



WHITE PAPER

# TransCanada and Columbia – What Does it Mean and How Does it Matter?

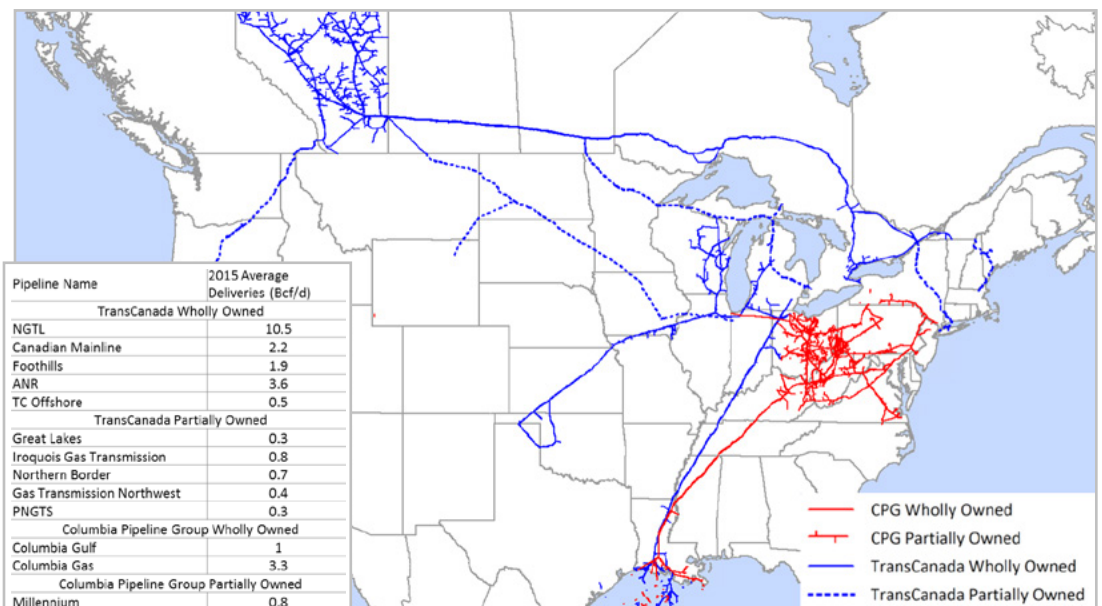
By Hua Fang and Anthony Ciatto



## The Deal

TransCanada Corporation (TransCanada) recently announced that it will purchase Columbia Pipeline Group (Columbia) for \$10.2 billion, creating one of North America’s largest regulated natural gas transmission businesses. As seen in Figure 1, the combined company will own or partially own more than 57,000 miles of natural gas transmission pipelines in the United States and Canada, with an estimated total throughput of more than 26 Bcf/d in 2015.

**Figure 1: Major TransCanada and Columbia Natural Gas Pipeline Transmission Assets**



Source: ABB Velocity Suite, Point Logic Energy

\*Note: Additional pipelines included in map but excluded from table due to average 2015 deliveries of less than 0.2 Bcf/d: TransCanada’s partially owned Bison, TQM, Tuscarora, and North Baja Pipelines; CPG’s wholly owned Crossroads pipeline.

## The Strategy

With the Columbia acquisition, TransCanada is executing a strategic pivot from unregulated energy market assets to assets with regulated returns. TransCanada is selling unregulated power plants in the Northeast United States as well as a minority stake in a Mexican pipeline, with the proceeds to be used to fund the Columbia acquisition. In addition, the acquisition provides a major presence in the Marcellus and Utica shale plays previously unavailable to TransCanada. ICF expects the growth in Marcellus and Utica production to lead to significant development opportunities, potentially accelerating TransCanada’s long-term growth potential.

The acquisition also puts TransCanada’s financial power behind Columbia’s transmission system, which may facilitate more rapid development of the Columbia system to take advantage of market opportunities resulting from continuing growth in Marcellus/Utica production.



## The Synergy

The combined company will have access to supplies from Western Canada, the Rockies, Midcontinent, Offshore Gulf of Mexico, and the Marcellus/Utica shale plays. It will have the capability to serve diversified market demands in the U.S. Northeast, Midwest, West, Gulf Coast, and Canada.

