

QUARTERLY FOCUS:

CANADIAN GAS USE BY THE NON-UTILITY GENERATION SECTOR (NUGS)

- Electricity generated in the United States by the NUGS has grown from a three percent market share in 1979 to ten percent in 1992 [Edison Electric Institute, *1992 Capacity and Generation of Non-Utility Sources of Energy* (Washington, DC, November 1993), page 23].
- In 1992, the NUGS produced 52 percent of its electricity from natural-gas-fired facilities [Edison Electric Institute, *1992 Capacity and Generation of Non-Utility Sources of Energy* (Washington, DC, November 1993), page 57].
- Canadian natural gas suppliers have made substantial gains in capturing a portion of this fast growing market over the past four years. Between 1990 and 1994, Canadian gas sales to the NUGS market represented over 22 percent of the total growth in Canadian gas exports to the United States.
- OFP estimates that during 1993, Canadian gas supplied about 11 percent of the total gas usage in the U.S. NUGS market.
- Although information on 1993 gas use in the U.S. NUGS market is not yet available, the figure for 1992 totaled 1845 Bcf (EIA Form 867). During 1993, importers reported to OFP that about 206 Bcf of Canadian natural gas was used by the NUGS.
- Approximately 83 percent of the Canadian gas supplies imported in 1993 for the NUGS were under long-term contracts. Under 46 long-term contracts, with an average term of 17 years, 171 Bcf of Canadian gas was imported, and another 35 Bcf of gas was imported under short-term arrangements.

