Natural Gas Outlook

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Presentation Coverage

• Short-term Outlook
  - Supply
  - Consumption
  - Prices
Short-Term Outlook for Natural Gas

- **SUPPLY**: Cautious Optimism because of the following expectations
  - Production increases in ’03 (result of improved drilling activity)
  - Net imports (including LNG) increase in 2004
  - Storage adequate at start winter 2003 (3 Tcf)

- **CONSUMPTION**: Little change in totals for 2003, 2004

- **WELLHEAD PRICE**: $4.88 per Mcf in 2003, $3.97 in 2004

- **CONSUMER PRICES**: higher this winter v. last;
  expect relief starting in 2Q 2004

- **CAVEAT**: Extremes in market or weather conditions could change this outlook.
U.S. Gas Production Is Expected to Increase in 2003 and Taper in 2004

Sources: EIA, *Short-Term Energy Outlook*, October 2003
Reserve Additions Outpaced U.S. Dry Natural Gas Production for 7 of Last 8 Years

Source: Energy Information Administration, U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves 2001 Annual Report
Gas Rigs Tend To Follow Spot Prices With A Lag

Working Gas in Underground Storage Compared with 5-Year Range

Sources: EIA, *Short-Term Energy Outlook*, October 2003
Natural Gas Import Sources

LNG Imports:
2002: 229 Bcf
2003: 540 Bcf
2004: 640 Bcf

Sources: History: EIA; Projections: Short-Term Energy Outlook October, 2003.
Monthly Consumption, Production and Net Imports

Consumption

Net Imports

Production

Projection

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<tr>
<th></th>
<th>Total Tcf</th>
<th>Daily Bcf/d</th>
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<tbody>
<tr>
<td>2002</td>
<td>22.5</td>
<td>61.6</td>
</tr>
<tr>
<td>2003</td>
<td>22.3</td>
<td>61.1</td>
</tr>
<tr>
<td>2004</td>
<td>22.4</td>
<td>61.4</td>
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Source: EIA, Short-Term Energy Outlook, October 2003
Natural Gas Spot Prices Are Expected to Average $4.50-$5.00 This Winter
(Base Case and 95% Confidence Interval*)

Average Spot Price:
- about $5.30 /Mcf in 2003
- about $4.40 /Mcf in 2004

*The confidence intervals show +/- 2 standard errors based on the properties of the model. The ranges do not include the effects of major supply disruptions.

Sources: History: EIA; Projections: Short-Term Energy Outlook, October 2003.
Total Natural Gas Demand Is Expected to Remain Flat For the Next Two Years

Sources: History: EIA; Projections: Short-Term Energy Outlook, October 2003.
Households Are Expected to Pay More For Gas Service This Winter

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<tbody>
<tr>
<td>Midwest</td>
<td>Actual</td>
<td>Actual</td>
<td>Actual</td>
<td>Actual</td>
<td>Forecast</td>
</tr>
<tr>
<td>Consumption (Mcf)</td>
<td>81.7</td>
<td>99.1</td>
<td>81.3</td>
<td>95.2</td>
<td>91.8</td>
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<tr>
<td>Avg. Price ($/Mcf)</td>
<td>6.69</td>
<td>9.53</td>
<td>7.38</td>
<td>8.39</td>
<td>9.52</td>
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<tr>
<td>Expenditures ($)</td>
<td>546</td>
<td>943</td>
<td>600</td>
<td>799</td>
<td>841</td>
</tr>
</tbody>
</table>

Summary

- Wellhead prices remain high and vulnerable to spikes resulting from developments like severe weather or disruptions in supplies.

- Storage is expected to be near the 5-year average level by Nov 1.

- LNG holds significant potential as a supply source.

- Consumers will pay more for gas this winter v. last. Rate reductions expected in 2004.

- A substantial boost in supplies from production or imports will take time and may require additional infrastructure.