

QUARTERLY FOCUS -- 1996: YEAR IN REVIEW

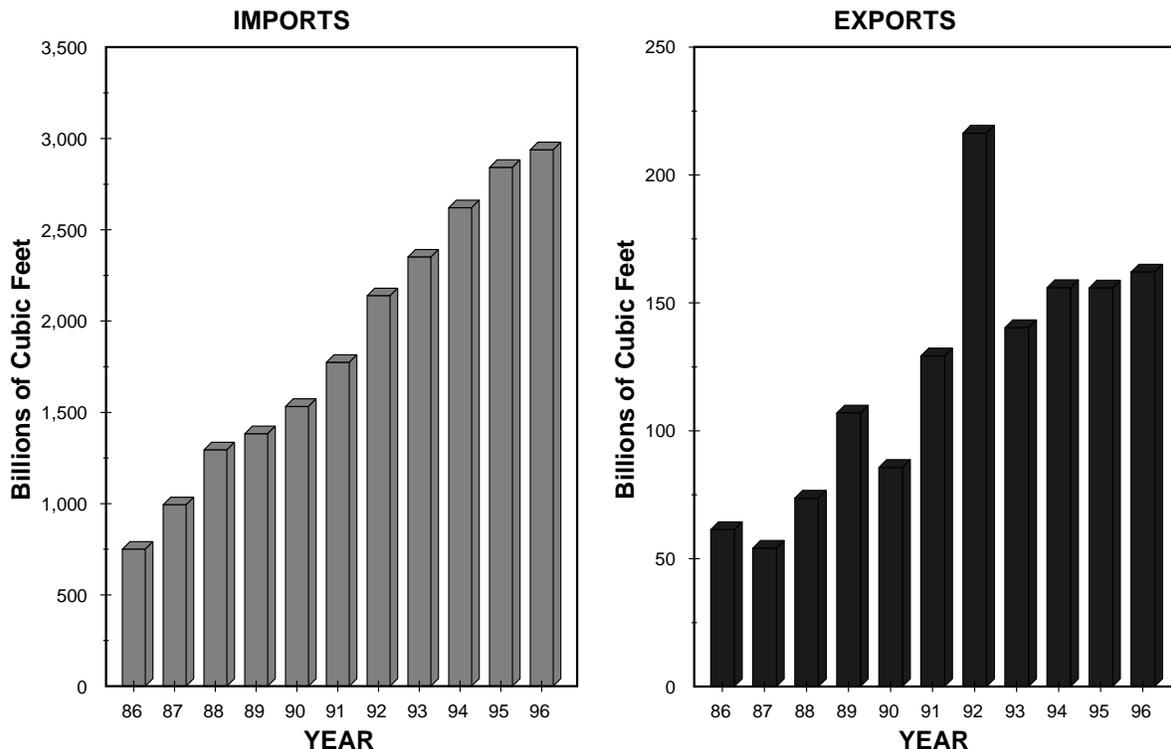
Table 1

--- YEAR AT A GLANCE ---		
<u>TOTAL IMPORTS*</u>		
<u>COUNTRY OF ORIGIN</u>	<u>BCF</u>	<u>WEIGHTED AVERAGE PRICE</u>
Canada	2883.3	\$1.92
Algeria	35.2	\$2.57 **
Mexico	13.9	\$2.22
Abu Dhabi	5.2	\$3.10 **
TOTAL	2937.6	
<u>TOTAL EXPORTS*</u>		
<u>COUNTRY OF DESTINATION</u>	<u>BCF</u>	<u>WEIGHTED AVERAGE PRICE</u>
Japan	67.7	\$3.61 ***
Canada	61.4	\$2.78
Mexico	33.8	\$2.09
TOTAL	162.9	
<p>* Data filed with DOE by importers/exporters.</p> <p>** Distrigas Corporation's average landed price for Algerian LNG was \$2.58 and \$3.10 for the volumes imported from Abu Dhabi. PanEnergy LNG Sales, Inc.'s average tailgate price for Algerian LNG was \$2.54.</p> <p>*** Delivered price.</p>		

