



The Ability to Meet Future Gas Demands from Electricity Generation in New York State

Final Report

Prepared for

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and

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APPENDIX A: NEW YORK GAS AND ELECTRIC SYSTEM INFRASTRUCTURE

A-1. GAS INFRASTRUCTURE

The gas industry infrastructure in New York consists of eight interstate US pipelines and one intrastate pipeline³³; thirteen gas distribution companies³⁴ (commonly referred to as LDCs); and local gas production and storage facilities.

INTERSTATE PIPELINES SERVING NEW YORK

All of the pipelines in the state were included in the analysis. The geographic territories of the pipelines vary widely. By virtue of these pipelines, New York has a diversified supply mix, receiving gas from US production in the Southwest, the Gulf Coast and Appalachia as well as New York; Canadian supplies from both western and eastern basins; and small amounts of imported liquefied natural gas (LNG) from various foreign sources (delivered via exchange/displacement from New England).

Three of the pipelines serve only the upstate area, three serve only the downstate area and four serve both. The pipelines are listed below by the areas they serve.

Table A1
Pipelines Serving New York State by Region
(As of January 1, 2002)

<u>Upstate Only</u>	<u>Both regions</u>	<u>Downstate Only</u>
Dominion Transmission	Columbia Gas Transmission	Algonquin Gas Transmission
Empire Transmission	Iroquois Gas Transmission	Texas Eastern Transmission
National Fuel Gas Supply	Tennessee Gas Pipeline	Transcontinental Gas Pipeline
	Trans Canada Pipeline (at international borders)	

New York has a very limited amount of in-state storage, most of which comes from LNG facilities within the LDCs. The Stagecoach project will add some new high-deliverability, underground storage.

³³ A second intrastate pipeline, North Country Pipeline was excluded from the analysis. The power load served by North Country (Saranac) was included within our analysis as part of NYSEG.

³⁴ Three very small LDCs were excluded from the analysis, Woodhull and Filmore (both municipal companies) and Corning Natural Gas.



The pipelines serving New York and New England traditionally have been long haul transmission lines, with ultimate supplies coming from the U.S. Southwest and Gulf Coast as well as Western Canada (and some small quantities of Appalachian production). For this reason, the Northeast was always at the farthest end of the pipe, with the commensurate high cost and limited flexibility. All of the gas that entered the region stayed in the region. No other region's capacity could be diverted to the Northeast to provide even temporary relief for any "crisis." As a consequence, the capacity in the region was limited to what the region both needed and was willing to pay for.

With the advent of U.S. imports from the Sable Island production (offshore Nova Scotia), the Northeast finally had relatively short haul production from the north that greatly expanded both the pipeline delivery capacity, as well as the supply of gas in the region and enhanced the flexibility of pipeline deliveries. These incremental pipeline flows not only supplied new markets (*e.g.*, new combined cycle electric generators in New England), but also offloaded pipeline capacity coming from the south so that capacity might be used in other areas. Sable Island gas does reach into New York occasionally. Much more importantly, however, is the fact that it meets some of New England's market requirements, thereby allowing the pipeline capacity that flows through New York (to New England) to be utilized in New York, if needed. This displacement effect (illustrated in Figure A1) is of greater regional consequence than the actual volume itself.