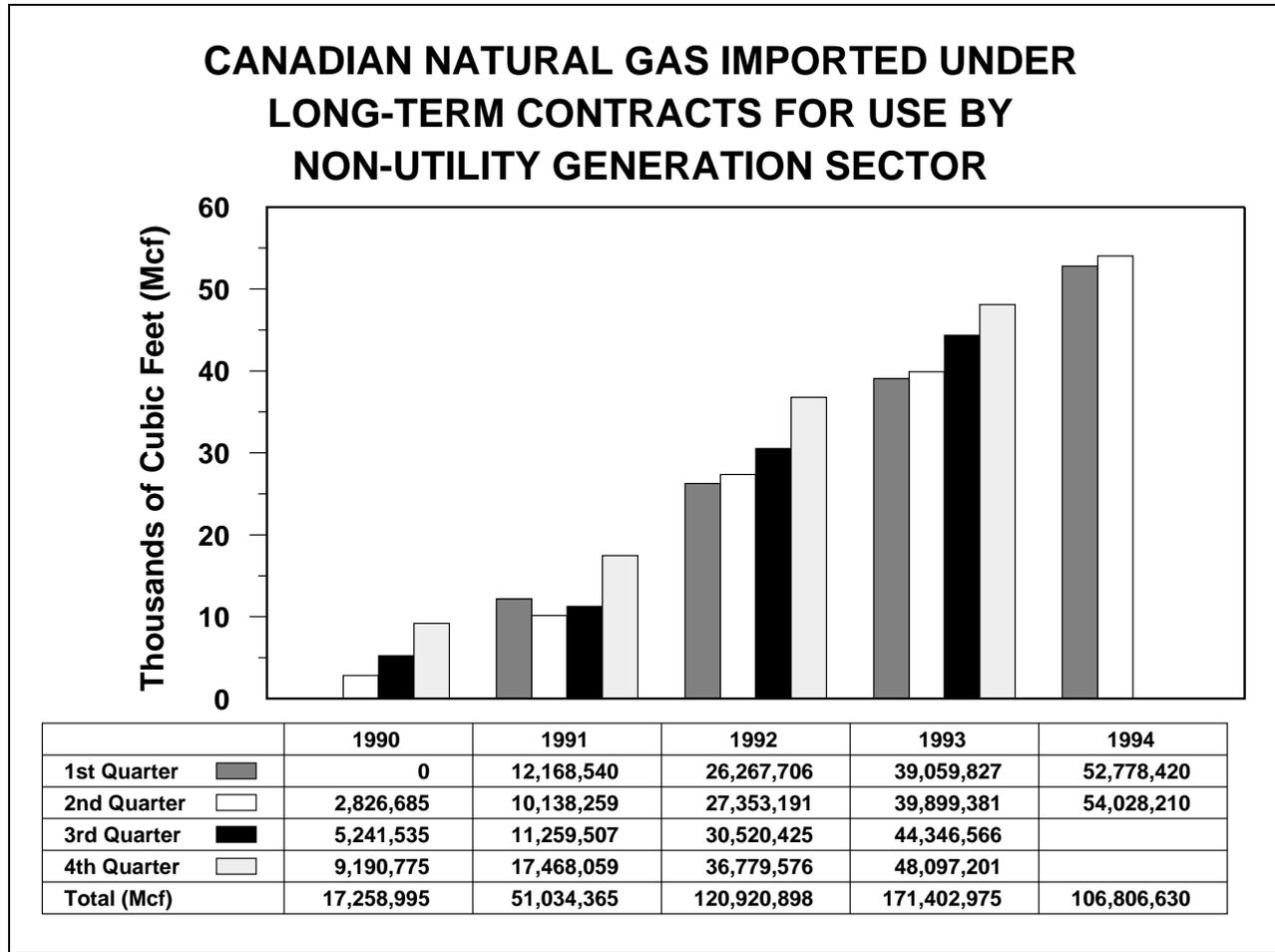


Figure 1

- **Figure 1** shows the growth of Canadian natural gas imported under long-term contracts for use by NUGS during the past four years.
- As shown, long-term Canadian gas sales to U.S. NUGS have gone from zero in the first quarter of 1990 to over 54 Bcf in the second quarter of 1994.
- The U.S. NUGS market in 1993 comprised about 11.25 percent of all Canadian long-term gas sales to the United States.
- Canadian natural gas supplied fuel to 35 different NUGS facilities, with an electric generation capacity totaling over 5900 Megawatts (MW) of electric capacity. Many of these facilities also were supplied with domestic gas.

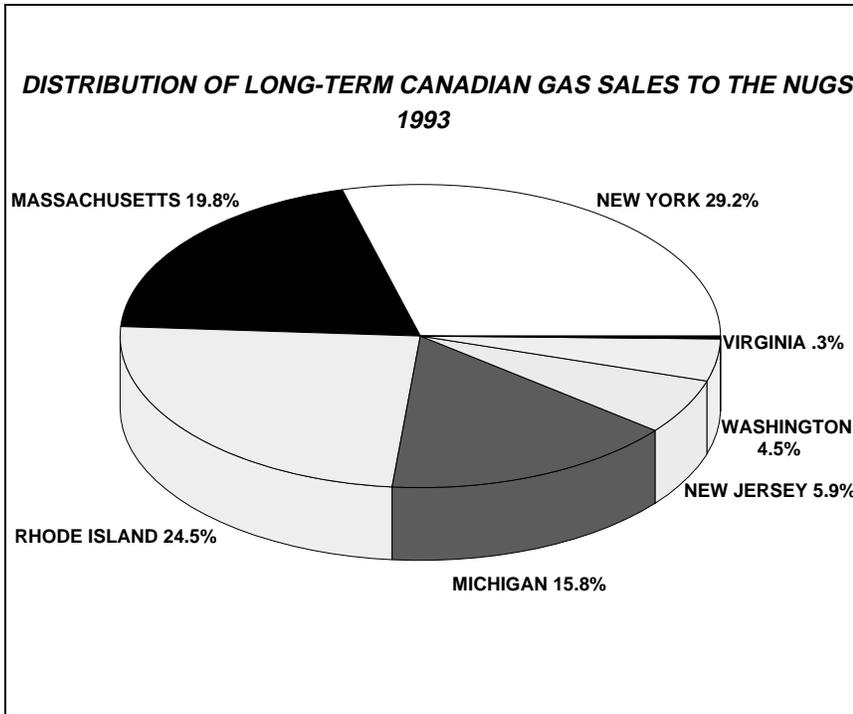


Figure 2

Figure 2 shows the 1993 geographical distribution of Canadian natural gas imports under long-term contracts for use by the NUGS.

As shown, the primary NUGS market for Canadian gas was the U.S. Northeast, with 79.2 percent of total sales. New York State was the single largest user, with 29.2 percent of the market.

As of June 1, 1994, there were 47 active long-term contracts importing Canadian natural gas for use by the NUGS, representing 731.6 MMcf/day of firm contract demand. On an annualized basis, this represents over 267 Bcf of gas.

