

# Supply and Demand Forecasts for Natural Gas

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Fall Conference**

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# Outline

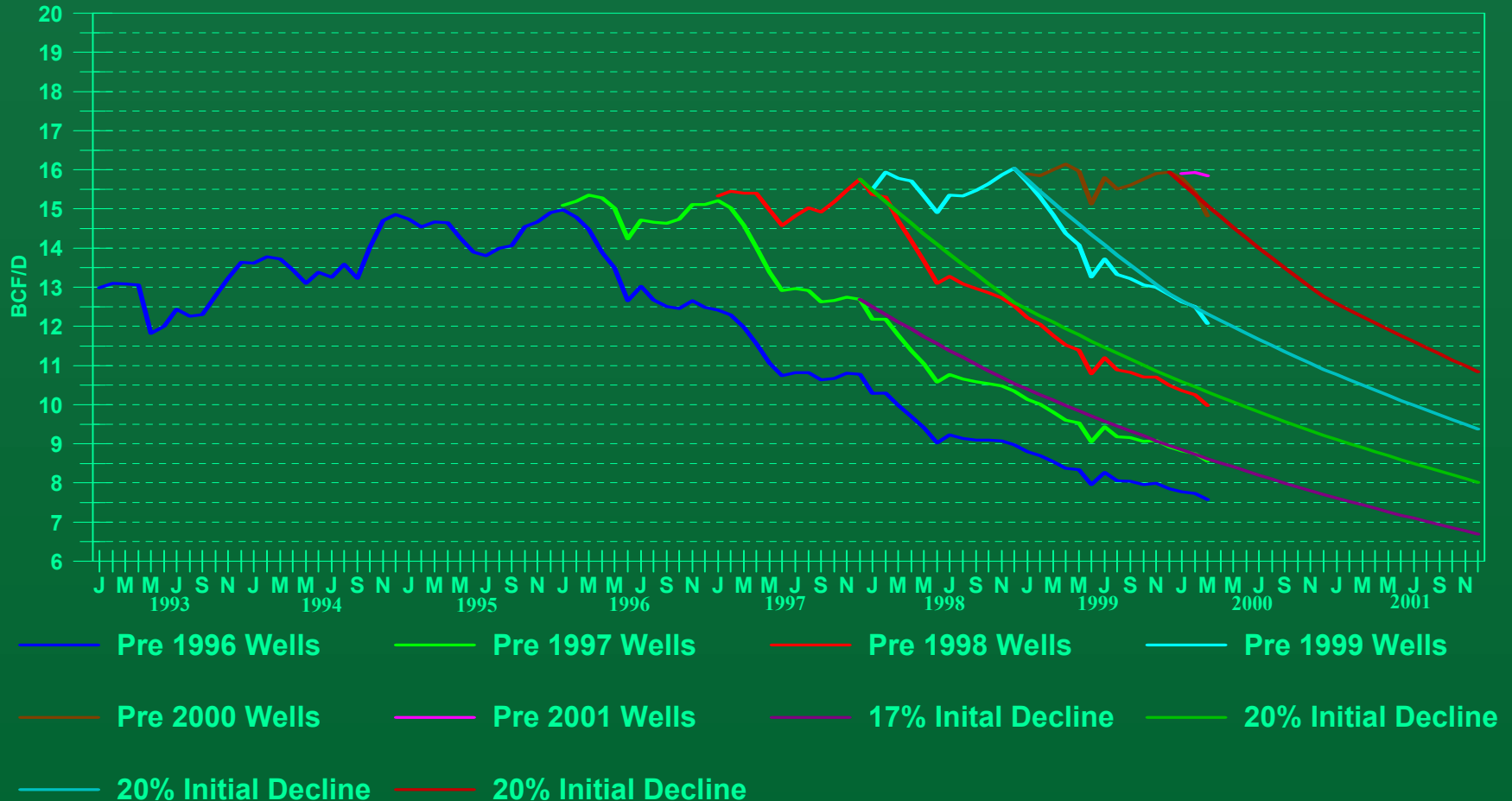
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- Supply - WCSB
  - Historical Production
- Export Capacity and Demand
- The Affect of “Reconnection” on Alberta Prices
  - The “New” Midwest Hub

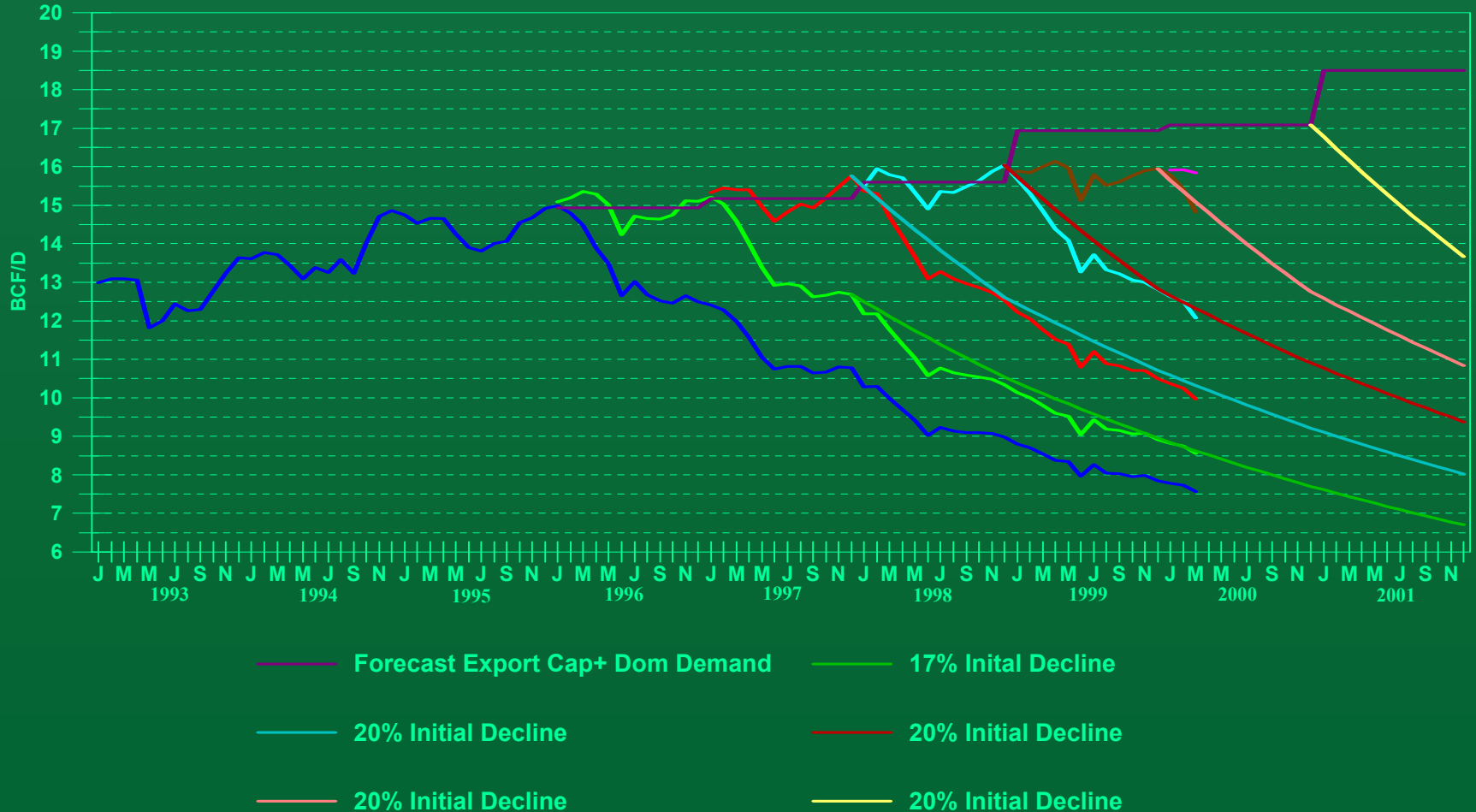
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# Supply