- **Table 1** shows the volumes and prices of natural gas imports by country of origin, and natural gas exports by country of destination for 1996. The weighted average price for imports is the per unit price (MMBtu) at the point of entry into the United States. The price shown for exports is at the point of exit, with the exception of sales to Japan; the price of exports to Japan is shown as a delivered price.
- Natural gas imports, for the ninth consecutive year, reached an historic high in 1996. The United States imported 2,937.6 Bcf and exported 162.9 Bcf of natural gas, resulting in **net** imports of 2,774.7 Bcf for the year. This represents an increase of 91.3 Bcf, or 3.4 percent over the 1995 level (2,683.4 Bcf).
- In 1996, natural gas exports grew by 6.9 Bcf, or 4.4 percent over the 1995 level (162.9 v. 156 Bcf). Exports to Canada and Japan increased, while exports to Mexico declined substantially. Most of the increase in exports came from sales to Canada more than doubling (61.4 v. 29.2 Bcf).

Natural Gas Import and Export Activity 1986 - 1996

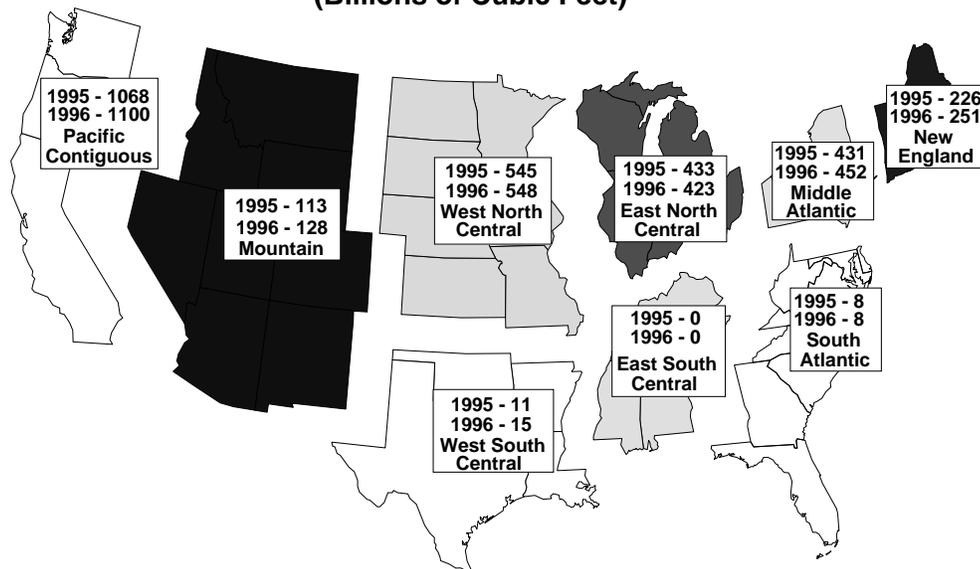
Figure 1



- **Figure 1** shows natural gas import and export activity over the past 11 years (1986-1996).
- From 1986 to 1996, imports have grown by almost 292 percent (750 Bcf v. 2,938 Bcf). Additionally, **net** imports as a percentage of total domestic gas demand have grown from 4.2 percent in 1986 to an estimated 12.6 percent in 1996. In 1995, **net** imports as a percentage of total gas demand was 12.4 percent, up from 11.7 percent in 1994.
- Comparing 1986 with 1996, natural gas exports have grown by 166 percent (61.3 Bcf v. 162.9 Bcf). In this eleven year span, gas exports to Japan, Canada and Mexico have grown by 35 percent, 567 percent, and 1,679 percent, respectively. The increased gas export sales to Canada and Mexico are indicative of a more efficient, integrated North American natural gas marketplace, resulting in increased energy trade opportunities among these three countries. The increase in LNG exports to Japan is the result of contractual changes in the volumes marketed under a long-term sales agreement between the two U.S. exporters and their Japanese customers.
- During 1996, about 41 percent (67.7 Bcf) of the gas exports were shipped to Japan, 38 percent of the volumes (61.4 Bcf) were exported to Canada, and 21 percent (33.8) of the volumes were exported to Mexico. As shown in **Figure 1**, the largest volume of gas exports occurred in 1992; this historic high level of exports was the result of record export sales to both Canada and Mexico.

