# • CAN WE HAVE A BRIGHT NATURAL GAS FUTURE WITH NEAR-TERM UNCERTAINTY?

Presented by:

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GTI Baseline Center

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#### GAS PRICE FLY UP (\$/MMBtu)

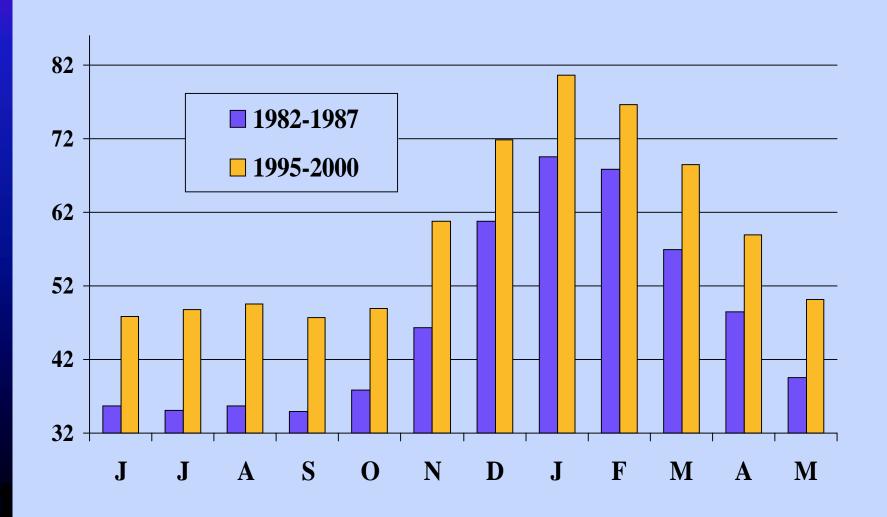


**Source: NYMEX Natural Gas Settle, First Month** 

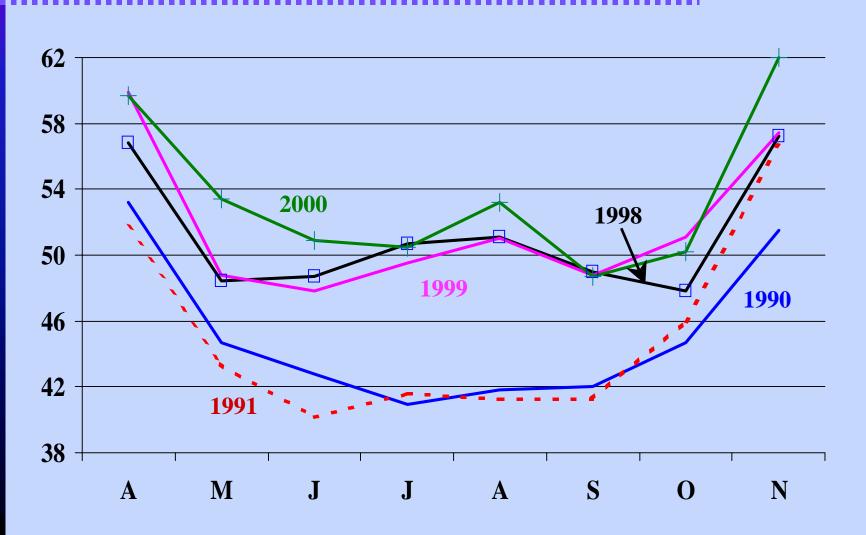
#### **CURRENT DEMAND SITUATION**

- Mild Or "Normal" Winter Weather In January, February, And March And Slowdown In Economic Activity Moderated Demand In Early 2001
- Growing Gas Demand For Power Generation Still Driver Of Market, But Growing Interest In Coal
- Economic Weakness Will Help Industry Adjust In Near Term
- Clear Evidence Of Growing Summer Demand Spike Will Compete With Storage Injections For Supply And Hold-Up Prices
- Potential Demand Spike Looms In 2002