# Adjusted WCSB Production Daily Gas per Calendar Day Marketable

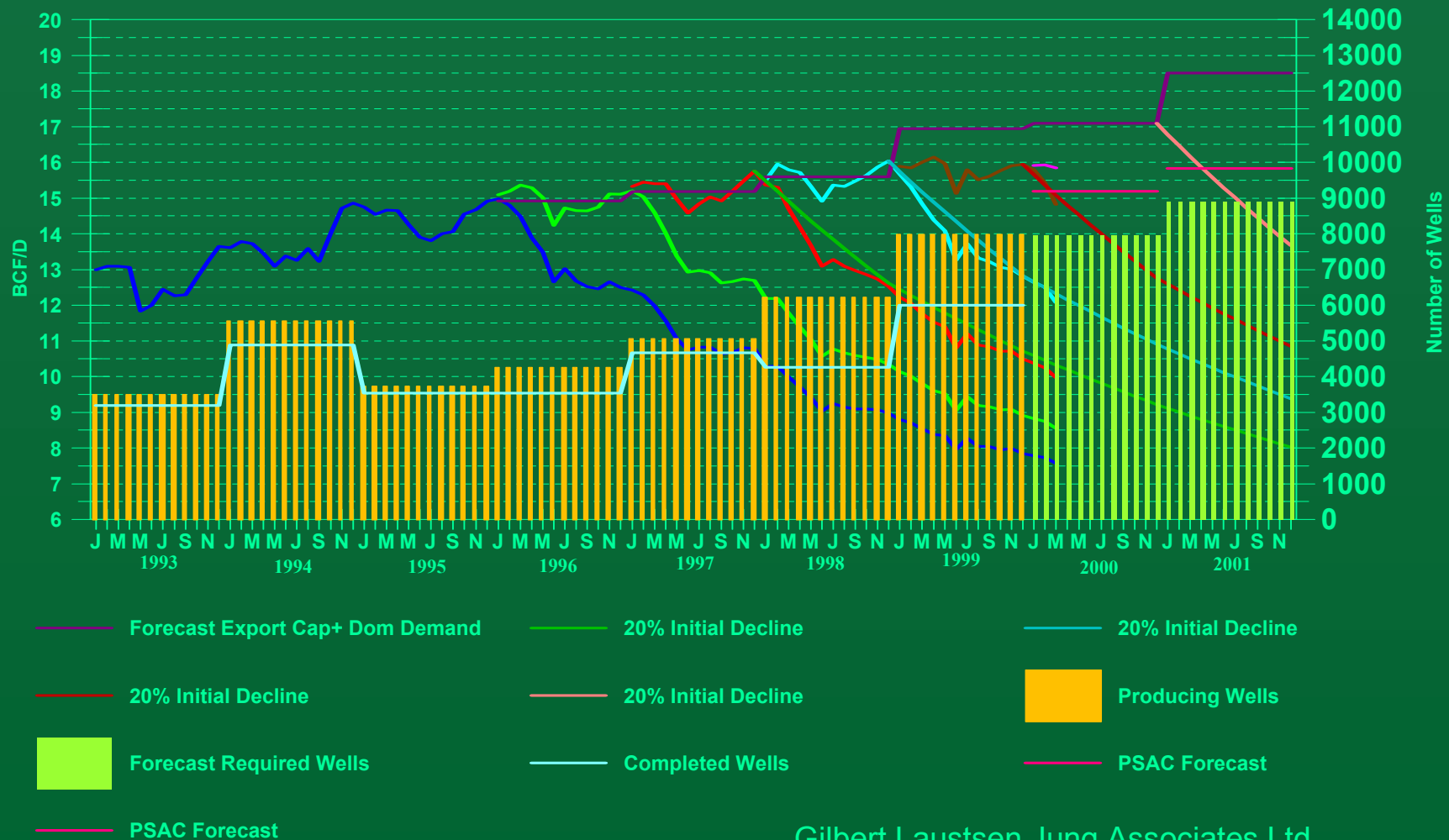


# Adjusted WCSB Production Daily Gas per Calendar Day Marketable



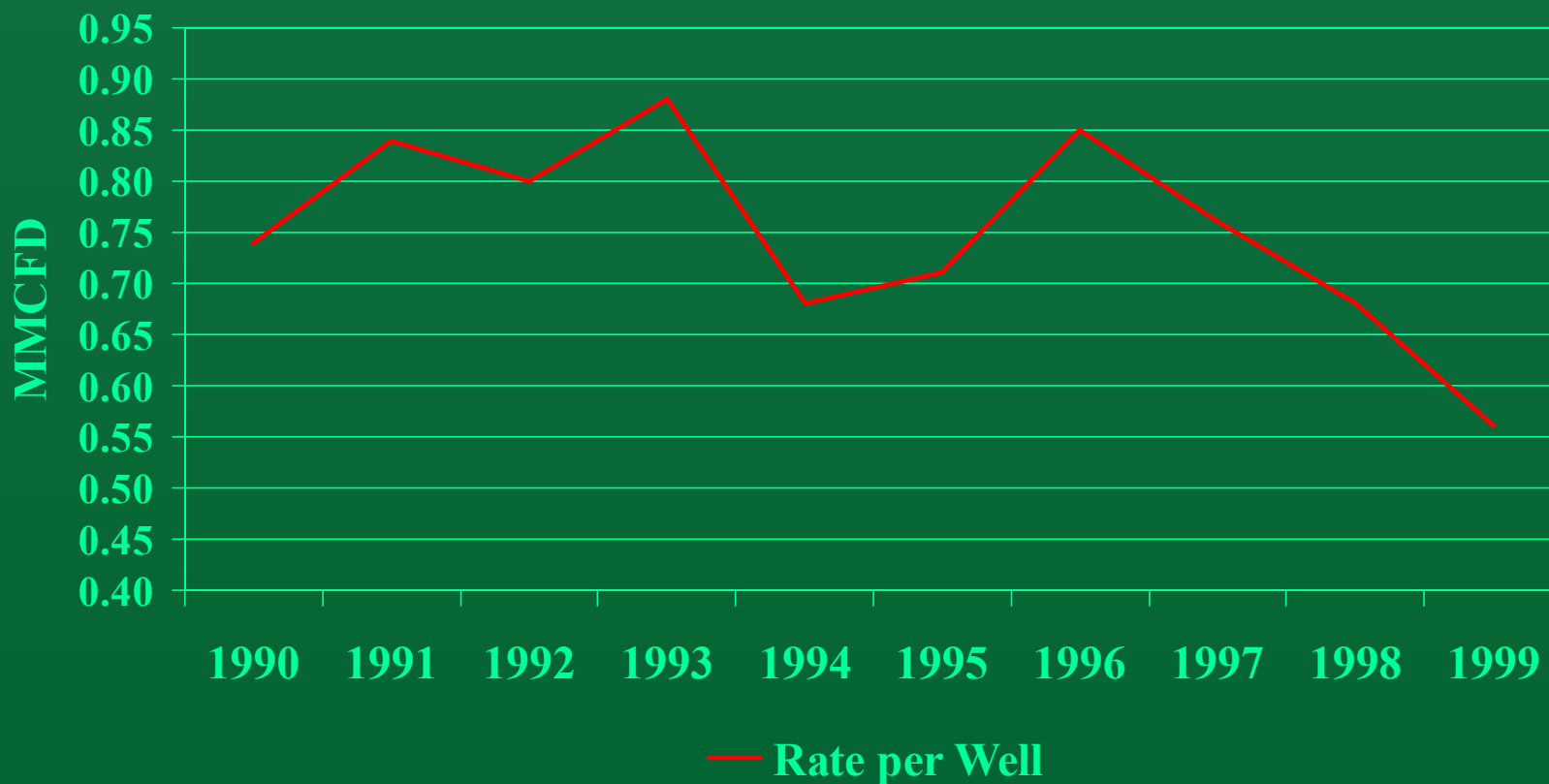
# Adjusted WCSB Production

## Daily Gas per Calendar Day Marketable

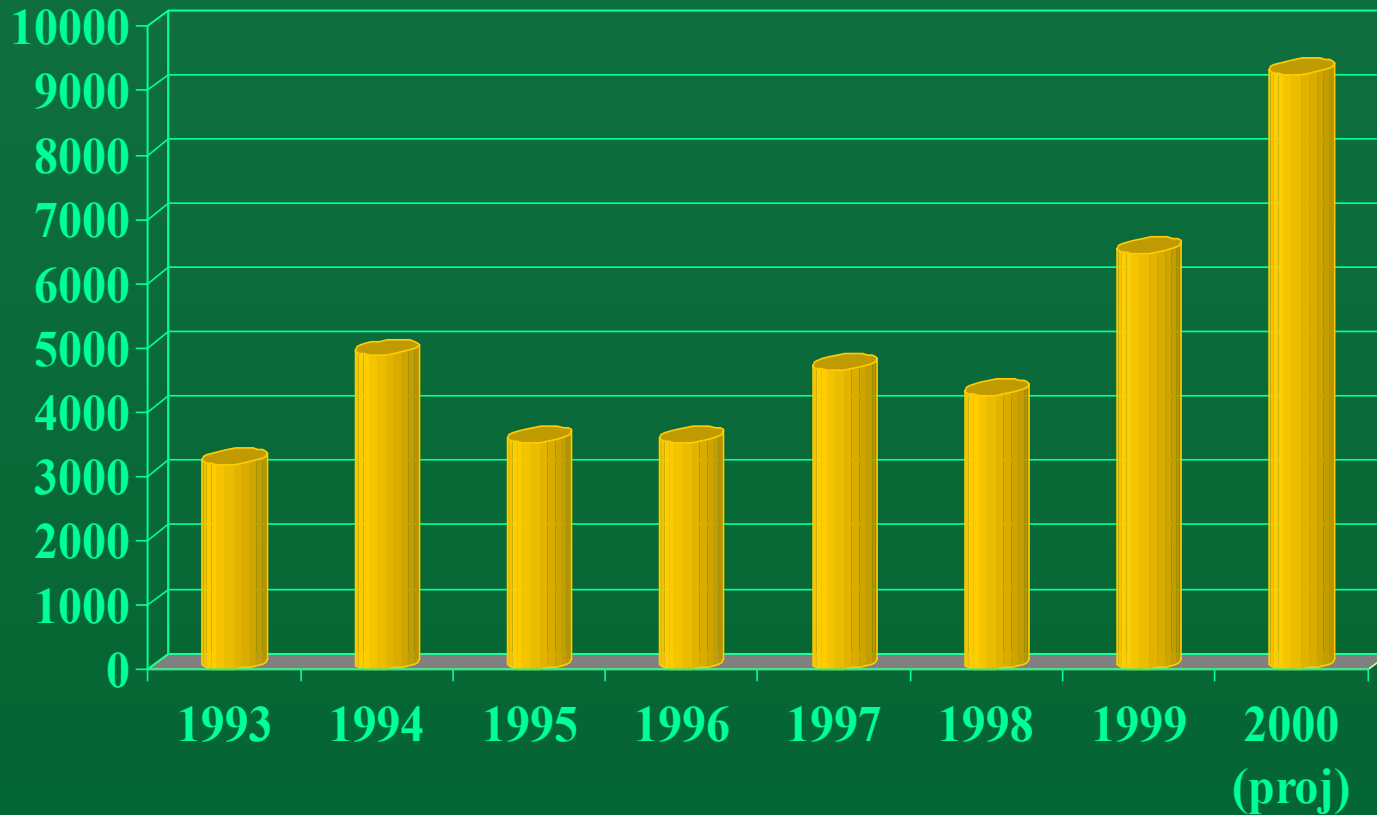


# Total WCSB

## Estimated First Year Raw Gas Rates

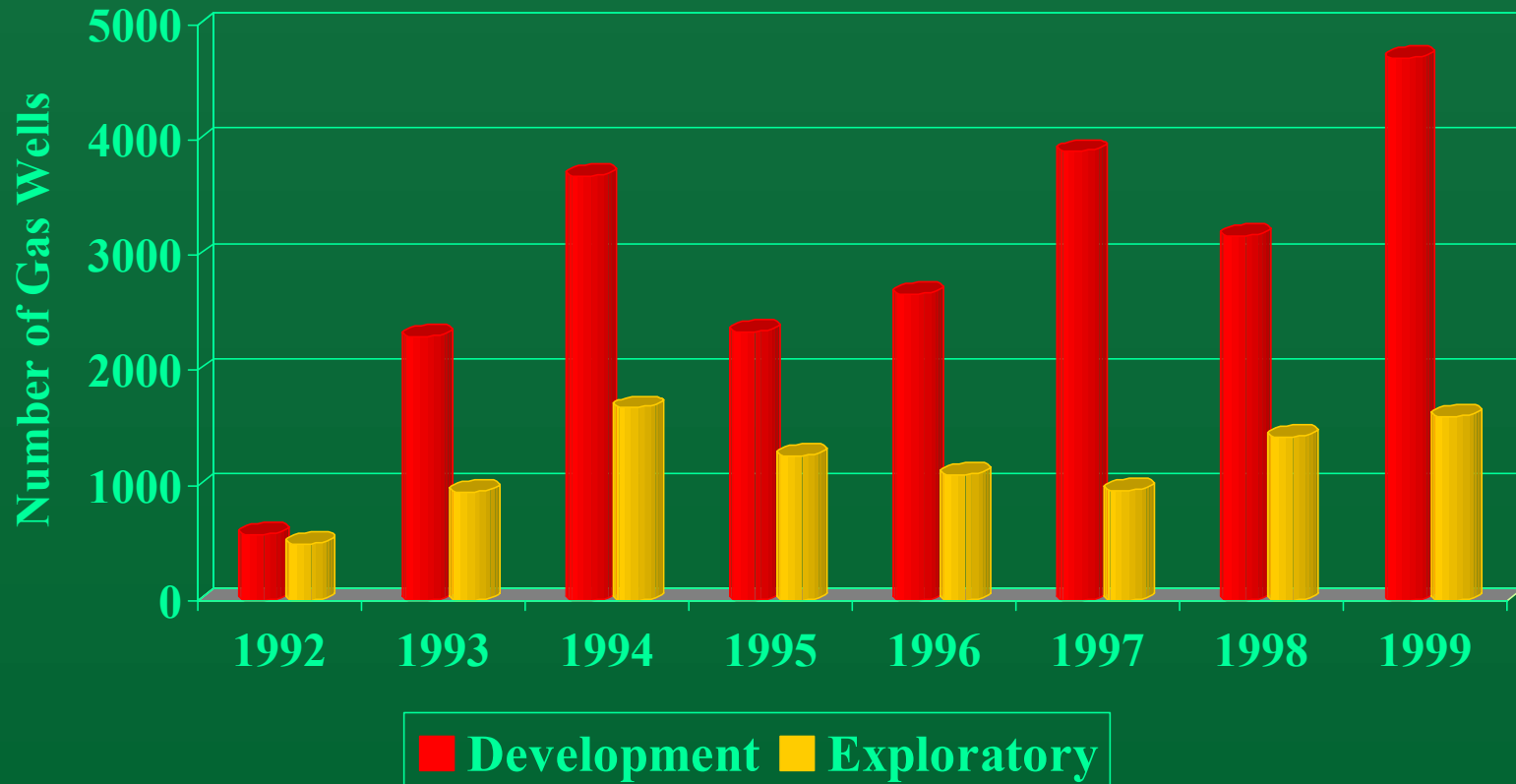


