SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 OF THE SECURITIES EXCHANGE ACT OF 1934

For the month of December 2006

COMMISSION FILE No. 1-31690

TransCanada Corporation

(Translation of Registrant's Name into English)

450 — **1** Street S.W., Calgary, Alberta, T2P 5H1, Canada (Address of Principal Executive Offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F

Form 20-F o Form 40-F x

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):o

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): o

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes o No x

The document listed below in this Section is furnished, not filed, as Exhibit 99.1. The Exhibit is being furnished, not filed, and will not be incorporated by reference into any registration statement filed by TransCanada Corporation under the Securities Act of 1933, as amended.

99.1 A copy of the Registrant's News Release dated December 22, 2006 announcing the acquisition of US natural gas pipeline and storage assets.

2

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

TRANSCANADA CORPORATION

By: /s/ Donald J. DeGrandis

Donald J. DeGrandis Corporate Secretary

December 22, 2006

EXHIBIT INDEX

99.1 A copy of the Registrant's News Release dated December 22, 2006 announcing the acquisition of US natural gas pipeline and storage assets.



NewsRelease

TransCanada to acquire premium U.S. natural gas pipeline and storage assets

Acquisition of 17,000-kilometre pipeline system and 230 Bcf of storage capacity solidifies TransCanada's position as a leading North American energy infrastructure company

Analyst and media conference call 10 a.m. MT/12 p.m. ET Friday, Dec. 22nd

CALGARY, Alberta — December 22, 2006 — (TSX: TRP) (NYSE: TRP) — TransCanada Corporation (TransCanada) today announced plans to significantly expand its continental natural gas pipeline and storage operations by acquiring ANR Pipeline Company and ANR Storage Company (collectively, ANR) and an additional 3.55 per cent interest in Great Lakes Gas Transmission Limited Partnership (Great Lakes) from El Paso Corporation. The total purchase price is US\$3.4 billion, subject to certain closing adjustments, and includes US\$457 million of assumed debt.

"With the acquisition of ANR, TransCanada's wholly owned natural gas pipeline network will extend more than 59,000 kilometres and offer our customers unparalleled connections from traditional and emerging supply basins to growing North American markets," said Hal Kvisle, TransCanada's chief executive officer. "By acquiring more than 230 billion cubic feet of natural gas storage capacity, TransCanada will have interests in approximately 360 billion cubic feet of storage capacity, making it one of North America's largest gas storage operators.

"This acquisition represents a unique opportunity to invest in regulated natural gas pipeline and storage assets that are a strong fit with our existing North American footprint," Mr. Kvisle continued. "They are high quality assets that will strengthen our position as a leader in the North American gas transmission business and deliver significant value to our shareholders. They will also

complement our growing portfolio of energy infrastructure assets that include significant power generation and gas storage operations as well as proposed liquefied natural gas terminals and crude oil pipelines."

TransCanada intends to fund the acquisition in a manner consistent with maintaining its strong financial position and TransCanada PipeLines Limited's 'A' credit ratings recognizing the solid strategic fit and business fundamentals of the acquired assets. In addition to the assumption of existing debt, the acquisition will be financed with components of incremental debt as well as a significant amount of new equity. TransCanada expects the transaction to be accretive to earnings and cash flow in the first full year of ownership. Pending regulatory approvals, the acquisition is expected to close in the first quarter of 2007.

ANR operates one of the largest interstate natural gas pipeline systems in the United States, providing transportation, storage, and various capacity-related services to a variety of customers in both the U.S. and Canada. The system consists of 17,000 kilometres (10,500 miles) of pipeline with a peak-day capacity of 6.8 billion cubic feet per day (Bcf/d). It transports natural gas from producing fields in Louisiana, Oklahoma, Texas and the Gulf of Mexico to markets in Wisconsin, Michigan, Illinois, Ohio and Indiana. The pipeline system also connects with numerous other pipelines providing customers with access to diverse sources of supply from Western Canada and the Rocky Mountain region and access to a variety of end-user markets in the midwestern and northeastern United States.

ANR also owns and operates numerous underground natural gas storage facilities in Michigan with a total capacity of approximately 230 Bcf. Its facilities offer customers a high level of service flexibility allowing them to meet peak-day delivery requirements and to capture the value resulting from changing supply and demand dynamics. As part of the acquisition TransCanada will also obtain certain gas supplies contained within production and storage reservoirs in Michigan.

Great Lakes owns and operates a 3,400 kilometre (2,115 mile) interstate natural gas pipeline system with a design capacity of 2.5 Bcf/d. Extending from the Minnesota-Manitoba border at Emerson to the Michigan-Ontario border at St. Clair, Great Lakes provides a direct, cost-effective link between Western Canada's abundant natural gas basin and major industrial and market centers in Minnesota, Wisconsin, Michigan and eastern Canada. With the acquisition of an additional 3.55 per cent interest in Great Lakes, TransCanada will directly own 53.55 per cent of Great Lakes. TransCanada will become the operator of Great Lakes, which is currently operated by a company jointly owned by affiliates of El Paso and TransCanada.

