

TransCanada PipeLines Limited

January 28, 2011

Ms Kirsten Walli Board Secretary Ontario Energy Board 2300 Yonge Street PO Box 2319, 26<sup>th</sup> Floor Ioronto, Ontario, M4P 1E4 Canada tel (403) 920-6373 fax (403) 920-2354 email frank\_karabetsos@transcanada.com web www.transcanada.com

Dear Ms Walli:

Re: IransCanada Power Transmission (Ontario) LP Application for Electricity Transmission License – Applicant Responses to Interrogatories from Ontario Energy Board Staff, Great Lakes Power Iransmission LP and Hydro One Networks Inc.

Please find enclosed IransCanada Power Iransmission (Ontario) LP's responses to the interrogatories from Ontario Energy Board Staff, Great Lakes Power Iransmission LP, and Hydro One Networks Inc. The responses have also been filed through RESS and sent to the Board Secretary and each of the intervenors by e-mail.

Yours truly,

TransCanada Power Transmission (Ontario) LP

Frank Karabetsos Legal Counsel

Law and Regulatory Research

Cc: Brian Kelly - TransCanada

### TRANSCANADA POWER TRANSMISSION L.P.

## RESPONSES TO INTERROGATORIES FROM BOARD STAFF

### **INTERROGATORY #1**

Please provide copies of the National Energy Board Codes of Conduct ("Codes") that are referred to on page 5 of the cover letter accompanying TransCanada Power Transmission (Ontario) L.P.'s electricity transmission licence application.

### **RESPONSE:**

Please see attached.



### TRANSCANADA PIPELINES LIMITED

# CANADIAN MAINLINE CODE OF CONDUCT

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## TRANSCANADA PIPELINES LIMITED CANADIAN MAINLINE CODE OF CONDUCT

### 1 PURPOSE AND OBJECTIVES OF THE CODE

### 1.1 Purpose of the Code

The purpose of this Code is to establish standards and conditions for interaction between TCPL, TCPL Mainline and their Affiliates, as defined in clause 2.1, in relation to the provision of TCPL Mainline Services. The Code sets parameters for transactions, information sharing and the sharing of services and resources which protect TCPL Mainline's customers against inappropriate inter-Affiliate behaviour and practices. These parameters also reflect the integrated nature of the TransCanada group of companies and businesses and allow TCPL and TCPL Mainline to engage in inter-Affiliate relationships and transactions to achieve operating efficiencies from economies of scale and scope in a manner that concords with the objectives of the Code.

### 1.2 Objectives of the Code

The principle objectives of the Code are:

- i) to create a clearly defined set of rules to enhance transparency, fairness and senior management accountability with respect to interactions between TCPL, TCPL Mainline and their Affiliates;
- ii) provide an environment in which inter-Affiliate economies and efficiencies can legitimately occur for the mutual advantage of TCPL Mainline's customers and TCPL shareholders;
- iii) develop support and respect for the Code by the employees, officers and directors of TCPL, which will in turn promote ratepayer confidence in the application of the Code; and
- iv) create regulatory processes and cost efficiencies through the consistent application of a clear set of standards and reporting requirements for transactions between TCPL, TCPL Mainline and their Affiliates, enhanced by a practical, resolution driven, dispute process.

### 1.3 Respect for the Code

TCPL is committed to upholding the spirit and intent of the Code and requires individuals to whom the Code applies to adhere to and respect it in providing TCPL Mainline Services.

### 2 GENERAL PROVISIONS

### 2.1 Definitions

In this Code the following words and phrases shall have the following meanings:

- a) "Affiliate" means with respect to TCPL Mainline or TCPL:
  - i) an "affiliate" as defined in the CBCA;
  - ii) a unit or division within TCPL or any Body Corporate referred to in clause (b)(i) above;
  - a partnership, joint venture, or Person in which TCPL or any Body Corporate referred to in clause (b)(i) above has a controlling interest or that is otherwise subject to the control of TCPL or such Body Corporate, or that has or reasonably expects to have a commercial or operational arrangement with TCPL and TCPL or any Body Corporate referred to in clause (b)(i) above owns more than 10% of the votes necessary to elect directors;
  - iv) any partnership, joint venture, or Person deemed by the NEB to be an affiliate of TCPL Mainline or TCPL for the purposes of this Code; and
  - v) an agent or other Person acting on behalf of any Body Corporate, unit, division, partnership, joint venture or Person referred to in clauses (b)(i) to (iv) above.
- b) "Affiliated Party Transactions Summary" unless otherwise directed by the NEB, means in respect of any period of time, a summary overview of each type of business transaction or service performed by an Affiliate for TCPL Mainline or by TCPL Mainline for an Affiliate, which summary shall contain a general description of the transactions and services, the parties involved and the approximate aggregate value of each type of transaction or service during the said period.
- c) "Body Corporate" means a "body corporate" as defined in the CBCA.
- d) "CBCA" means the Canada Business Corporations Act.
- e) "Code" means this TCPL Mainline Code of Conduct.
- f) "Compliance Officer" shall have the meaning ascribed thereto in section 7.3 hereof.
- g) "Compliance Plan" shall mean the document to be prepared and updated by TCPL Mainline pursuant to section 7.5 hereof.
- g.1) "Compliance Plan Committee" means a committee which shall meet at least quarterly and be comprised of at least the following TCPL representatives:
  - President, Pipelines Division;