# WCSB Natural Gas Drilling Activity

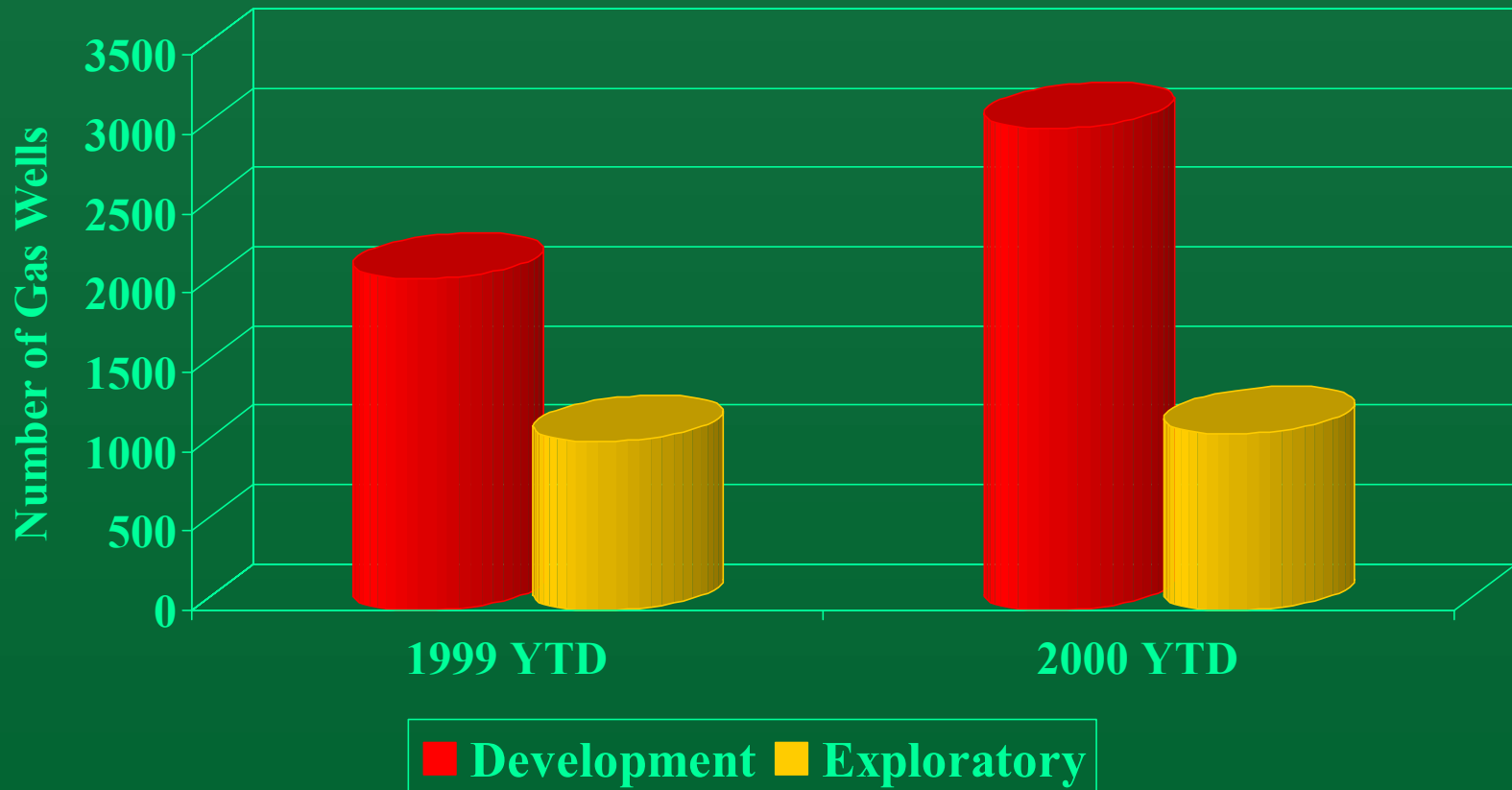


Source: PSAC

# Natural Gas Well Completions By Type - Western Canada



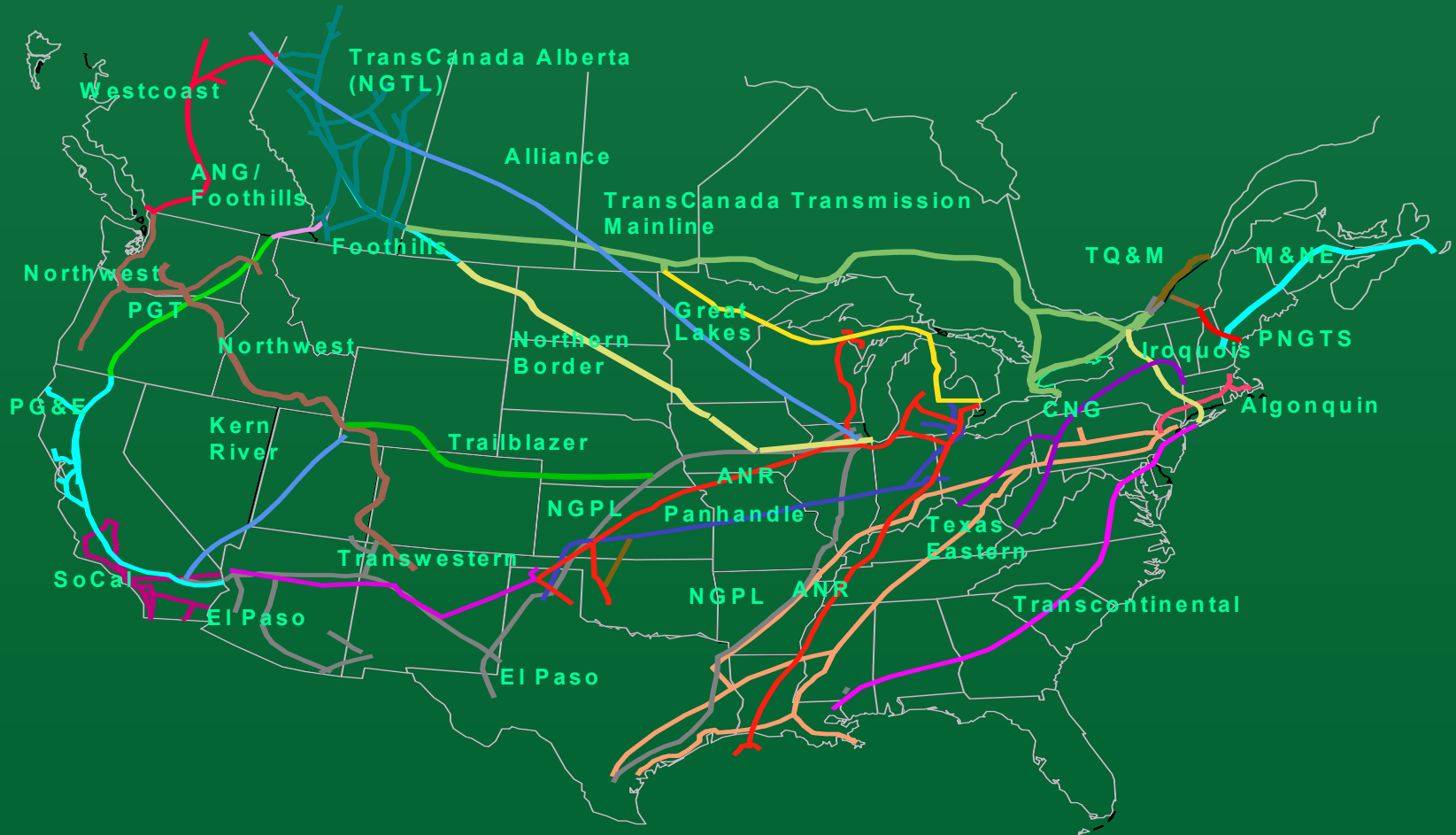
# Natural Gas Well Completions By Type - Western Canada



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# Export Capacity

