

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 January 2018
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 Form 40-F

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):

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):

Exhibit 99.1 to this report, furnished on Form 6-K, is furnished, not filed, and will not be incorporated by reference into any registration statement filed by the registrant under the Securities Act of 1933, as amended.

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.

Date: January 2, 2018

TRANSCANADA CORPORATION

By: /s/ Christine R. Johnston

Christine R. Johnston

Vice-President, Law and Corporate Secretary

EXHIBIT INDEX

99.1 A copy of the registrant's News Release dated January 2, 2018.

Leach XPress Project Placed into Service; Mountaineer XPress, Gulf XPress Receive FERC Certificates

HOUSTON, Texas - **January 2, 2018** - News Release - TransCanada Corporation (TSX: TRP) (NYSE: TRP) (TransCanada) today announced its Leach XPress (LXP) project was placed in-service on January 1, 2018, and that the Federal Energy Regulatory Commission (FERC) has issued a certificate of public convenience and necessity for its Mountaineer XPress (MXP) and Gulf XPress (GXP) projects on December 29, 2017. All three projects provide vital links between Appalachian natural gas supply and growing U.S. markets.

LXP comprises 160 miles (257 kilometres) of 36-inch-diameter pipeline, three compressor stations, and modifications to an existing compressor station. Representing an investment of approximately US\$1.6 billion, the pipeline is capable of transporting approximately 1.5 billion cubic feet of natural gas a day (Bcf/d). Via an existing interconnect with TransCanada's Columbia Gulf Transmission System and its Rayne XPress (RXP) project which was placed into service last November, LXP will facilitate the delivery of up to an additional 1 Bcf/d to Southeast and Gulf Coast supply markets.

"Successful completion of Leach XPress is a prime example of TransCanada's North American strategy of connecting prolific and growing supply basins with markets eager to access reliable, reasonably priced sources of energy," said Russ Girling, TransCanada President and CEO. "This is truly a best-in-class pipeline and we look forward to many years of safe, reliable, and efficient operation on behalf of our customers."

At peak construction, LXP employed nearly 5,000 employees and contractors.

FERC's thorough review and approval of MXP and GXP follows three years of planning by TransCanada's project teams, along with over two years of outreach to communities and landowners along the projects' routes. Once remaining regulatory approvals are obtained, TransCanada plans to begin right-of-way preparation and construction activities on both projects, with an anticipated in-service date in late 2018.

"FERC's approval of Mountaineer XPress and Gulf XPress allows us to continue delivering on our commitment to create new outlets for our customers, transporting Marcellus and Utica shale gas to key markets in the U.S. and beyond," said Stanley Chapman III, TransCanada's Executive Vice President and President, U.S. Natural Gas Pipelines. "Our project teams are prepared to begin construction on both projects."

The MXP and GXP projects consist of combined infrastructure investment of US\$3.2 billion. MXP will deliver approximately 2.6 Bcf/d of gas to the TCO Pool and Leach markets on the Columbia Gas Transmission System through the construction of 170-miles (274 kilometres) of 36-inch pipeline, three new compressor stations and upgrades to three existing compressor stations. GXP will transport approximately 0.8 Bcf/d to Southeast and Gulf Coast supply markets through the construction of seven new compressor stations, and upgrades to one existing compressor station, along TransCanada's existing Columbia Gulf System.

MXP and GXP are expected to create over 8,000 jobs during peak construction later this year. Both are underpinned by long-term, fixed-fee, firm transportation service agreements. They will be designed, constructed and operated with a core focus on safety and minimizing environmental impact.

TransCanada now has FERC Certificate Orders for all major Appalachian growth projects associated with the 2016 acquisition of Columbia Pipeline Group. Together, they represent a significant part of TransCanada's portfolio of complementary infrastructure assets and CAD\$24 billion of near-term growth projects that is expected to underpin growth in the company's common dividend at the upper end of an eight to 10 percent range annually through 2020 and an additional eight to 10 percent in 2021.

With more than 65 years' experience, TransCanada is a leader in the [responsible development](#) and reliable operation of North American energy infrastructure including natural gas and liquids pipelines, power generation and gas storage facilities. TransCanada operates one of the largest natural gas transmission networks that extends more than 56,900 miles, tapping into virtually all major gas supply basins in North America. TransCanada is the continent's leading provider of gas storage and related services with 653 billion cubic feet of storage capacity. A large independent power producer, TransCanada currently owns or has interests in approximately 6,100 megawatts of power generation in Canada and the United States. TransCanada is also the developer and operator of one of North America's leading liquids pipeline systems that extends approximately 3,000 miles, connecting growing continental oil supplies to key markets and refineries. TransCanada's common shares trade on the Toronto and New York stock exchanges under the symbol TRP. Visit TransCanada.com to learn more, or [connect with us on social media](#) and [3BL Media](#).

FORWARD LOOKING INFORMATION

This publication contains certain information that is forward-looking and is subject to important risks and uncertainties (such statements are usually accompanied by words such as "anticipate", "expect", "believe", "may", "will", "should", "estimate", "intend" or other similar words). Forward-looking statements in this document are intended to provide TransCanada security holders and potential investors with information regarding TransCanada and its subsidiaries, including management's assessment of TransCanada's and its subsidiaries' future plans and financial outlook. All forward-looking statements reflect TransCanada's beliefs and assumptions based on information available at the time the statements were made and as such are not guarantees of future performance. Readers are cautioned not to place undue reliance on this forward-looking information, which is given as of the date it is expressed in this news release, and not to use future-oriented information or financial outlooks for anything other than their intended purpose. TransCanada undertakes no obligation to update or revise any forward-looking information except as required by law. For additional information on the assumptions made, and the risks and uncertainties which could cause actual results to differ from the anticipated results, refer to the Quarterly Report to Shareholders dated November 8, 2017 and 2016 Annual Report filed under TransCanada's profile on SEDAR at www.sedar.com and with the U.S. Securities and Exchange Commission at www.sec.gov.

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