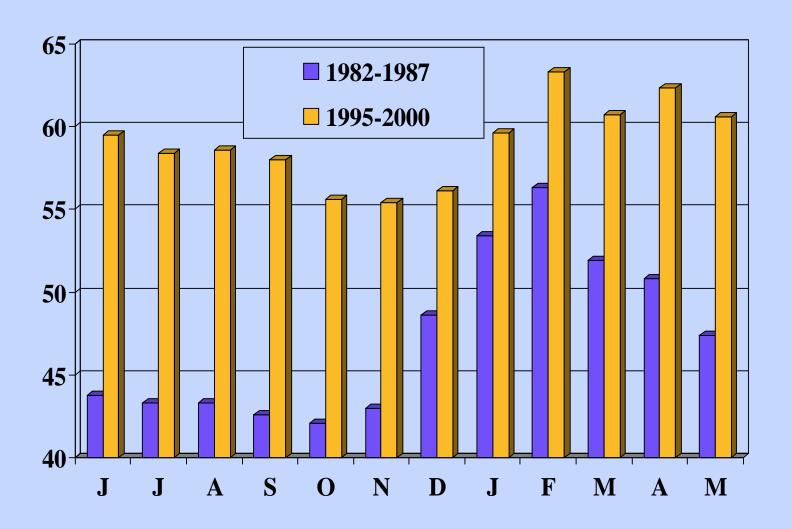
# MONTHLY GAS DEMAND (5-Year Average, Bcf/d)



### GROWING SUMMER MINI-PEAK (Bcf/d)



# DELIVERED GAS (5-Year Average, Bcf/d)



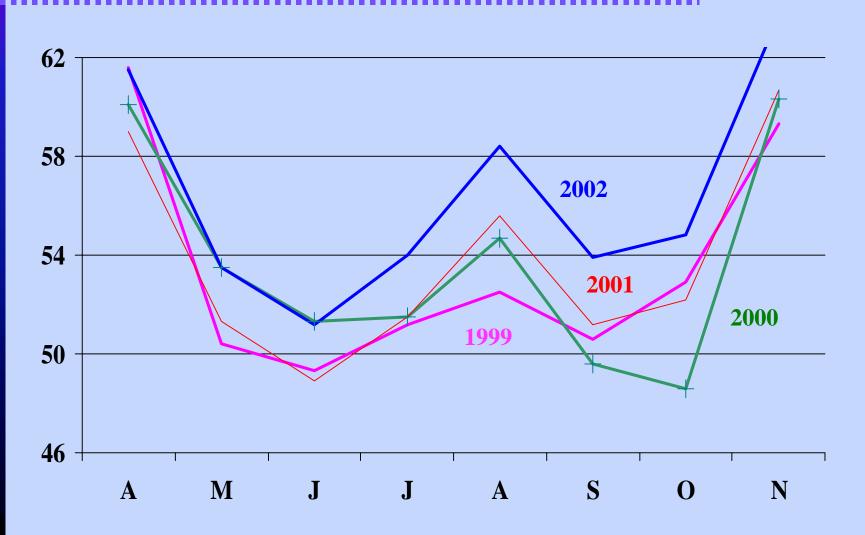
#### NEW MERCHANT CAPACITY IMPACT ON DEMAND: BASE CASE ASSUMPTION

	<u>MW</u> *	INCREMENTAL CONSUMPTION (Bcf)**	CUMULATIVE CONSUMPTION (Bcf)**
2000	20,604	437	437
2001	22,309	474	911
2002	21,372	454	1,365
2003	24,120	512	1,877

<sup>\*</sup> Includes only facilities that are under construction and have regulatory approval.

<sup>\*\*</sup>Assumes heat rate of 8,000 Btu/kWh, 40% utilization factor, and 22% offset of existing gas demand.

### GROWING SUMMER MINI-PEAK (Bcf/d)



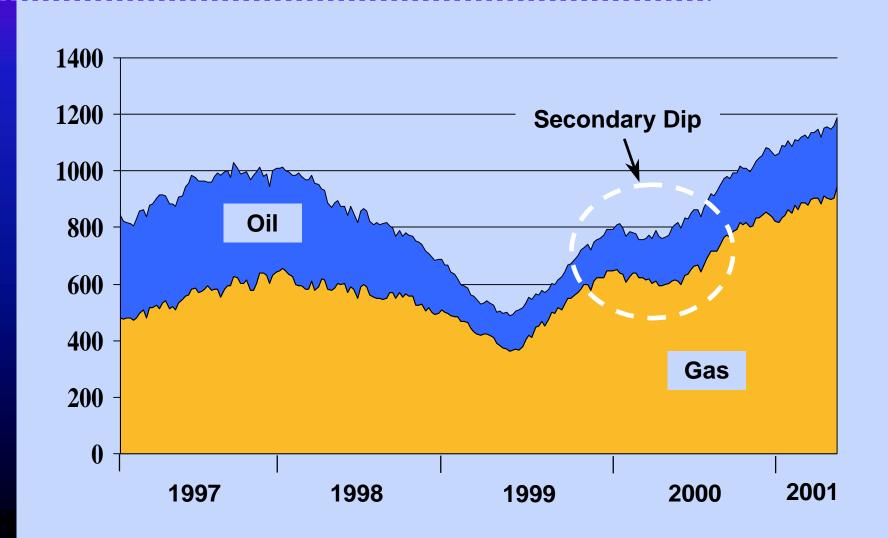
### NEWLY ANNOUNCED COAL-FIRED POWERPLANTS (MW)