**Estimated Sales of Imported Natural Gas
By Census Division - 1995 and 1996
(Billions of Cubic Feet)**

Figure 2



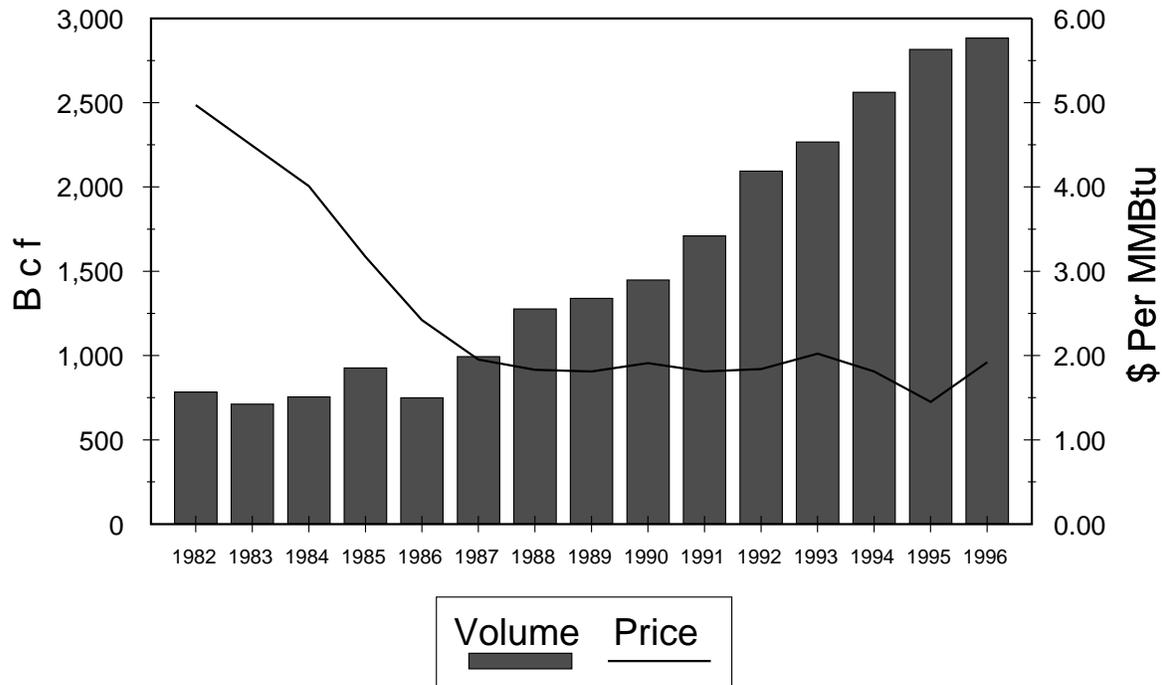
Note: Import sales do not equal imports due to fuel use, linepack, storage, imbalances and undetermined markets.

- As illustrated in **Figure 2**, the three geographic areas showing the greatest growth in consumption of imported gas supplies in 1996 were Region 9 (Pacific Contiguous), Region 1 (New England), and Region 2 (Middle Atlantic).
- In Census Region 9, Canadian gas sales increased by 32 Bcf over the 1995 level, or 3 percent. A major factor contributing to this growth was the activation of six new long-term Canadian import contracts, totaling 173.4 MMcf per day. Canadian gas supplies used for fuel the new 474-megawatt combined cycle cogeneration facility near the town of Hermiston, Oregon, was responsible for 42 percent of the incremental growth in this region. Increased sales to this region represent about 35 percent of the incremental growth in **net** imports for the entire country during the year.
- In Census Region 1, import gas sales increased by 25 Bcf over the 1995 level, or 11 percent. Most of the growth in import sales into this region was due to the increase in LNG imports. LNG import sales into Region 1 increased by 15 Bcf in 1996, while Canadian gas sales increased by 10 Bcf.
- As shown in **Figure 2**, the third largest growth area in 1996 for gas import sales, on a volumetric basis, was in Census Region 2 (Middle Atlantic). It experienced an increase of about 21 Bcf over the 1995 level, or an increase of 5 percent.
- Comparing 1996 with 1995, Census Region 8 (Mountain) experienced the greatest growth rate in gas import sales on a percentage basis -- 13 percent. A substantial portion of this increase was due to increased sales to customers in the state of Montana.