In a separate transaction, TC PipeLines, LP will acquire 46.45 per cent of Great Lakes from El Paso for US\$962 million, subject to certain closing adjustments, including US\$212 million of assumed debt. TransCanada is the General Partner and a common unitholder (13.4 per cent interest) of TC PipeLines, LP. (see the News Release issued today by TC PipeLines, LP).

TransCanada will also be gaining the strength and expertise of the close to 1,000 employees who work for ANR, headquartered in Houston, Texas, and Great Lakes, headquartered in Troy, Michigan.

"We look forward to welcoming the experienced, expert people of ANR and Great Lakes," said Mr. Kvisle. "They have a long history of safe, reliable operations combined with strong stakeholder relationships. TransCanada shares these values and will place a high priority on ensuring an orderly transition for employees and customers. Combined with our existing operations, we will create an even more efficient gas transmission and storage network capable of providing flexible, value-added services to our customers."

On closing of the acquisition, TransCanada's portfolio of high quality energy infrastructure assets will include:

- Approximately 59,000 kilometres (36,500 miles) of wholly owned natural gas pipelines. TransCanada's wholly owned systems include the Alberta System; the Canadian Mainline; the BC System; Foothills; Gas Transmission Northwest; North Baja; Tamazunchale; and ANR
- · Interests in an additional 7,500 kilometres (4,600 miles) of natural gas pipelines including Portland Natural Gas Transmission (61.7 per cent); Great Lakes Gas Transmission Company (53.55 per cent directly and 6.2 per cent indirectly through TC PipeLines, LP); Trans-Quebec & Maritimes Pipeline Company (50 per cent); Iroquois Natural Gas Transmission (44.5 per cent); Northern Border Pipeline Company (6.7 per cent indirectly through TC PipeLines, LP); Tuscarora Gas Transmission Company (1 per cent directly and 13.1 per cent indirectly through TC PipeLines, LP)
- · Approximately 360 Bcf of natural gas storage capacity
- · Interests in approximately 7,700 megawatts of power generation in Canada and the U.S. through a diversified portfolio of generating assets that include natural gas-fired, nuclear, coal, hydro and wind facilities

TransCanada is also pursuing the development of the Keystone Oil Pipeline project to transport crude oil from Alberta to refining centres in the U.S. Midwest, and remains well-positioned to connect northern frontier natural gas into its existing North American transmission network. In its Energy business, TransCanada is advancing two proposed liquefied natural gas terminals.

Maps and additional information about TransCanada, the ANR pipeline and storage systems and the Great Lakes pipeline system are available on the Internet at www.transcanada.com

Lazard Freres & Co. LLC and Citigroup Corporate and Investment Banking served as financial advisors to TransCanada on this transaction. Mayer, Brown, Rowe and Maw LLP and Hogan, Hartson served as legal advisors.

Analyst/Media Teleconference Dial-in and Webcast Information

TransCanada will hold a teleconference today at 10 a.m. (Mountain)/12 p.m. (Eastern) to discuss this announcement. Analysts, members of the media and other interested parties wanting to participate in the call should dial 1-866-898-9626 or 416-340-2216 (Toronto area) at least 10 minutes prior to the start of the call. No passcode is required. A live audio and slide presentation webcast of the teleconference will also be available on TransCanada's website at www.transcanada.com

The conference will begin with a brief address by members of TransCanada's executive management, followed by a question and answer period for investment analysts. A question and answer period for members of the media will immediately follow. A replay of the teleconference will be available two hours after the conclusion of the call until midnight December 29, 2006 by dialing 1-800-408-3053 or 416-695-5800 (Toronto area) and entering pass code 3209224. The webcast will be archived and available for replay.

TransCanada Corporation

TransCanada is a leader in the responsible development and reliable operation of North American energy infrastructure including natural gas pipelines and storage facilities, and power generation. For 50 years, TransCanada has transported the majority of Western Canada's natural gas production to key Canadian and U.S. markets. On closing of the acquisition of the ANR pipeline and storage assets, TransCanada's network of wholly owned pipelines will extend more than 59,000 kilometres (36,500 miles), tapping into virtually all major gas supply basins in North America. TransCanada will also become one of the continent's largest providers of gas storage and related services with approximately 360 billion cubic feet of storage capacity. A growing independent power producer, TransCanada owns, or has interests in, approximately 7,700 megawatts of power generation in Canada and the United States. TransCanada's common shares trade on the Toronto and New York stock exchanges under the symbol TRP.

FORWARD-LOOKING INFORMATION

Certain information in this news release is forward-looking and is subject to important risks and uncertainties. The results or events predicted in this information may differ from actual results or events. Factors which could cause actual results or events to differ materially from current expectations include, among other things, the ability of TransCanada to successfully implement its strategic initiatives and whether such strategic initiatives will yield the expected benefits, the availability and price of energy commodities, regulatory decisions, competitive factors in the pipeline and power industry sectors, and the current economic conditions in North America. For additional information on these and other factors, see the reports filed by TransCanada with Canadian securities regulators and with the United States Securities and Exchange Commission. TransCanada disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise except as required by law.

Media Inquiries:Jennifer Varey(403) 920-7859Shela Shapiro(800) 608-7859Investor & Analyst Inquiries:David Moneta
Myles Dougan(403) 920-7911