# Natural Gas Transportation Grid



# Western Canada Supply and Demand - 1999

	Marketable Supply	Local Demand	Net Available for Export
	BCF/D	BCF/D	BCF/D
Alberta	12.89	1.97	10.92
B.C./Southern Territories	2.08	0.75	1.33
Saskatchewan	0.59	0.47	0.12
<b>Total</b>	<b>15.55</b>	<b>3.19</b>	<b>12.36</b>

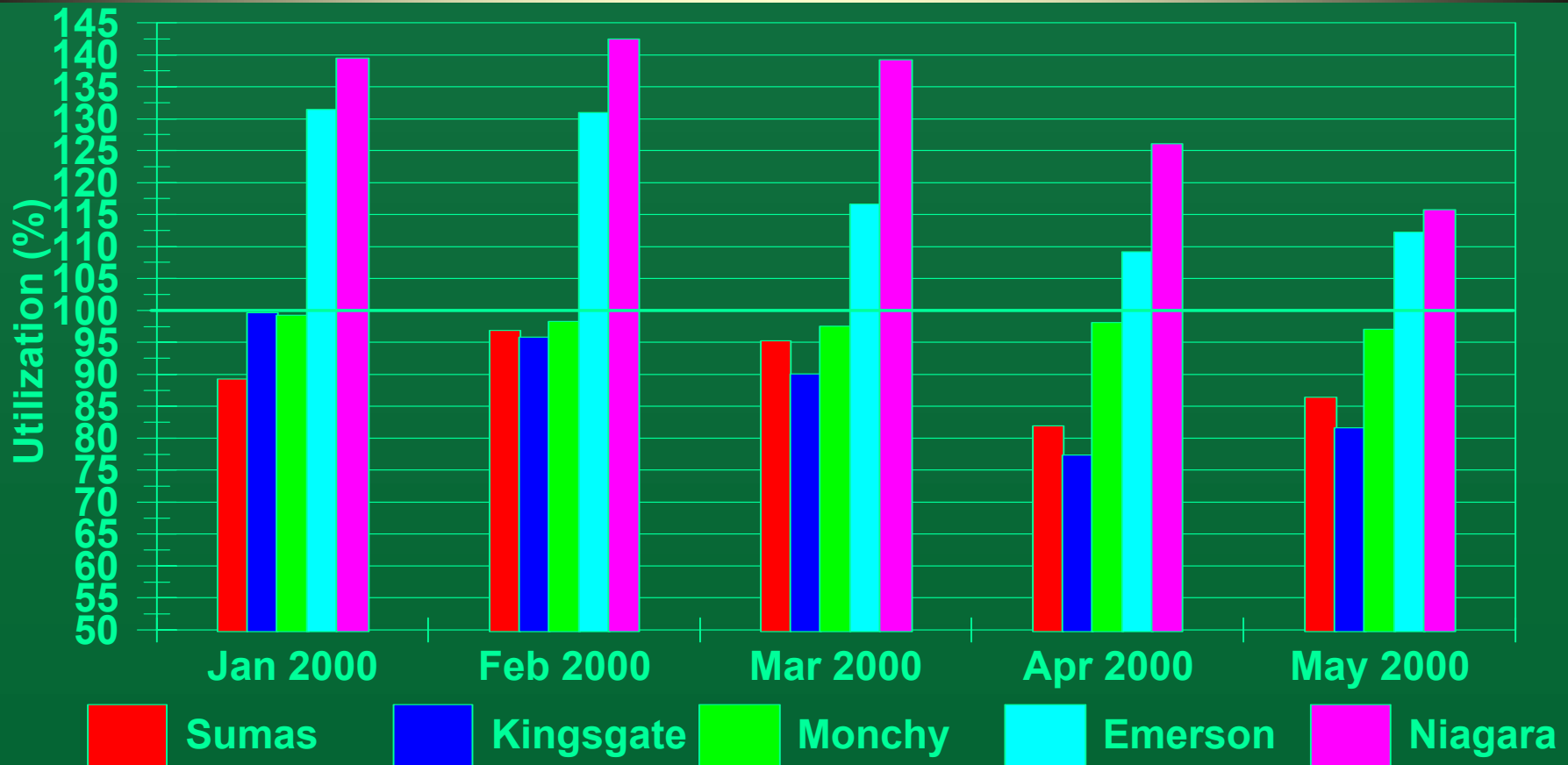
# Pipeline Capacity and Throughput - 1999