UNITED STATES - CANADA TRADE

**CANADIAN NATURAL GAS IMPORTS
VOLUMES AND PRICES
1982 - 1996**

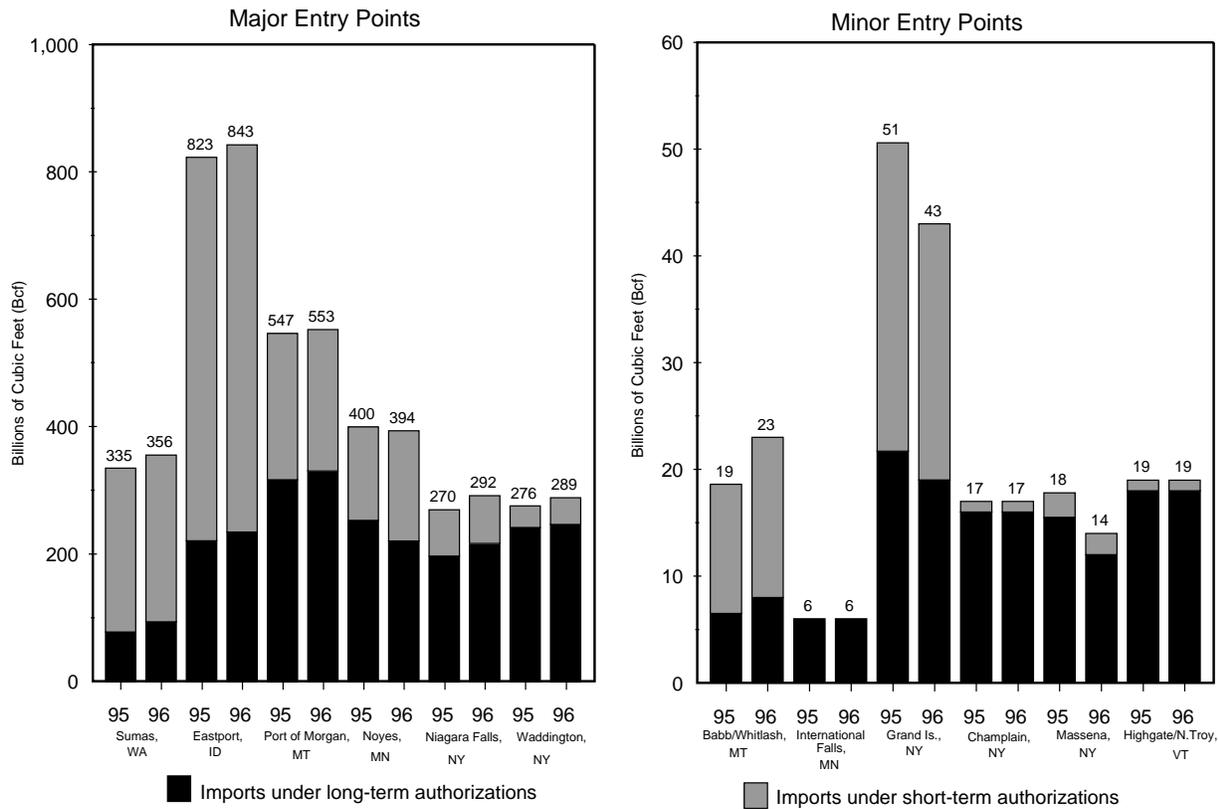
Figure 3



- **Figure 3** shows the volume and price trend for Canadian natural gas imports during the past 15 years.
- Canadian natural gas imports in 1996 grew by 2.4 percent and established a new record at 2,883.3 Bcf; however, the rate of growth in 1996 was the lowest of the past ten years. The average international border price for Canadian gas supplies in 1996 was \$1.92 per MMBtu. This price was 32 percent higher than last year's average price of \$1.45 per MMBtu. However, putting these figures into perspective, last year's prices were at a record low and the 1994 average price for Canadian gas supplies was \$1.80 per MMBtu.
- The average price of gas imported from Canada in 1996 was \$2.21 per MMBtu under long-term contracts (contracts longer than 2 years) and \$1.63 per MMBtu under short-term contracts (contracts of 2 years or less).
- During 1996, Canada's share of the natural gas import market in the United States was slightly over 98 percent. LNG imports from Algeria and Abu Dhabi comprised about 1.4 percent of the import market, and Mexico's share equaled about 0.5 percent.

Canadian Natural Gas Imports By Point of Entry 1995 vs 1996

Figure 4