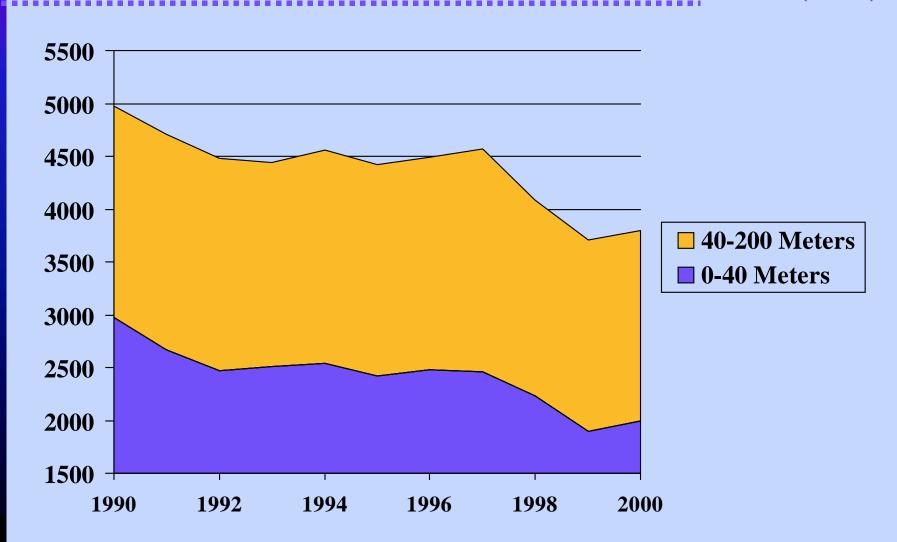
#### **CURRENT SUPPLY SITUATION**

- Production Situation Improving Gradually, Expect
   More Rapid Improvement In 2001
  - Visible Production Increase In Fourth Quarter Of 2000
- Lower-48 Takes Still Running At Over 98 Percent Of Deliverability In 2000
- Storage Situation Has Improved Rapidly
  - Milder Weather In Early 2001
  - Slowdown In Economic Activity
- However, Injections Will Have To Run At Close To Historically High Levels This Summer For Storage To Complete Recover

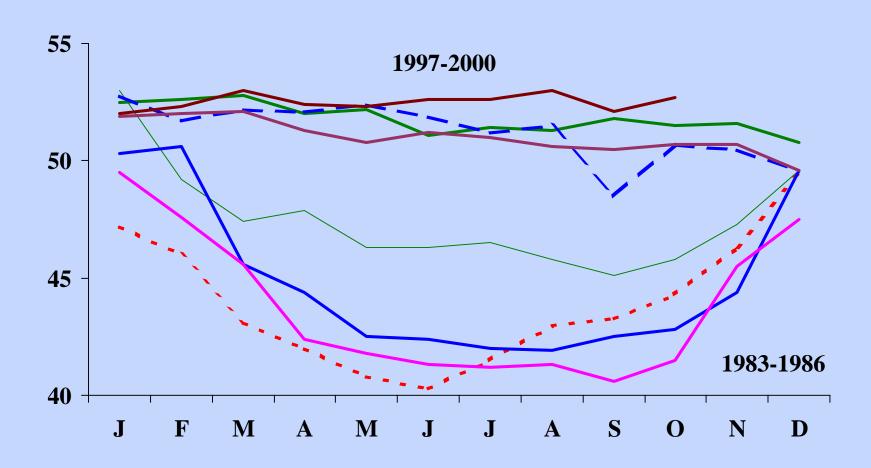
#### **BAKER HUGHES RIG COUNT: 1997-2001**