	Capacity	Throughput	Load Factor
	BCF/D	BCF/D	Percent
Sumas	1.05	1.04	99
Kingsgate	2.60	2.30	88
Empress (TCPL)	7.37	6.80	92
Empress (Foothills, Northern Border)	2.24	2.15	96
<b>Total</b>	<b>13.26</b>	<b>12.29</b>	<b>93</b>

# Canadian Natural Gas Exports Capacity Utilization by Export Point



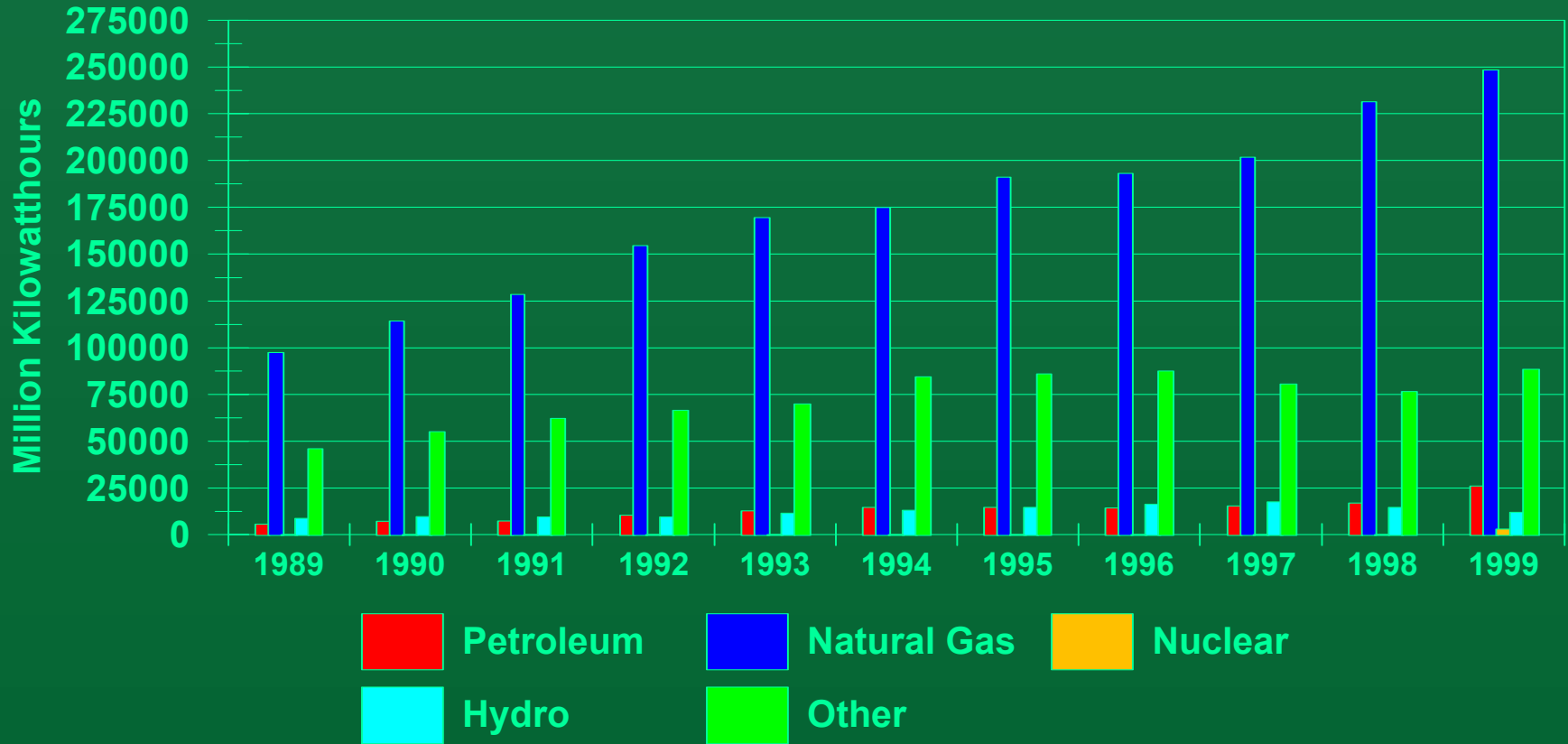
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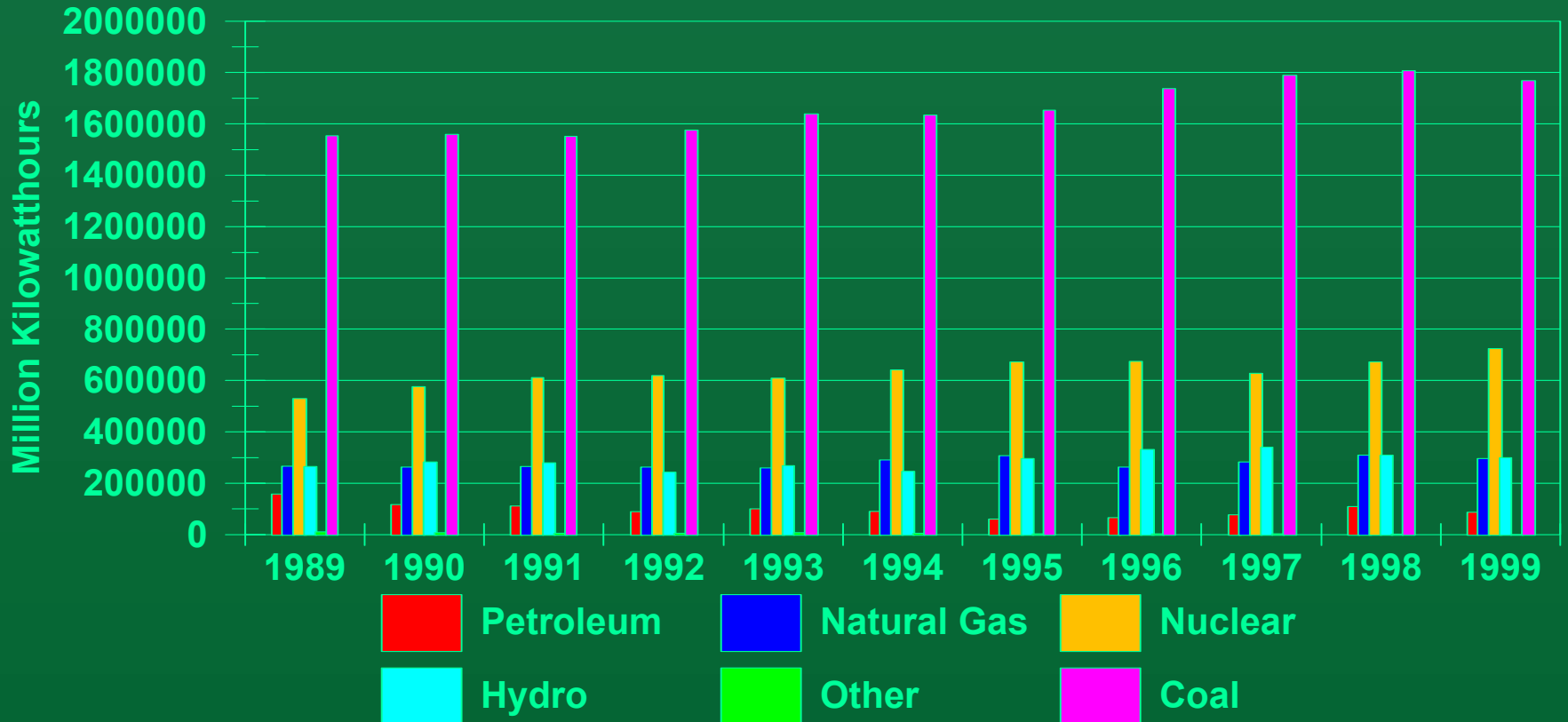
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# Demand

