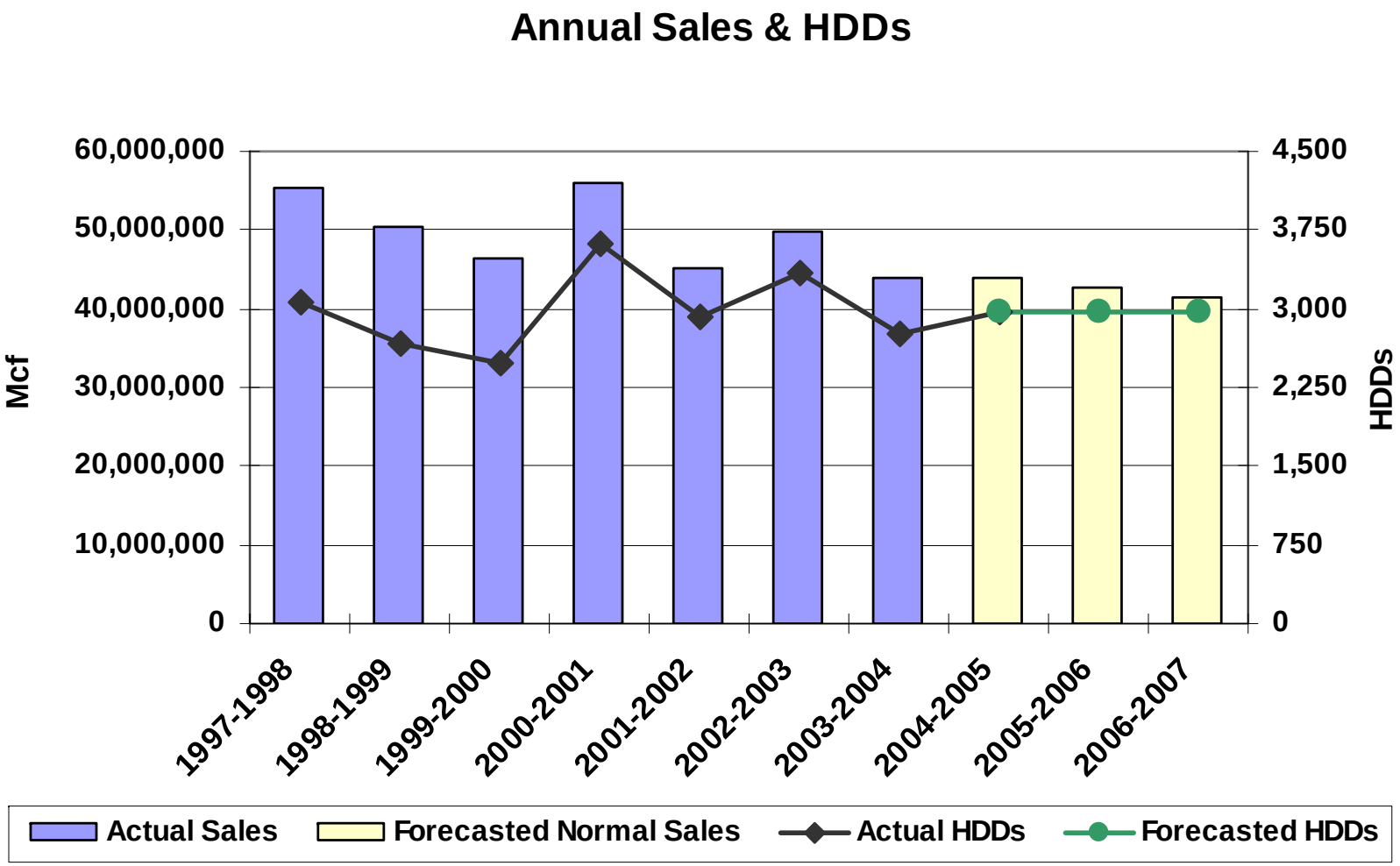


Residential Load Trends

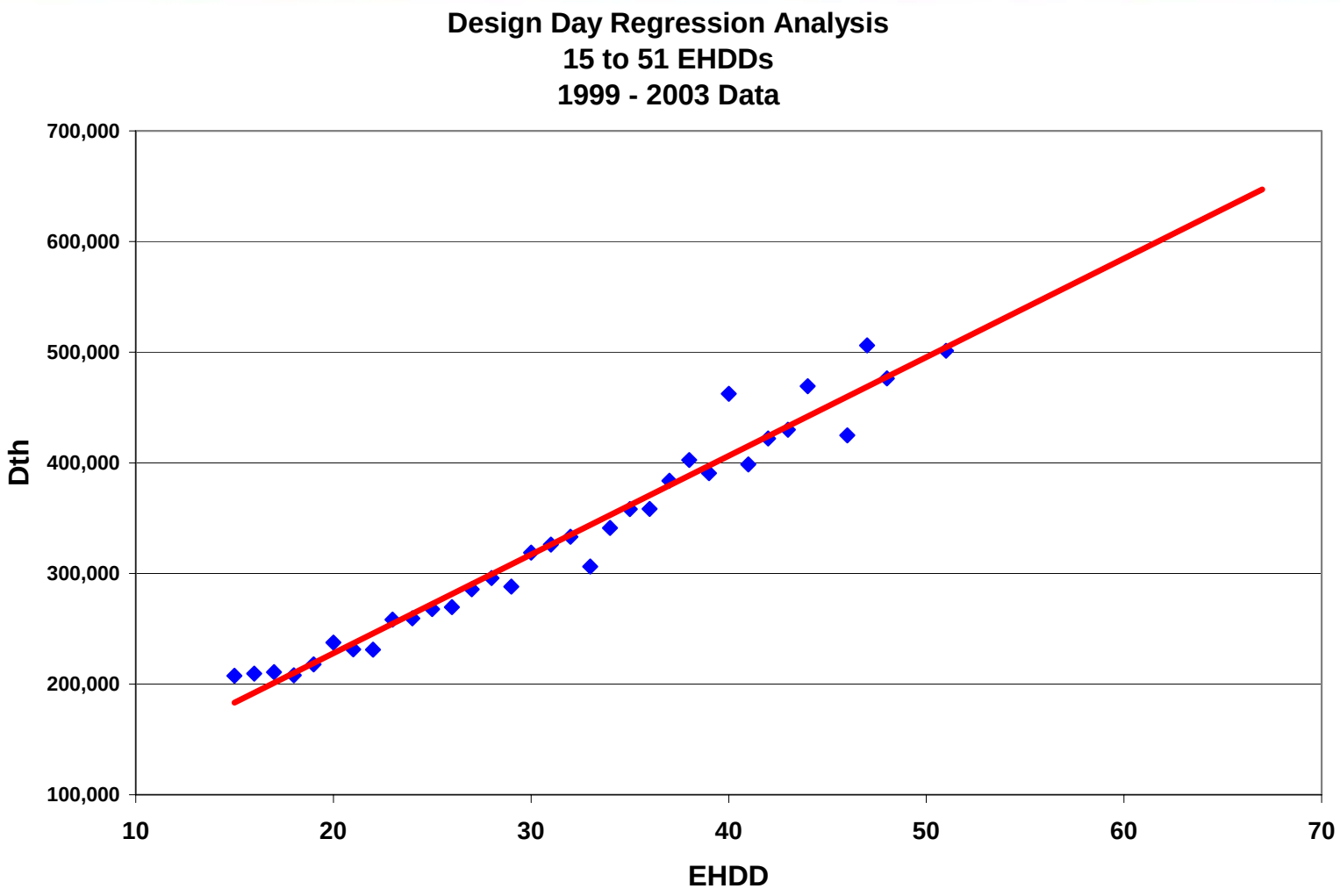




Load Forecast - All Customers



Design Day Analysis



Expected Residential Bill
Winter 2004-2005

Expected Average Bill for 100 CCF

Gas Supply Rate	**$75.00**
Total Bill (excluding tax)	**$107.14**

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Always There