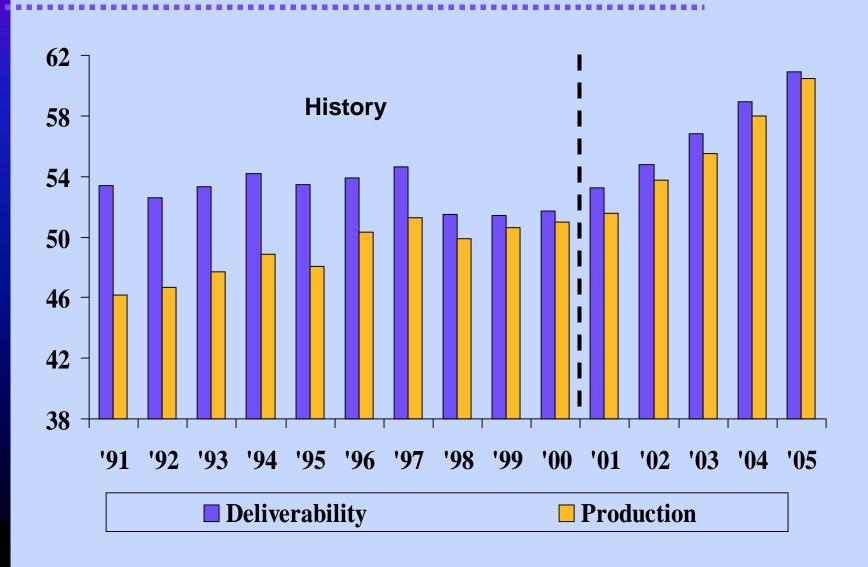
### HISTORICAL GAS PRODUCTION BY WATER DEPTH IN GULF OF MEXICO (Tcf)



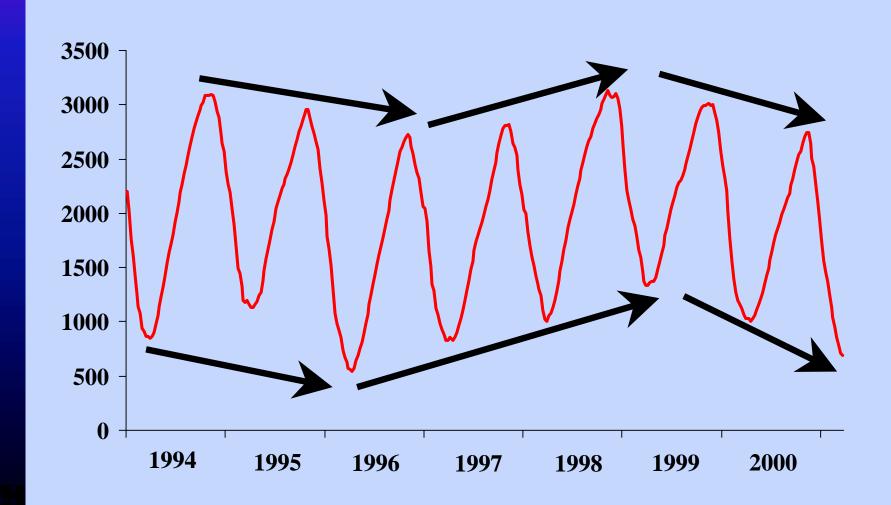
### LOWER-48 DRY GAS PRODUCTION (Bcf/d)