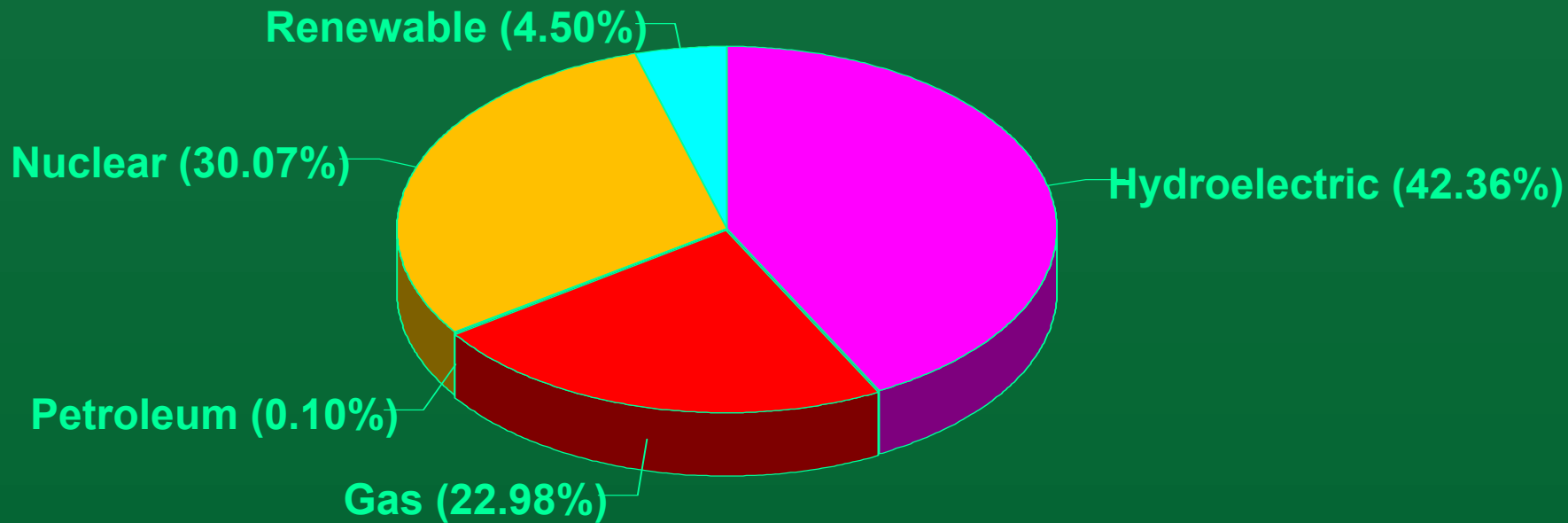
# U.S. Electricity Net Generation Nonutility Power Producers



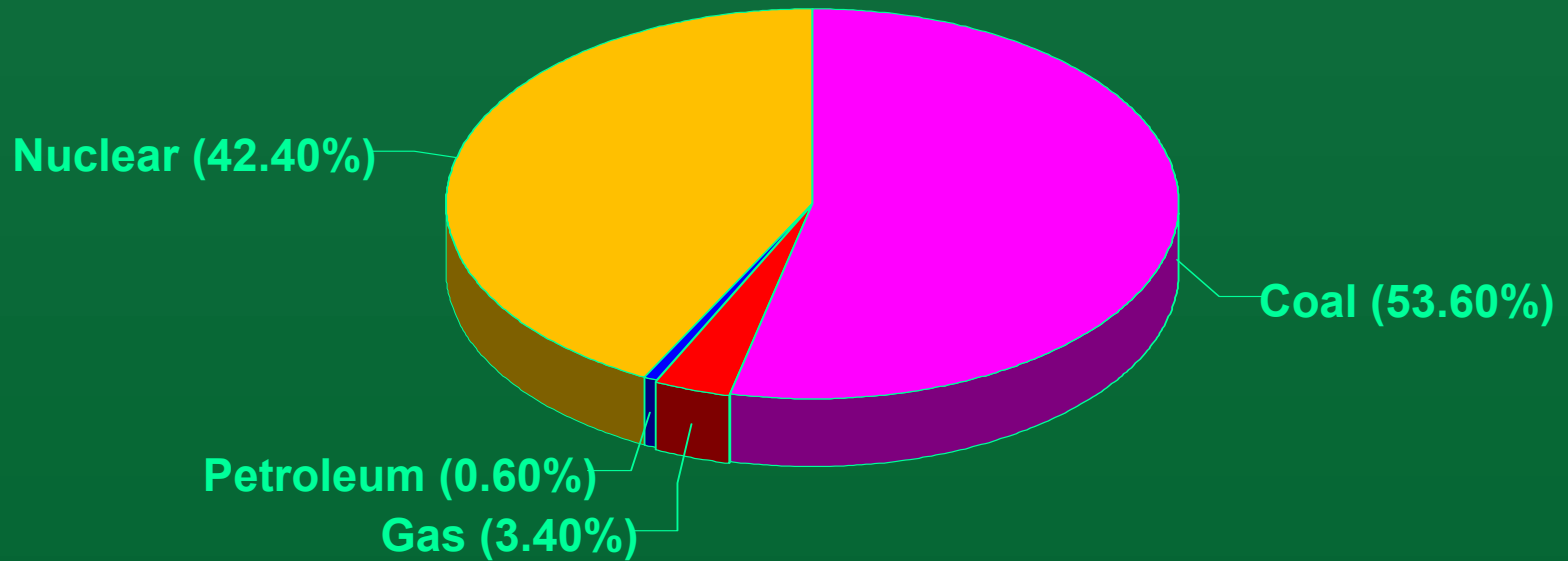
# U.S. Electricity Net Generation Electric Utilities



# Generation by Primary Energy- 1998 California



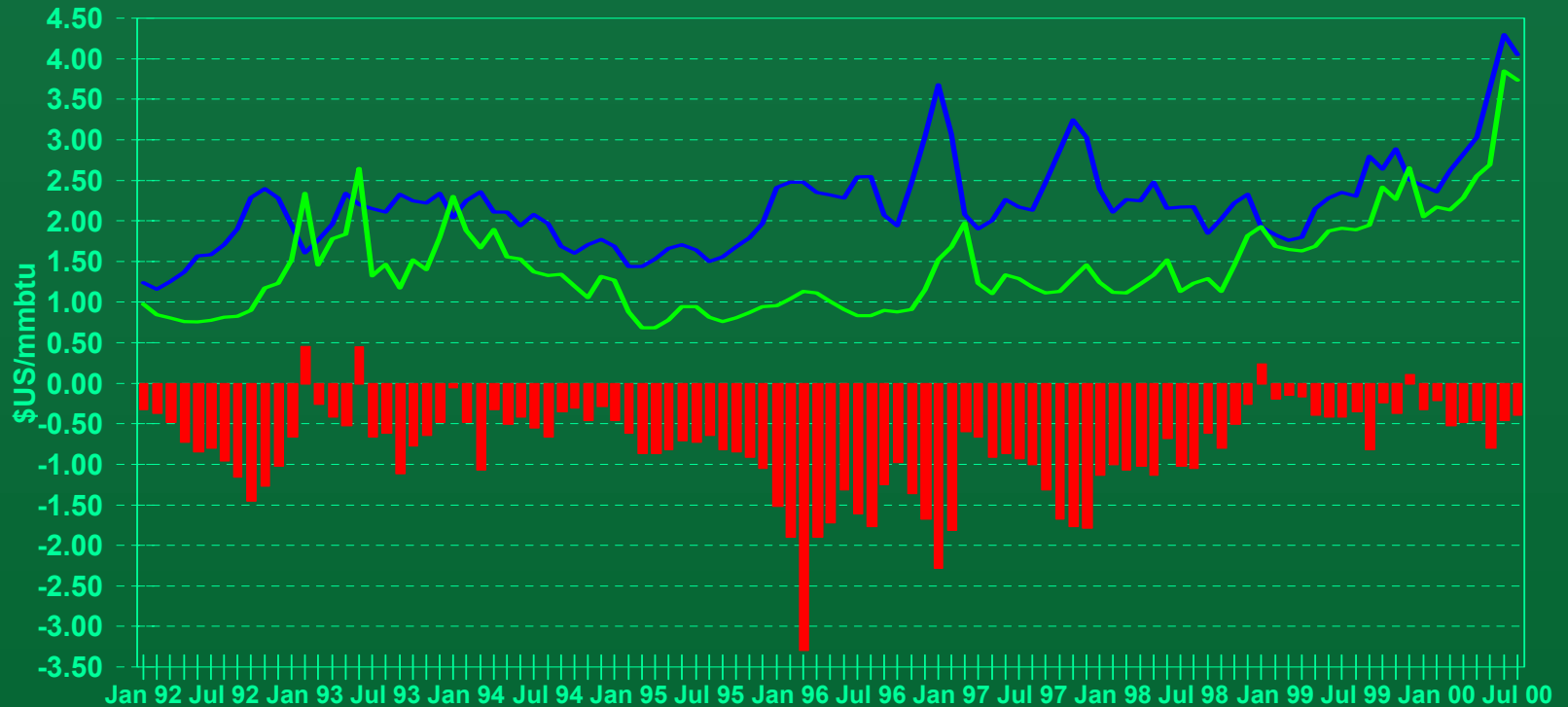
# Generation by Primary Energy- 1998 Illinois



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# The Affect of “Reconnection” on Alberta Prices