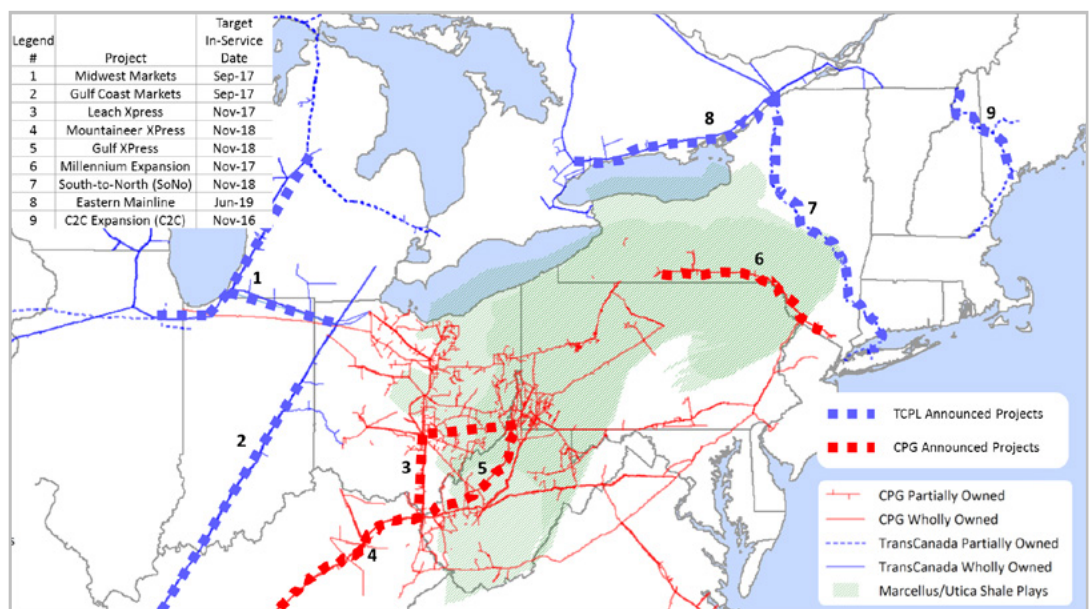
The combined company can benefit significantly from the complementary nature of the companies' pipelines as they relate to the Marcellus/Utica shale production region—the largest natural gas supply source in North America—with the potential to grow production from 20 Bcf/d to 44 Bcf/d in 2035.

As shown in Figure 2, CPG's Columbia Gas pipeline (TCO), located deep in the core of Marcellus/Utica production, interconnects with TransCanada's ANR pipeline (ANR) at multiple points. The Crossroad pipeline also intersects with ANR in the Midwest market area. Operating these pipeline systems collectively could allow shippers on TCO to reach the Midwest and Gulf markets via ANR, and shippers on ANR could secure supplies back into the core production region via TCO.

Both companies have proposed new pipeline projects to serve the expected growth in Marcellus/Utica production. Some project proposals are competitive in nature, for example, TCO's Leach Xpress project and ANR's Gulf Coast Markets project. This acquisition allows TransCanada to develop the more advanced Columbia projects and strategically prioritize its own proposals in order to progress with greater efficiency and synergy.

TCO and Millennium could also provide upstream supplies to Iroquois Gas Transmission (IGT) via Algonquin Gas Pipeline (AGT) or Tennessee Gas Pipeline (TGP), providing Marcellus/Utica supplies to the South-to-North (SoNo) project proposed by IGT. While the SoNo project has not yet reported any significant market interest, the project could potentially facilitate the flow of gas from the Marcellus/Utica shale plays back into Canada using reversed capacity on IGT. If developed, SoNo could also provide upstream gas supplies to Portland Natural Gas Transmission system, which is proposing capacity expansions to serve New England.