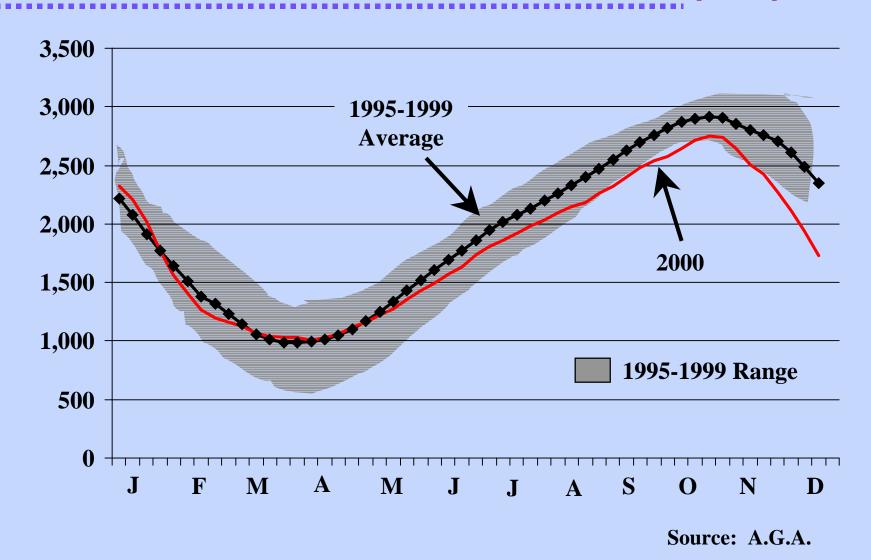
### LOWER-48 GAS DELIVERABILITY & PRODUCTION (Bcf/d)



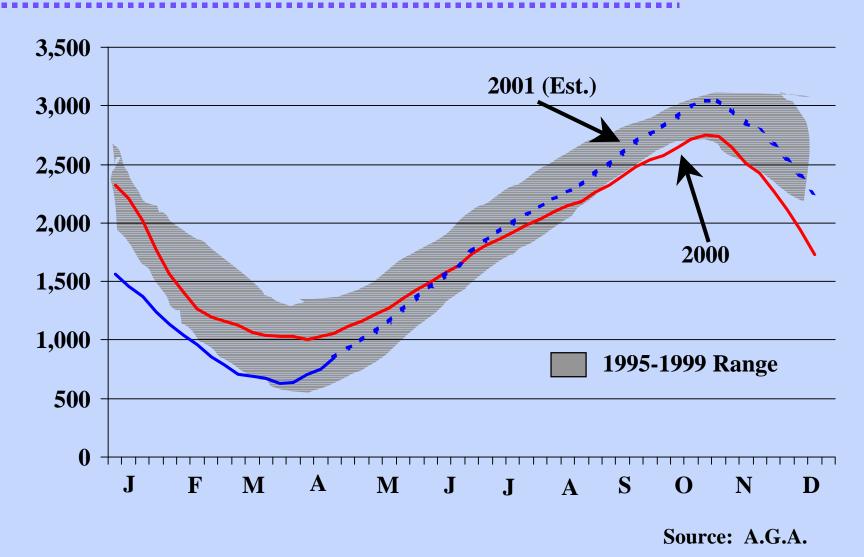
# HISTORICAL U.S. WORKING GAS STORAGE TRENDS (Bcf)



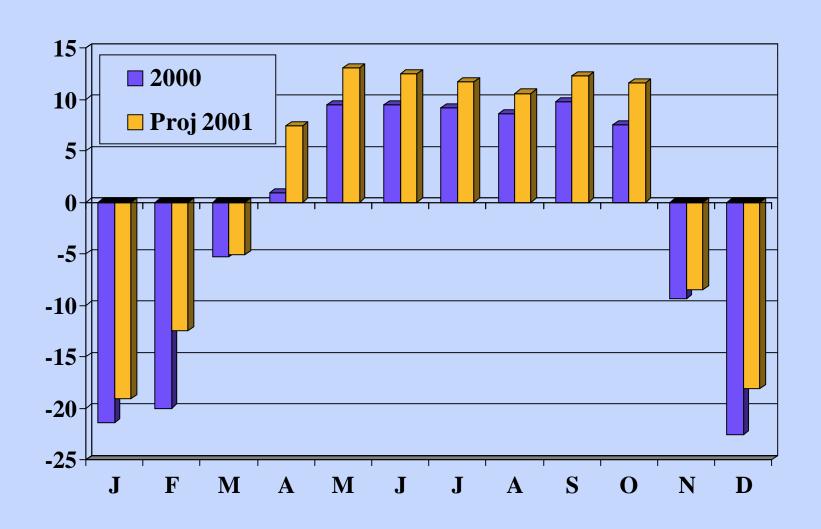
# U.S. WORKING GAS STORAGE TRENDS--2000 VERSUS 1995-99 AVERAGE (Bcf)