# Henry Hub versus AECO



— NYMEX 30 Day Futures

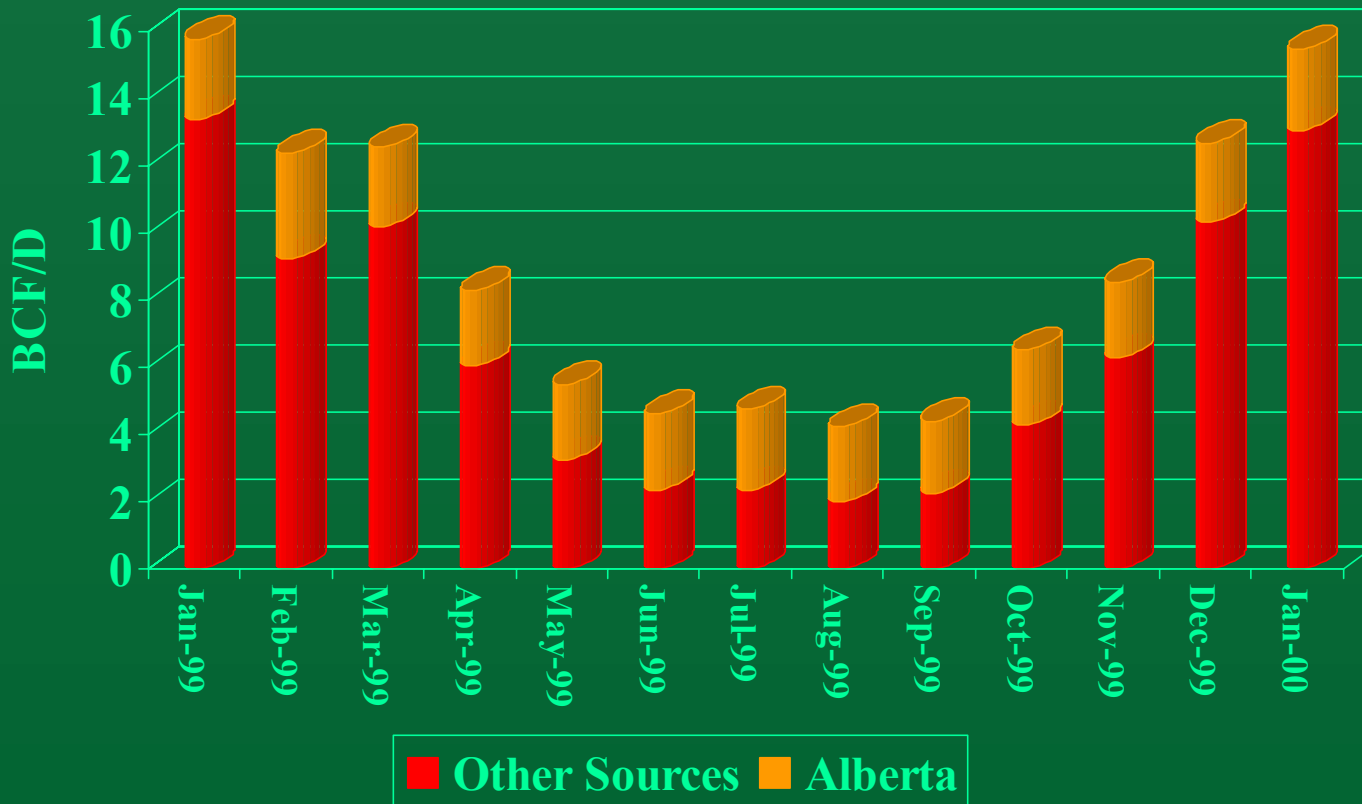
— Alta Spot @ AECO

■ AECO vs Henry Hub Basis Differential

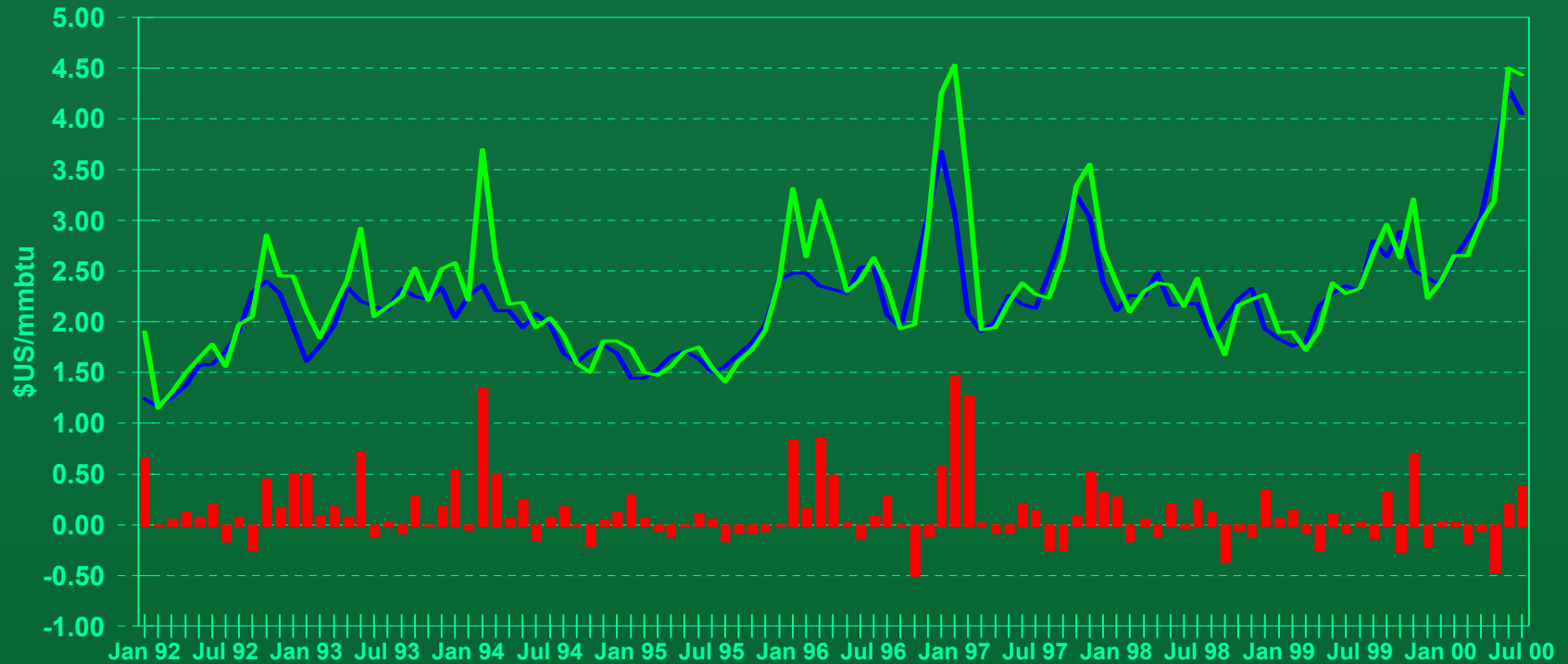
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# The “New” Midwest Hub