**Figure 2: Major Announced TransCanada/Columbia Pipeline Projects in U.S. Northeast and Ontario**



Source: ABB Velocity Suite, Point Logic Energy

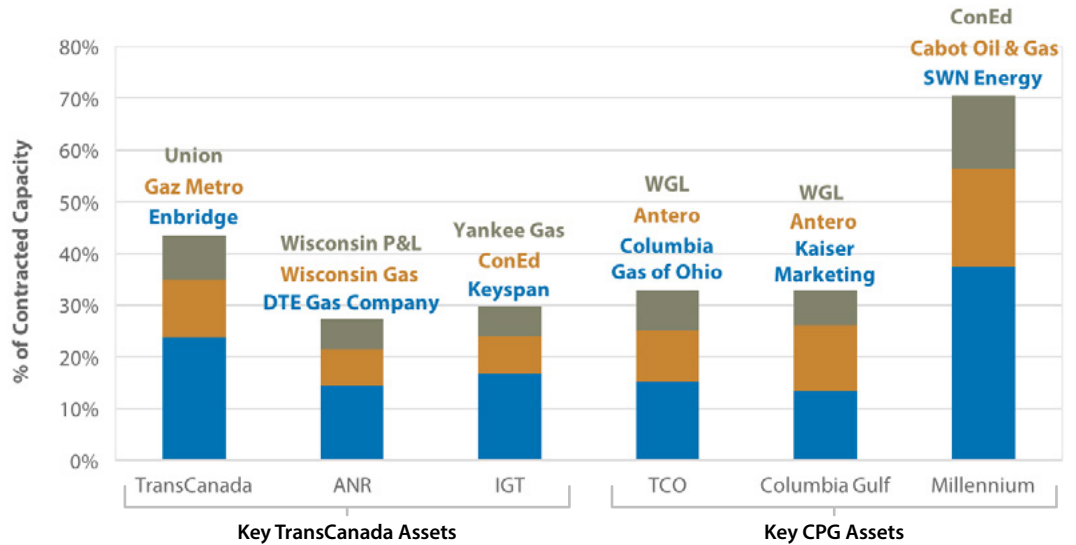


The acquisition also brings TransCanada one step closer to being able to directly supply Marcellus and Utica gas into the TCPL Canadian Mainline system via New York. While Columbia does not currently have pipelines that directly reach Niagara or IGT, TCO is relatively close, and TransCanada is now significantly closer to being able to directly supply gas into Ontario than it has been in the past. Direct access to Ontario via New York would increase the level of influence that TransCanada would have on Canadian markets and facilitate further control of these markets over time.

### The Impacts on Shippers

There is limited overlap of TransCanada and Columbia’s firm transportation shippers on pipelines serving the Eastern U.S. market. Figure 3 shows the top three firm transportation capacity holders on these pipelines.

**Figure 3: Top 3 Contracted Shippers by TransCanada/Columbia Pipelines**



Source: Point Logic Energy, Pipeline Websites

The shippers on ANR are mostly local distribution companies (LDCs) and marketers serving the U.S. Midwest and Ontario. TransCanada’s Canadian mainline firm transportation contracts are dominated by Eastern Canadian LDCs, with Union, Gas Metro, and Enbridge accounting for nearly 45 percent of total contracted capacity, while New York, New England, and Midwest U.S. utilities account for only 12 percent.

More than 60 percent of TCO’s firm transportation capacity is held by gas and power utilities in the Northeast. Antero Resources, a major Marcellus/Utica shale producer, holds 1.2 Bcf/d capacity on TCO. Most producers have capacity both on TCO and Columbia Gulf to access the Gulf Coast markets. With additional access to the Midwest LDCs on ANR, TCO can expand its capacity to serve more Marcellus/Utica shale producers.

ANR and Columbia Gulf both provide access to the Gulf Coast market, with liquefied natural gas exports as the primary driver for future demand growth. ANR’s interconnects along the coast reach farther west than those of Columbia Gulf.



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Nearly 60 percent of firm transportation contracts on Millennium are held by Marcellus producers, who could find better markets in New England and Eastern Canada. On the other hand, shippers on TransCanada's mainline in Eastern Canada, New York, and New England could have access to more secure supplies in the prolific Northeast Pennsylvania counties via TCO and Millennium.

### The Conclusion

TransCanada's acquisition of Columbia continues the recent trend of consolidation of natural gas transportation infrastructure to exploit synergy and increase efficiency. TransCanada also acquires a major position in the growing Marcellus/Utica shale plays, potentially leading to long-term growth in regulated assets and income. Shippers could potentially benefit from the transaction with greater upstream or downstream access. However, the costs the shippers pay for the service are ultimately determined by the company's rate strategy and the financial structure of the deal.

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