Note: Graph does not include entry points for LNG and Mexican imports, as well as several minor Canadian entry points.

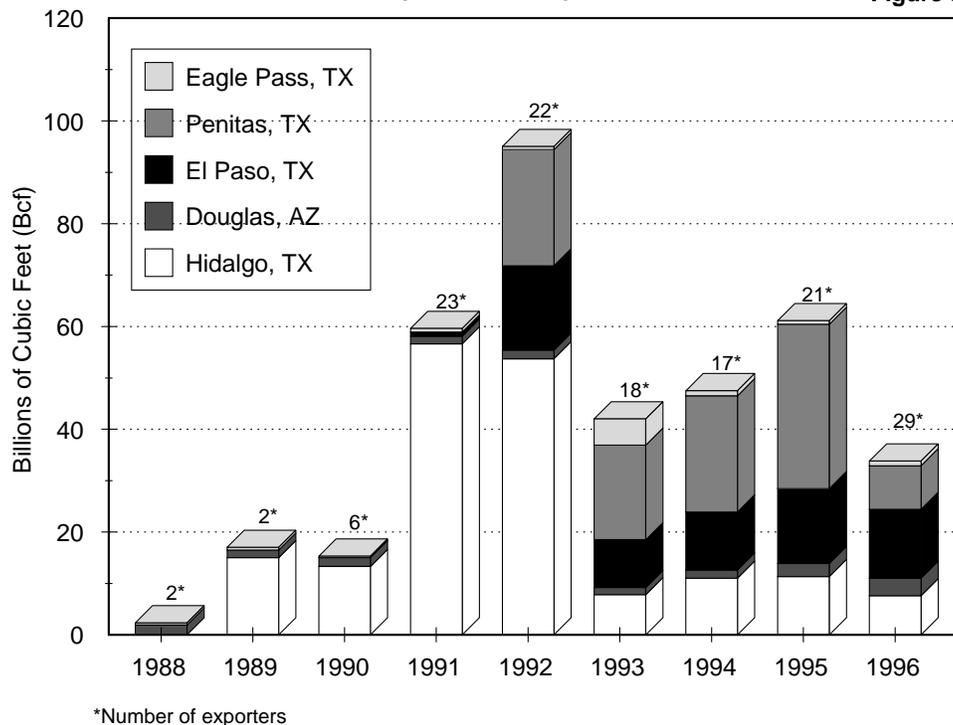
- **Figure 4** compares natural gas imports from Canada by point of entry for 1995 and 1996. The bar chart distinguishes between imports made under short-term and long-term import authorizations.
- **Figure 4** shows continued but modest growth at most major import points. During 1996, the international border points of Sumas, Washington; Eastport, Idaho; Port of Morgan, Montana; Niagara Falls, New York; and Waddington, New York all showed increased import activity.
- On a volumetric basis, the three largest increases occurred in the West at Sumas, Washington (up 21 Bcf) and Eastport, Idaho (up 20 Bcf). In the East, the Niagara Falls entry point experienced growth of 22 Bcf. On a percentage basis, the Babb/Whitlash, Montana entry points experienced the greatest increase in activity. Imports at these two points grew by over 21 percent.
- Natural gas imports fell this year at two New York entry points. The drop in imports at the Grand Island entry point can be attributed to a decline in short-term import sales and the termination of a long-term import by a New York local distribution company. The reduced imports at the Massena entry point are largely the result of a cogeneration facility taking less gas under a long-term supply arrangement than in 1995.