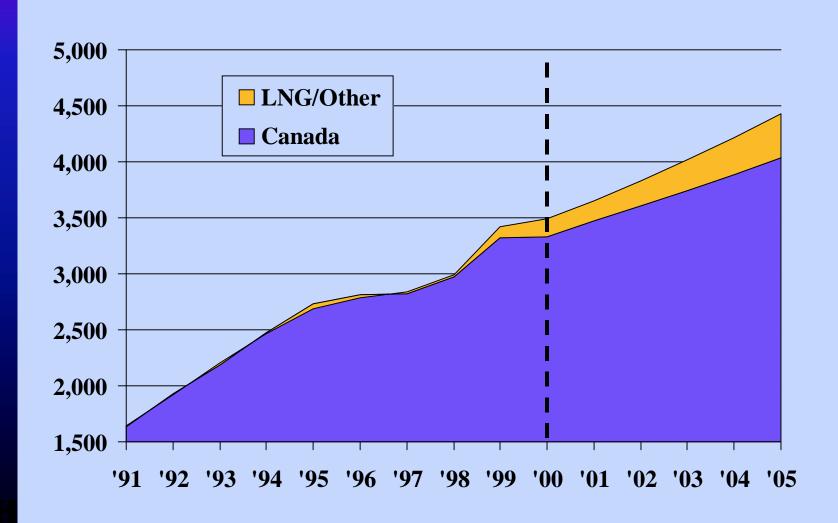
# U.S. WORKING GAS STORAGE TRENDS--BASE CASE SCENARIO (Bcf)



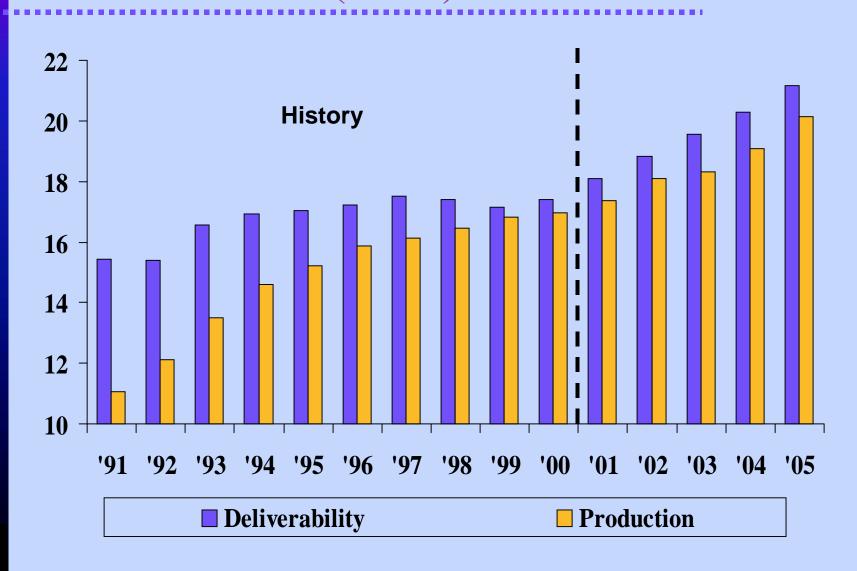
# COMPARISON STORAGE INJECTIONS AND WITHDRAWALS (Bcf/d)



