

# U.S. Transmission



**We provide quick and efficient transportation of natural gas through our sophisticated transmission systems**



Spectra Energy's natural gas transmission systems consist of a complex network of pipelines, designed to quickly and efficiently transport natural gas from its origin to areas of high demand. Our systems are comprised of interstate (across state borders) or intrastate (within state lines) pipelines, compressor stations, metering stations, valves and control stations.

Spectra Energy's natural gas operations include more than 17,000 miles of interstate transmission pipeline that receive natural gas from the major production areas of the Gulf Coast and Canada for transportation and sale primarily in the Midwest and northeastern United States.

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# Storage

## We own and/ or operate several types of storage systems, including depleted reservoir, salt caverns and liquefied natural gas



Currently these three storage methods – depleted reservoir, salt caverns and liquefied natural gas – combine to provide more than 250 billion cubic feet of certificated working gas storage capacity.

### ***Depleted Reservoir***

Depleted reservoirs (or pools) in our eastern North America market area are used as storage facilities by injecting natural gas back into the porous underground rock that once held the fuel before it was produced.

Spectra Energy owns the storage field near the town of Accident, Maryland, and partially owns the Pennsylvania fields near Oakford (50 percent) and Leidy (25 percent). The proximity of these storage fields to our shippers provides a great deal of flexibility. The depleted reservoirs in use at Accident, Oakford and Leidy allow for “one turn” per year (an injection and withdrawal cycle that takes 12 months).

Our Union Gas storage facility at Dawn, Ontario, is North America’s largest. It, too, is a depleted reservoir but the porosity of its geologic formation allows for more than one turn per year. In total, Spectra Energy’s depleted reservoir working gas storage capacity is about 225 Bcf.

### ***Salt Caverns***

Salt is impermeable and self-sealing, so it creates exceptionally strong and environmentally sound storage. Our salt caverns can extend more than 1,000 feet underground. In fact, their vertical height can be greater than a major skyscraper is tall.

Spectra Energy owns two salt storage facilities, one in Liberty, Texas (Moss Bluff), and the other in Evangeline, Louisiana (Egan), with others in development. Moss Bluff and

Egan are equipped with two-way directional interconnects to major pipelines serving mid-western and eastern U.S. markets.

We also use a bedded salt formation in southwest Virginia for natural gas storage. The bedded salt beneath the Saltville facility allows for caverns not as deep as those at Egan or Moss Bluff, but wider.

In total, Spectra Energy has more than 30 Bcf of salt cavern working gas storage capacity.

### ***Storing Liquefied Natural Gas (LNG)***

LNG is made by refrigerating natural gas to condense it into a liquid. The liquid form is much denser than natural gas, so it has much more energy for the amount of space it occupies, making it an efficient storage solution for natural gas.

Spectra Energy operates a LNG storage facility near Kingsport, Tennessee, and another near Hagar, Ontario. Both of these facilities have the capacity to store about 1 Bcf each for shippers seeking peak day services.

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# Western Canada Transmission & Processing



Spectra Energy's western Canadian portfolio includes BC Pipeline, BC Field Services, Midstream and Natural Gas Liquids



Spectra Energy's western Canadian portfolio includes four distinct businesses – BC Pipeline, BC Field Services, Midstream and Natural Gas Liquids.

Together they constitute one of the largest natural gas midstream businesses in Canada. With this focus on the midstream gas and gas

liquids value chain we have built a western Canadian business that is substantial in both scale and scope. Given our market-leading presence, the businesses are well positioned to grow.

Our substantial market position in western Canada was established through both organic development projects and strategic acquisitions. Those acquisition and integration skills, combined with continuing organic development opportunities, position us well for continued growth in northeast British Columbia and the Western Canadian Sedimentary basin – one of the most vital and vibrant supply areas in North America.

## ***BC Pipeline***

Spectra Energy's transportation system stretches from Fort Nelson, in northeast British Columbia and Gordondale at the British Columbia/Alberta border, to the southern-most point at the British Columbia/U.S. border at Huntington/Sumas.

The system includes:

- About 1,700 miles of natural gas transmission pipeline which can transport 2.2 billion cubic feet of natural gas per day
- 19 compressor stations and 4 interconnecting pipelines
- The transmission system is fully regulated by Canada's National Energy Board, and the southern mainline has served markets in British Columbia's lower mainland and the US Pacific Northwest since 1957

### ***BC Field Services***

Spectra Energy's integrated raw gas gathering and processing system gathers raw natural gas from diverse supply sources such as the Yukon & southern Northwest Territories, Alberta, and northeast British Columbia.

The system includes:

- Approximately 1,800 miles of raw gas gathering pipelines
- Five natural gas processing facilities with a capacity of approximately 2.0 billion cubic feet per day
- Delivery of processed natural gas to markets in Canada, US Midwest, and US Pacific Northwest
- While regulated by the National Energy Board, this business operates under a framework for light-handed regulation

### ***Midstream***

Spectra Energy Midstream is one of the largest independent midstream operators in the Western Canadian Sedimentary Basin ("WCSB"). It has interests in 13 natural gas processing plants with a net processing capacity of 924 million cubic feet per day.

Midstream covers approximately 1,000 miles of raw gas gathering pipelines located throughout natural gas prone areas in the western extent of the WCSB. Collectively, these facilities constitute a network that is uniquely positioned in each individual operating area to serve growing drilling and production activity.

### ***Natural Gas Liquids***

Spectra Energy's Empress System includes natural gas liquids (NGL) extraction, fractionation, transportation, storage and marketing operations.

These facilities include:

- 2.4 billion cubic feet per day of natural gas liquids extraction and 55,000 bpd of fractionation capacity
- 580 miles of NGL pipeline with proprietary access to major sales pipelines in Canada and the U.S.
- 4.1 million bbls of underground NGL storage with seven truck and three rail shipping terminals

## Distribution

**The distribution of natural gas is the final step in providing this critical resource to our customers**



Spectra Energy's Distribution of natural gas is the final step in providing gas to consumers. Typically, distribution occurs through smaller pipelines at lower pressures and across shorter distances than the main Transmission segment.

Larger industrial, commercial and electric generation customers usually receive natural gas directly from the main interstate or intrastate pipelines, but most end-users receive natural gas from a local distribution company or LDC.

Spectra Energy provides natural gas distribution service to about 1.3 million residential, commercial and industrial customers in over 400 communities in northern, southwestern and eastern Ontario through its Union Gas Limited subsidiary.