UNITED STATES - MEXICO TRADE

Natural Gas Exports To Mexico By Point of Exit

(1988 - 1996)

Figure 5

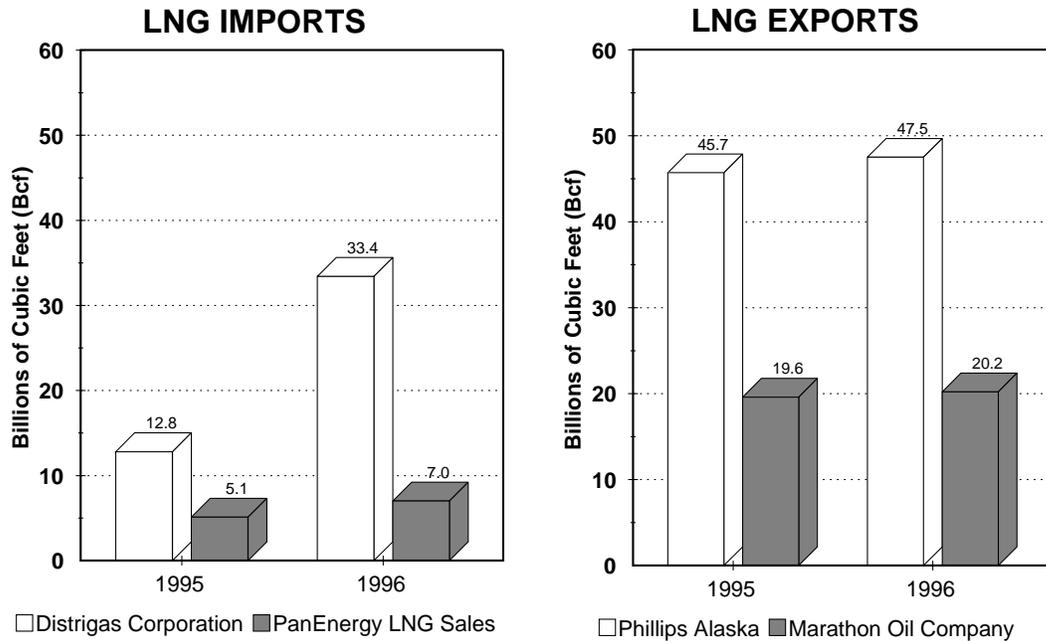


- Gas exports to Mexico during 1996 totaled 33.8 Bcf, the lowest level since 1990. Volumes were modest for the 1st and 2nd quarters (6.4 Bcf and 7.3 Bcf); however, due to a July 26 explosion of Mexico’s largest gas processing plant, exports reached a near record-breaking monthly level of 9.2 Bcf in August. Totals for the 3rd and 4th quarters were 14.6 Bcf and 5.4 Bcf, respectively. The weighted average price of 1996 exports to Mexico was \$2.09 per MMBtu. This price was about 41 percent higher than last year’s average price of \$1.48 which was the lowest for the decade. Although total volumes exported to Mexico during the year were relatively low, 1996 saw the number of companies exporting this gas grow to 29.
- Reduced exports to Mexico reflect the increase in natural gas production by Petroleos Mexicanos (Pemex) during 1996. Production for the first nine months of the year increased to about 4.2 Bcf per day, and continued to advance toward Pemex’s long-term goal of 5 Bcf per day by the year 2000.
- During 1996 imports from Mexico more than doubled the 1995 level (13.9 Bcf v. 6.7 Bcf). The average international border price for Mexican gas supplies was \$2.22 per MMBtu. This price was 47 percent higher than last year’s average price of \$1.51 per MMBtu.