# Natural Gas Consumption - Midwest Region



# Henry Hub versus Chicago

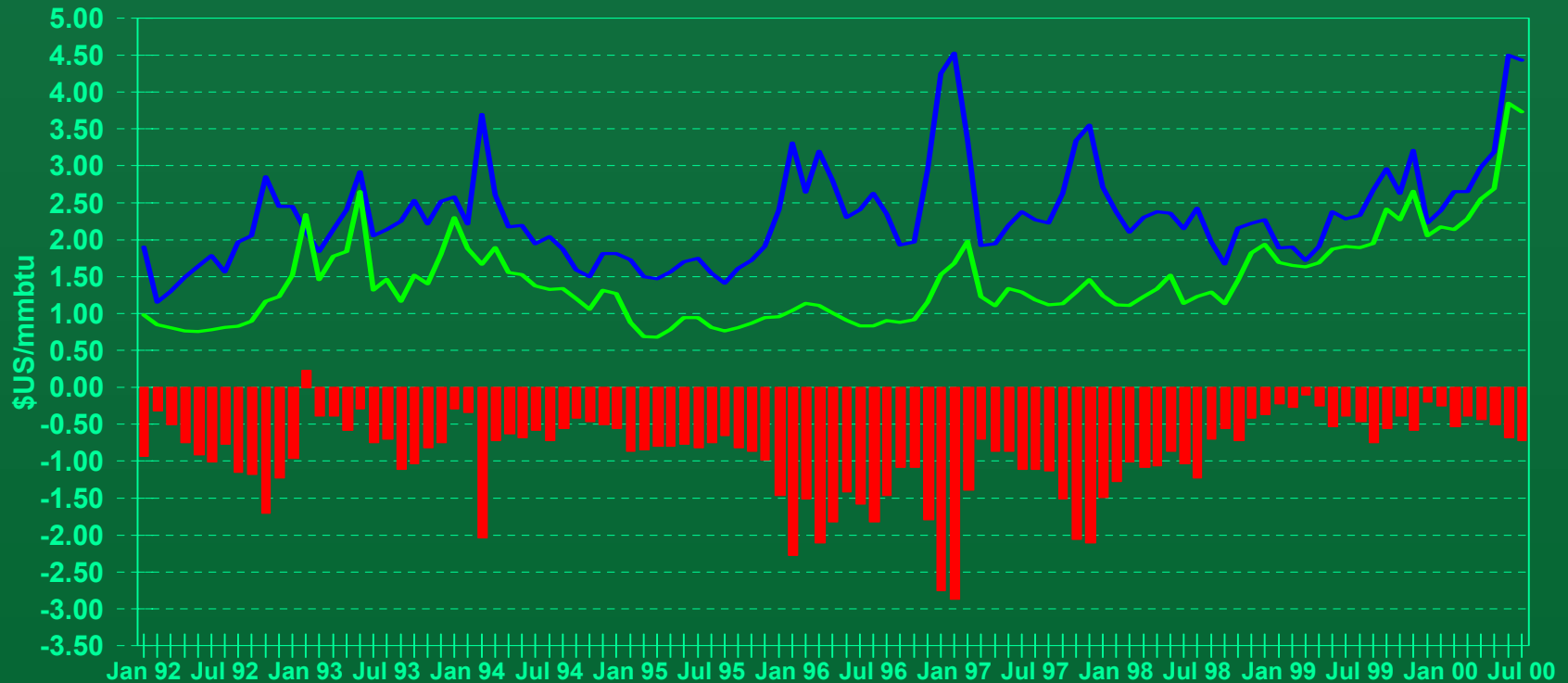


— NYMEX 30 Day Futures

— Midwest Spot @ Chicago

■ Chicago vs Henry Hub Basis Diff

# AECO versus Chicago

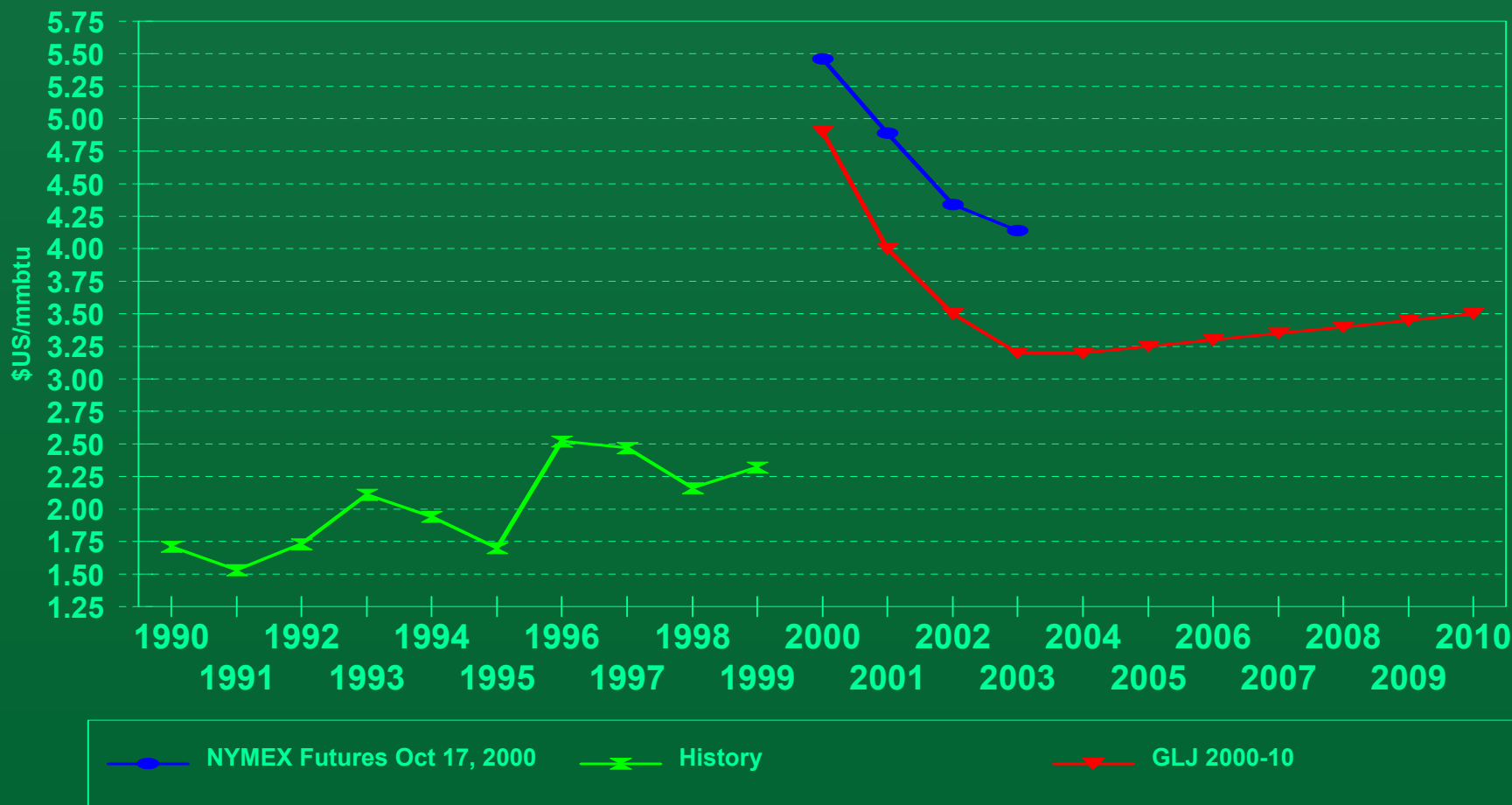


— Midwest Spot @ Chicago

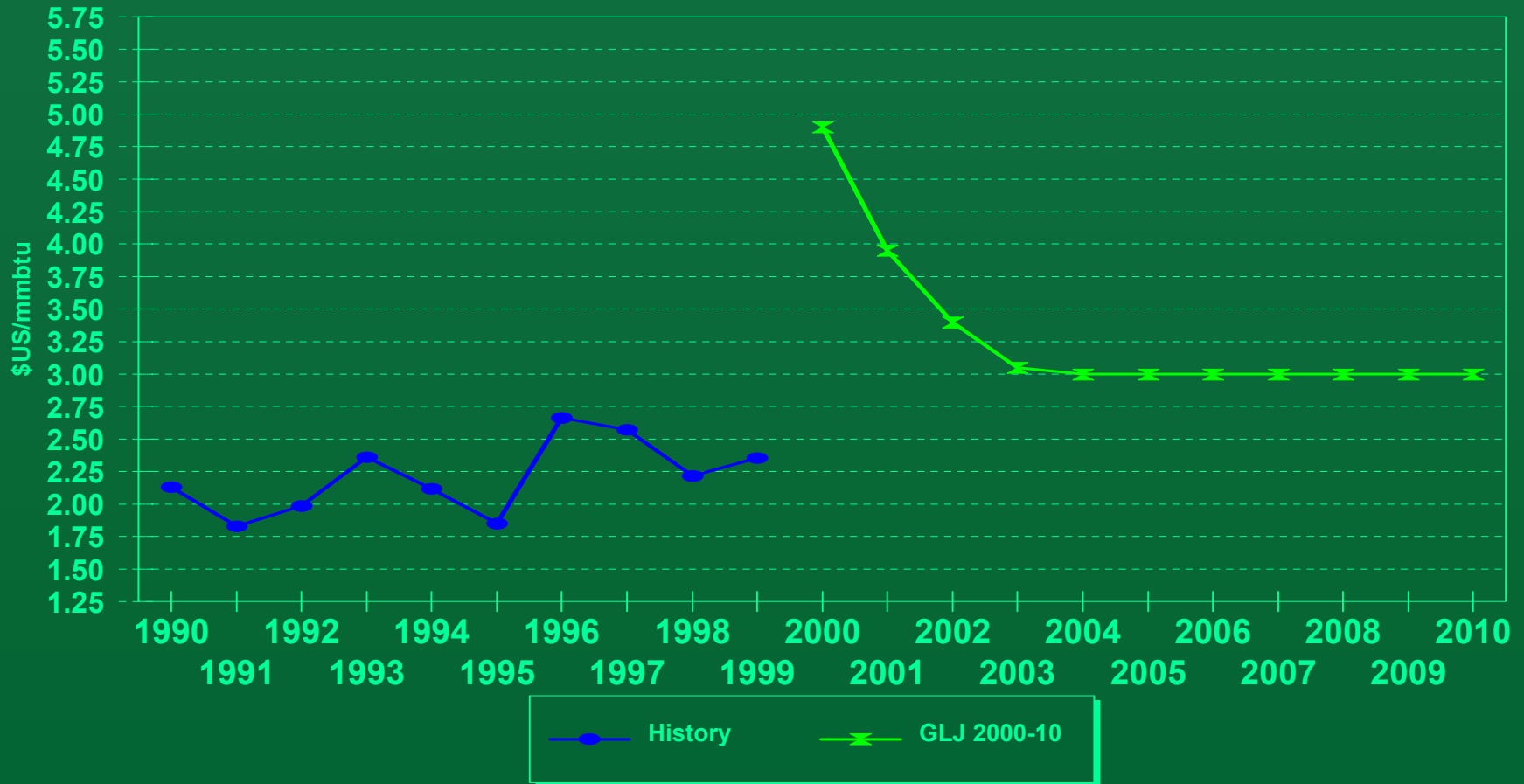
— Alta Spot @ AECO

■ AECO vs Chicago Basis Differential

# US Gulf Coast Natural Gas Price @ Henry Hub (Nominal Dollars)



# US Gulf Coast Natural Gas Price @ Henry Hub (Constant 2000 Dollars)



# AECO-C Natural Gas Spot Price (Nominal Dollars)



# AECO-C Natural Gas Spot Price (Constant 2000 Dollars)

