

U.S. Securities and Exchange Commission
Washington, D.C. 20549
Form 40-F

OR

For the fiscal year ended December 31, 2015 Commission File Number 1-8887

(Exact Name of Registrant as specified in its charter)

Canada

(Province or jurisdiction of incorporation or organization)

4922, 4923, 4924, 5172

(PPrimary Standard Industrial Classification Code Number (if applicable))

52 - 2179728

(I.R.S. Employer Identification Number (if applicable))

TransCanada Tower, 450 - 1 Street S.W.

Calgary, Alberta, Canada, T2P 5H1

(403) 920-2000

(Address and telephone number of Registrant's principal executive offices)

TransCanada PipeLine USA Ltd., 700 Louisiana Street, Suite 700

Houston, Texas, 77002-2700; (832) 320-5201

(Name, address (including zip code) and telephone number (including area code))

of agent for service in the United States

Securities registered or to be registered pursuant to Section 12(b) of the Act: None

Securities registered or to be registered pursuant to Section 12(g) of the Act: None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: Debt Securities

For annual reports, indicate by check mark the information filed with this Form:

Annual information form

x Audited annual financial statements

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

At December 31, 2015, 779,605,870 common shares,

which are all owned by TransCanada Corporation, were issued and outstanding.

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months (or such shorter period that the Registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the Registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit and post such files). Yes ☒ No ☐

The documents (or portions thereof) forming part of this Form 40-F are incorporated by reference into the following registration statements under the Securities Act of 1933, as amended:

Form
F-10

Registration No.
333-208588

EXPLANATORY NOTE

An amendment to this Form 40-F shall be filed to include the TransCanada PipeLines Limited ("TCPL") Annual information form for the year ended December 31, 2015. The amendment shall be filed no later than the date the Annual information form is required pursuant to home country requirements.

AUDITED CONSOLIDATED ANNUAL FINANCIAL STATEMENTS AND MANAGEMENT'S DISCUSSION AND ANALYSIS

Except sections specifically referenced below which shall be deemed incorporated by reference herein and filed, no other portion of the TCPL 2015 Management's discussion and analysis and audited consolidated financial statements shall be deemed filed with the U.S. Securities and Exchange Commission (the "Commission") as part of this report under the Exchange Act.

A. Audited Annual Financial Statements

For audited consolidated financial statements, including the auditors' report, see pages 111 through 173 of the TCPL 2015 Management's discussion and analysis and audited consolidated financial statements included herein.

B. Management's Discussion and Analysis

For management's discussion and analysis, see pages 1 through 110 of the TCPL 2015 Management's discussion and analysis and audited consolidated financial statements included herein.

C. Management's Report on Internal Control Over Financial Reporting

For management's report on internal control over financial reporting, see "Management's report on Internal Control over Financial Reporting" that accompanies the audited consolidated financial statements on page 111 of the TCPL 2015 Management's discussion and analysis and audited consolidated financial statements included herein.

UNDERTAKING

The Registrant undertakes to make available, in person or by telephone, representatives to respond to inquiries made by the Commission staff, and to furnish promptly, when requested to do so by the Commission staff, information relating to: the securities registered pursuant to Form 40-F; the securities in relation to which the obligation to file an annual report on Form 40-F arises; or transactions in said securities.

DISCLOSURE CONTROLS AND PROCEDURES AND INTERNAL CONTROL OVER FINANCIAL REPORTING

For information on disclosure controls and procedures and management's annual report on internal control over financial reporting, see "Other information - Controls and Procedures" in Management's discussion and analysis on page 92 of the TCPL 2015 Management's discussion and analysis and audited consolidated financial statements.

AUDIT COMMITTEE FINANCIAL EXPERT

The Registrant's board of directors has determined that it has at least one audit committee financial expert serving on its audit committee. Mr. Siim A. Vanaselja, Mr. Kevin E. Benson and Mr. John E. Lowe have been designated audit committee financial experts and are independent, as that term is defined by the New York Stock Exchange's listing standards applicable to the Registrant. The Commission has indicated that the designation of Mr. Vanaselja, Mr. Benson and Mr. Lowe as audit committee financial experts does not make Mr. Vanaselja, Mr. Benson or Mr. Lowe "experts" for any purpose, impose any duties, obligations or liability on Mr. Vanaselja, Mr. Benson or Mr. Lowe that are greater than those imposed on members of the Audit committee and Board of Directors who do not carry this designation or affect the duties, obligations or liability of any other member of the Audit committee.

CODE OF ETHICS

The Registrant has adopted a code of business ethics for its directors, officers, employees and contractors. The Registrant's code is available on its website at www.transcanada.com. No waivers have been granted from any provision of the code during the 2015 fiscal year.

PRINCIPAL ACCOUNTANT FEES AND SERVICES

Pre-Approval Policies and Procedures

TCPL's Audit committee has adopted a pre-approval policy with respect to permitted non-audit services. Under the policy, the Audit committee has granted pre-approval for specified non-audit services. For engagements of up to \$250,000, approval of the Audit committee Chair is required, and the Audit committee is to be informed of the engagement at the next scheduled Audit committee meeting. For all engagements of \$250,000 or more, pre-approval of the Audit committee is required. In all cases, regardless of the dollar amount involved, where there is a potential for conflict of interest involving the external auditor to arise on an engagement, the Audit committee must pre-approve the assignment.

To date, non-audit services have been pre-approved by the Audit committee in accordance with the pre-approval policy described above.