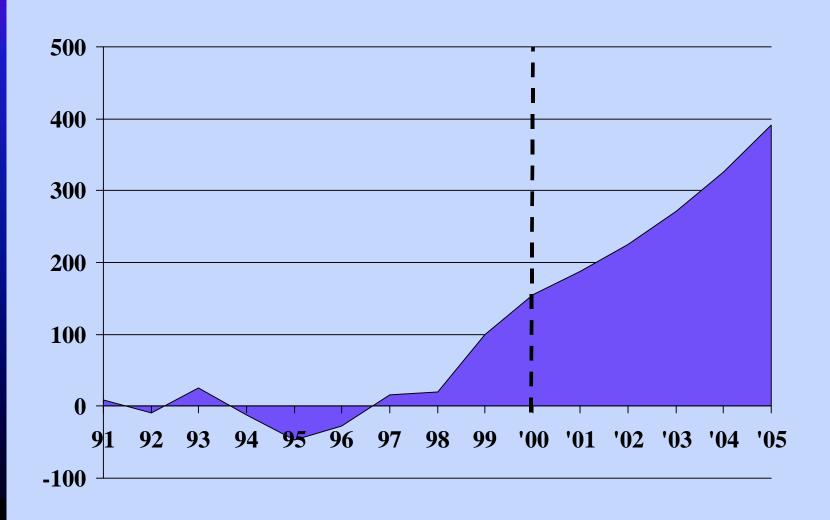
#### **GROWTH IN NET IMPORTS (Bcf)**



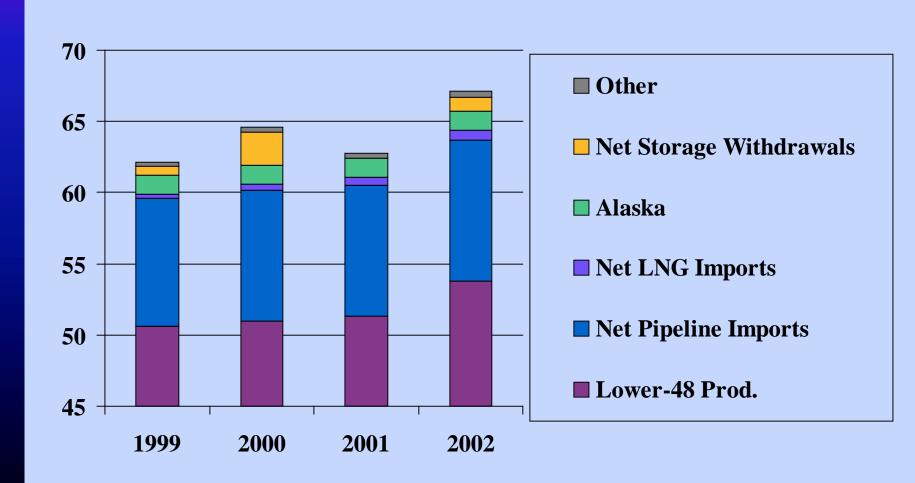
### CANADIAN GAS DELIVERABILITY & PRODUCTION (Bcf/d)



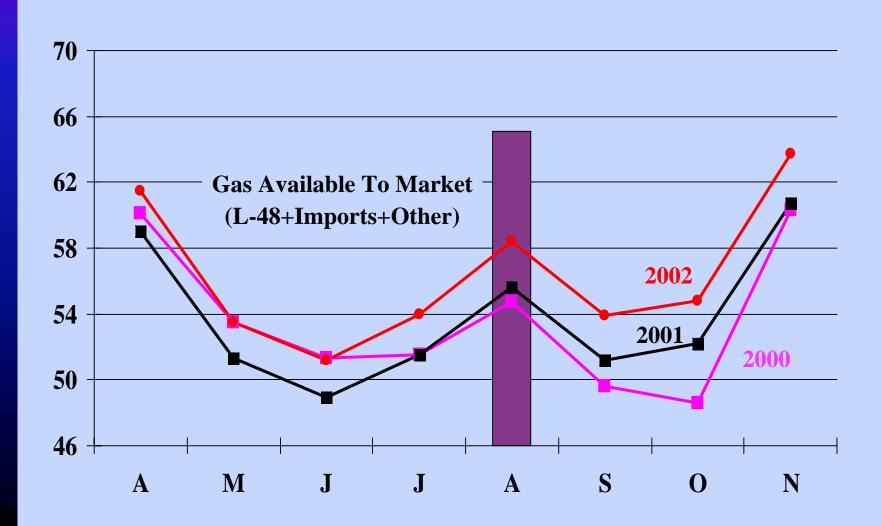
#### **NET LNG IMPORTS (Bcf)**



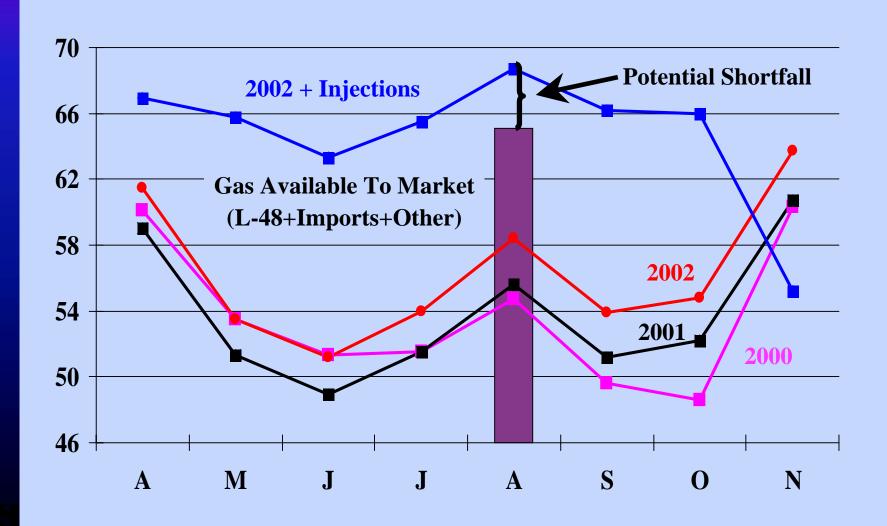
#### GAS SUPPLY BY COMPONENT (Bcf/d)