OFP has approved 10 other long-term natural gas import contracts for use by the NUGS, which are scheduled to be operational within the next two years. These contracts represent an additional 230.5 MMcf/day of firm contract demand, or 84 Bcf of gas on an annualized basis.

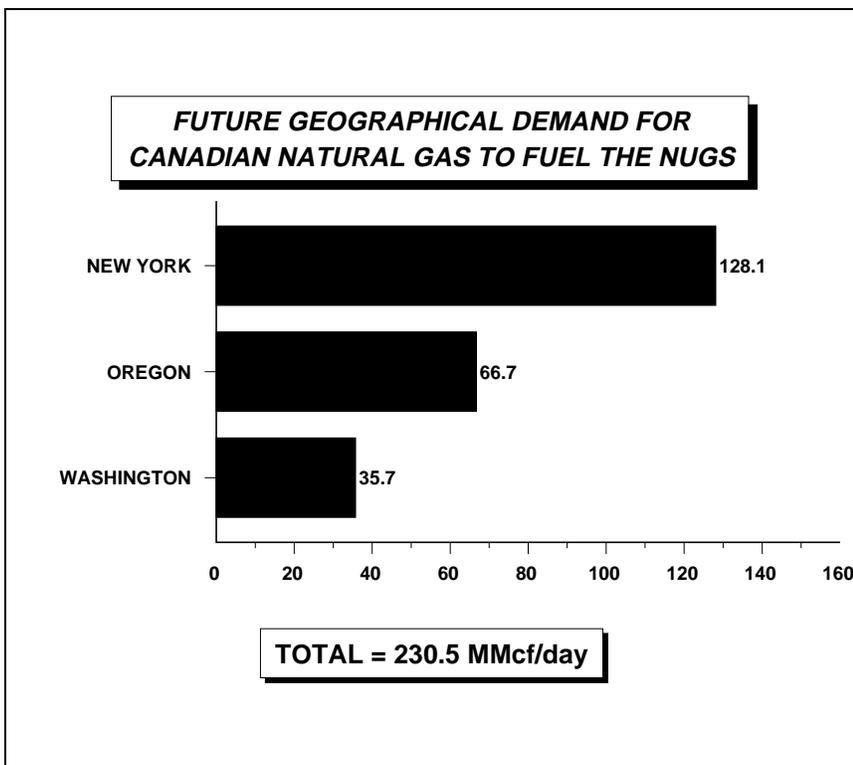


Figure 3

Figure 3 shows the breakdown by state of the additional 230.5 MMcf/day of firm contract demand which is scheduled to come on line for the NUGS market during the next two years. The future NUGS facilities planning to use Canadian gas are located in the states of New York, Oregon and Washington.

Gas-fired plants operated by the NUGS are expected to grow substantially in the Pacific Northwest as the result of the closure of a nuclear facility, economic growth, and environmental concerns associated with hydroelectric production of the Bonneville Power Administration. As a consequence, OFP anticipates that there will be additional long-term gas import projects during the next year or two designed to supply proposed new facilities in this region.

LOAD FACTORS OF LONG-TERM CANADIAN GAS CONTRACTS SERVING THE NUGS MARKET IN 1993

STATES	ANNUAL CONTRACTED VOLUME (MMcf)	ACTUAL IMPORTED VOLUME (MMcf)	LOAD FACTOR
NEW YORK	69,569	50,291	72.3%
WASHINGTON	9,288	7,631	82.2%
MASSACHUSETTS	37,850	34,053	90.0%
NEW JERSEY	10,950	10,168	92.9%
RHODE ISLAND	43,508	42,056	96.7%
MICHIGAN	27,922	27,204	97.4%
ALL STATES	199,087	171,403	86.1%

Table 1

- Historically, long-term gas contracts supplying the NUGS have experienced a very high load factor. This is due to the fact that the NUGS market does not have seasonal swings like some other customers, and they often serve baseload electricity demand. During 1993, the average load factor under long-term Canadian gas import contracts serving the NUGS market was 86 percent.
- Table 1** shows, by state, the load factors experienced in 1993 under long-term Canadian import contracts serving the NUGS market. As indicated, the contracts supplying the NUGS in Michigan had the highest load factor with 97.4 percent, and New York experienced the lowest with 72.3 percent.