External Auditor Service Fees

The following table provides information about the fees paid by the Company to KPMG LLP, the external auditor of the TransCanada group of companies, for professional services rendered for the 2015 and 2014 fiscal years.

(\$ millions)	2015	2014
Audit fees	\$7.8	\$6.4
audit of the annual consolidated financial statements		
services related to statutory and regulatory filings or engagements		
review of interim consolidated financial statements and information contained in various prospectuses and other securities offering documents		
Audit related fees	0.2	0.2
services related to the audit of the financial statements of certain TransCanada post-retirement and post-employment plans		
Tax fees	0.5	0.5
Canadian and international tax planning and tax compliance matters, including the review of income tax returns and other tax filings		
All other fees	—	—
Total fees	\$8.5	\$7.1

OFF-BALANCE SHEET ARRANGEMENTS

The Registrant has no off-balance sheet arrangements, as defined in this Form, other than the guarantees and commitments described in Note 26 of the Notes to the audited consolidated financial statements attached to this Form 40-F and incorporated herein by reference.

TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS

For information on tabular disclosure of contractual obligations, see "Contractual obligations" in Management's discussion and analysis on page 82 of the TCPL 2015 Management's discussion and analysis and audited consolidated financial statements.

IDENTIFICATION OF THE AUDIT COMMITTEE

The Registrant has a separately-designated standing Audit committee. The members of the Audit committee are:

	S.A. Vanaselja
	K.E. Benson
Chair:	D.H. Burney
Members:	J.E. Lowe
	M.P. Salomone
	D.M.G. Stewart

FORWARD-LOOKING INFORMATION

We disclose forward-looking information to help current and potential investors understand management's assessment of our future plans and financial outlook, and our future prospects overall.

Statements that are forward-looking are based on certain assumptions and on what we know and expect today and generally include words like anticipate, expect, believe, may, will, should, estimate or other similar words.

Forward-looking statements in this document may include information about the following, among other things:

- anticipated business prospects
- our financial and operational performance, including the performance of our subsidiaries
- expectations or projections about strategies and goals for growth and expansion
- expected cash flows and future financing options available to us
- expected costs for planned projects, including projects under construction and in development
- expected schedules for planned projects (including anticipated construction and completion dates)
- expected regulatory processes and outcomes
- expected common share purchases under our normal course issuer bid
- expected impact of regulatory outcomes
- expected outcomes with respect to legal proceedings, including arbitration and insurance claims
- expected capital expenditures and contractual obligations
- expected operating and financial results
- the expected impact of future accounting changes, commitments and contingent liabilities
- expected industry, market and economic conditions.

Forward-looking statements do not guarantee future performance. Actual events and results could be significantly different because of assumptions, risks or uncertainties related to our business or events that happen after the date of this document.

Our forward-looking information is based on key assumptions, and subject to the following risks and uncertainties:

Assumptions

- inflation rates, commodity prices and capacity prices
- timing of financings and hedging
- regulatory decisions and outcomes
- foreign exchange rates
- interest rates
- tax rates
- planned and unplanned outages and the use of our pipeline and energy assets
- integrity and reliability of our assets
- access to capital markets
- anticipated construction costs, schedules and completion dates
- acquisitions and divestitures.

Risks and uncertainties

- our ability to successfully implement our strategic initiatives
- whether our strategic initiatives will yield the expected benefits
- the operating performance of our pipeline and energy assets

amount of capacity sold and rates achieved in our pipeline businesses
the availability and price of energy commodities
the amount of capacity payments and revenues we receive from our energy business
regulatory decisions and outcomes
outcomes of legal proceedings, including arbitration and insurance claims
performance and credit risk of our counterparties
changes in market commodity prices
changes in the political environment
changes in environmental and other laws and regulations
competitive factors in the pipeline and energy sectors
construction and completion of capital projects
costs for labour, equipment and materials
access to capital markets
interest, tax and foreign exchange rates
weather
cybersecurity
technological developments
economic conditions in North America as well as globally.

You can read more about these factors and others in reports we have filed with Canadian securities regulators and the U.S. Securities and Exchange Commission (SEC).

As actual results could vary significantly from the forward-looking information, you should not put undue reliance on forward-looking information and should not use future-oriented information or financial outlooks for anything other than their intended purpose. We do not update our forward-looking statements due to new information or future events, unless we are required to by law.

SIGNATURES

Pursuant to the requirements of the Exchange Act, the Registrant certifies that it meets all of the requirements for filing on Form 40-F and has duly caused this annual report to be signed on its behalf by the undersigned, thereto duly authorized, in the City of Calgary, Province of Alberta, Canada.

TRANSCANADA PIPELINES LIMITED

Per: /s/ DONALD R. MARCHAND
DONALD R. MARCHAND
Executive Vice-President, Corporate Development and
Chief Financial Officer

Date: February 11, 2016

DOCUMENTS FILED AS PART OF THIS REPORT

EXHIBITS

13.1	Management's discussion and analysis (included on pages 1 through 110 of the TCPL 2015 Management's discussion and analysis and audited financial statements).
13.2	2015 Audited consolidated financial statements (included on pages 111 through 173 of the TCPL 2015 Management's discussion and analysis and audited financial statements)), including the auditors' report thereon.
23.1	Consent of KPMG LLP, Independent Registered Public Accounting Firm.
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of Chief Executive Officer regarding Periodic Report containing Financial Statements.
32.2	Certification of Chief Financial Officer regarding Periodic Report containing Financial Statements.
101.INS	XBRL Instance Document.
101.SCH	XBRL Taxonomy Extension Schema Document.
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	XBRL Taxonomy Definition Linkbase Document.
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.