LNG TRADE

Figure 6

**LNG TRADE
1995 VS 1996**



- **Figure 6** compares imports and exports of liquefied natural gas (LNG) for 1995 and 1996.
- During 1996, Distrigas Corporation (Distrigas) and PanEnergy LNG Gas Sales, Inc. (PanEnergy) imported an aggregate 40.4 Bcf of LNG into the United States. Approximately 83 percent (33.4 Bcf) was delivered to Distrigas at its Everett, Massachusetts terminal, while the remaining 17 percent (7.0 Bcf) was delivered to PanEnergy at Trunkline LNG Company’s terminal located at Lake Charles, Louisiana.
- During 1996, a total of 16 cargoes of LNG were imported into the United States. Distrigas imported 11 of its LNG cargoes from Algeria under a long-term import authorization, and imported 2 cargoes from Abu Dhabi under a short-term authorization that commenced on September 9, 1996. PanEnergy imported its three cargoes under both long-term and short-term import authorizations. In November 1996, PanEnergy used its long-term authorization to import Algerian LNG into the United States for the first time since July 1994. The average landed price of LNG imported from Algeria in 1996 was \$2.57 per MMBtu, a 20 percent increase over the 1995 price of \$2.15 per MMBtu.
- As shown in **Figure 6**, LNG imports during 1996 increased by 126 percent from the 1995 level (40.4 v. 17.9 Bcf). Imports by Distrigas grew by 161 percent, and imports by PanEnergy increased by 37 percent.

- The LNG import from Abu Dhabi represents only the second time in which Distrigas has utilized its short-term import authorization to make spot purchases of LNG and only the second time in which it has purchased gas from a source other than Algeria. The two spot purchases of LNG by Distrigas in 1996 seem reflective of a trend over the past couple years where there are occasional short-term transactions of surplus LNG supplies by a number of producing countries. Sales such as these seem to point out that LNG transactions are becoming more flexible, opportunistic and responsive to changes in the world marketplace.
- The growth in LNG imports in 1996 primarily was the result of the near completion of Algeria's renovation project to restore its liquefaction plants to their original capacities, and the increase in natural gas prices in the United States. During 1996, Algeria's annual LNG export capacity was increased to about 980 Bcf, and the prices for natural gas supplies rose rather dramatically, thereby allowing LNG to compete for markets, particularly in the Northeast. In 1995, the renovation project resulted in LNG export curtailments to all of its customers, including Distrigas and PanEnergy. As a result, LNG imports during 1995 were the lowest level since 1988, when 17.5 Bcf was imported into the United States.
- Another possible reason for increased imports of Algerian LNG into the U.S. during 1996 was the expansion of Algeria's gas pipeline exports. In mid-1995, the TransMediterranean pipeline, which links Algeria to Italy, increased its total pipeline capacity to 2.3 Bcf per day. In addition, the Gazoduc Maghreb-Europe pipeline became operational in November 1996. The 1,162-mile pipeline transports Algerian gas to Spain and Portugal via Morocco and the Strait of Gibraltar. The completion of this pipeline has freed up more LNG export capacity, as Spain currently is Algeria's second largest LNG customer.
- **Figure 6** also shows the volume of LNG exported by Phillips Alaska Natural Gas Corporation (Phillips) and Marathon Oil Company (Marathon) from Kenai, Alaska, to Japan during 1995 and 1996.
- LNG exports to Japan grew by 4 percent in 1996 over the 1995 level (67.7 v. 65.3 Bcf). The LNG shipped to Japan reached a record high in 1996 as total exports approached the maximum level of authorized volumes. The weighted average delivered price for these volumes in 1996 was \$3.61 per MMBtu, a 6 percent increase over the 1995 price of \$3.40 per MMBtu.

Note: Data used in this report are from company filings made with the Office of Fossil Energy (FE). All 1995/96 year-to-year comparisons utilize FE data. One should be mindful of the fact that FE data is collected on an equity (sales) basis, rather than on a custody (physical movements) basis, as employed by the Energy Information Administration (EIA) in its reports. As a consequence, the data may have some minor variances.