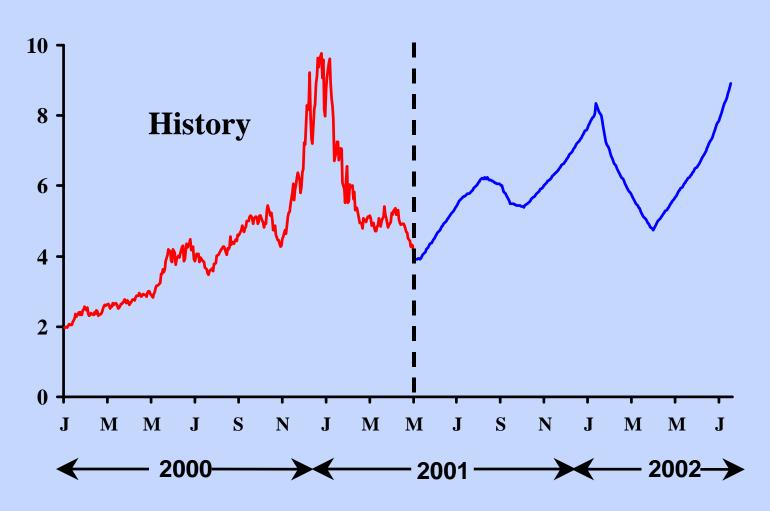
#### SUMMER PEAK DEMAND VERSUS DELIVERABLE GAS (Bcf/d)



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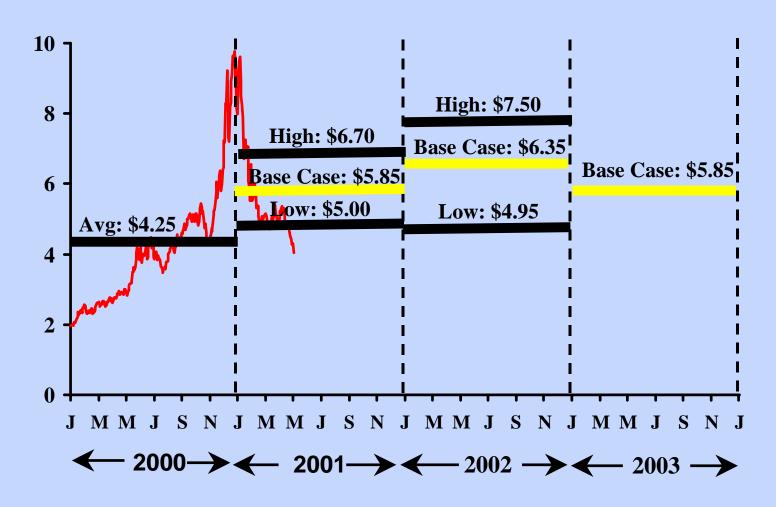


#### WELLHEAD GAS PRICE TRENDS: BASE CASE (\$/MMBtu)



Source: NYMEX Natural Gas Settle, First Month And GRI

### WELLHEAD GAS PRICE SCENARIOS (\$/MMBtu)



Source: NYMEX Natural Gas Settle, First Month And GRI

#### **CONCLUSIONS**

- Demand Growth For Power Generation Being Moderated By High Prices. But, New Coal Won't Have Impact Until Post-2002. Pretty Much Gas Only For Now
- Wellhead Deliverability Is Improving Only Gradually, Expect More Substantial Improvement Post 2003
- Storage Is Recovering More Rapidly Than Previously Anticipated
- High Level Of Storage Injections And Growing Summer Peak Will Push Up Gas Prices Creating Second Seasonal Spike
- Little Hope For Price Relief Prior To 2004