- Controller:
- · Chief Compliance Officer; and
- Senior Vice-President, Canadian and Eastern US Pipelines.
- h) "Compliance Report" shall have the meaning ascribed thereto in section 7.6 hereof.
- i) "Confidential Information" means any information relating to a specific customer or potential customer of TCPL Mainline, which information TCPL Mainline has obtained or compiled in the process of providing current or prospective TCPL Services and which is not otherwise available to the public.
- j) "Cost Recovery Basis" with respect to:
  - i) the use by TCPL Mainline of an Affiliate's personnel, means the fully burdened costs of such personnel for the time period they are used by TCPL Mainline, including salary, benefits, vacation, materials, disbursements and all applicable overheads;
  - ii) the use by TCPL Mainline of an Affiliate's equipment, means an allocated share of capital and operating costs appropriate for the time period the equipment is utilized by TCPL Mainline;
  - the use by an Affiliate of TCPL Mainline's equipment, means an allocated share of the capital and operating costs appropriate for the time period the equipment is utilized by the Affiliate;
  - iv) the use by TCPL Mainline of an Affiliate's services, means the complete costs of providing the services, determined in a manner acceptable to TCPL Mainline, acting prudently;
  - v) the use by an Affiliate of TCPL Mainline's services, means the complete costs of providing the services, determined in a manner acceptable to TCPL Mainline, acting prudently; and
  - vi) the transfer of equipment, plant inventory, spare parts or similar assets between TCPL Mainline and a Regulated Affiliate, means the net book value of the transferred assets.
- k) "Fair Market Value" means the price reached in an open and unrestricted market between informed and prudent parties, acting at arms length and under no compulsion to act.
- "For Profit Affiliate Service" means any service, provided by TCPL on behalf of TCPL Mainline to an Affiliate, or by an Affiliate to TCPL on behalf of TCPL Mainline on a forprofit basis.
- m) "Information Services" means any computer systems, computer services, databases, electronic storage services or electronic communication media utilized by TCPL Mainline relating to TCPL Mainline customers or TCPL Mainline operations.

- n) "NEB" means the National Energy Board.
- o) "Non-Executive Officer" means an officer of TCPL who is not also a senior officer of TransCanada Corporation with an executive officer title.
- p) "Non-Regulated Affiliate" means an Affiliate that is not a Regulated Affiliate.
- q) "Occasional Services" shall have the meaning ascribed thereto in section 3.3.6 hereof.
- r) "Person" means a "person" as defined in the CBCA.
- s) "Regulated Affiliate" means an Affiliate whose tolls and tariffs are regulated by the NEB, the Alberta Energy and Utilities Board or the Federal Energy Regulatory Commission.
- t) "Services Agreement" means an agreement entered into between TCPL and one or more Affiliates for the provision of Shared Services or For Profit Affiliate Services to or from TCPL Mainline and shall provide for the following matters as appropriate in the circumstances:
  - i) the type, quantity and quality of service;
  - ii) pricing, allocation or cost recovery provisions;
  - iii) confidentiality arrangements;
  - iv) the apportionment of risk;
  - v) dispute resolution provisions; and
  - vi) a representation by TCPL and each Affiliate party to the agreement that the agreement complies with the Code.
- u) "Shared Service" means any service provided on a Cost Recovery Basis by TCPL on behalf of TCPL Mainline to an Affiliate or by an Affiliate to TCPL on behalf of TCPL Mainline.
- v) "TCPL" means TransCanada PipeLines Limited.
- w) "TCPL Mainline" means the TCPL line of business under which TCPL owns and operates a high pressure natural gas transmission system that extends from the Alberta border across Saskatchewan, Manitoba, Ontario, and through a portion of Quebec, and connects to various downstream Canadian and international pipelines.
- x) "TCPL Mainline Service" means a TCPL Mainline service, the terms and conditions of which are regulated by the NEB.

### 2.2 Interpretation

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Headings are for convenience only and shall not affect the interpretation of this Code. Words importing the singular include the plural and vice versa. A reference to a statute, document or a provision of a document includes an amendment or supplement to, or a replacement of, that statute, document or that provision of that document.

### 2.3 To Whom this Code Applies

TCPL Mainline is obligated to comply with this Code and all Affiliates of TCPL Mainline are obligated to comply with the Code to the extent they interact with TCPL Mainline.

### 2.4 Coming into Force

This Code comes into force 90 days after approval by the NEB, provided however that, to the extent existing agreements or arrangements are in place between parties to whom this Code applies that do not conform with this Code, such agreements or arrangements must be brought into compliance with this Code within 60 days after this Code comes into force.

### 2.5 Amendments to this Code

This Code may be reviewed and amended from time to time by the NEB on its own initiative, or pursuant to a request by any party to whom this Code applies or by any interested party.

### 2.6 Exemptions

TCPL Mainline may apply to the NEB for an exemption with respect to compliance with any provision of this Code. Any such application will specify if the requested exemption is in respect of a particular transaction, series of transactions, for a specified period of time, or is for a general exemption from a particular provision.

### 2.7 Authority of the NEB

This Code does not detract from, reduce or modify in any way, the powers of the NEB to deny, vary, approve with conditions, or overturn, the terms of any transaction or arrangement between TCPL Mainline and one or more Affiliates that may be done in compliance with this Code. Compliance with the Code does not eliminate the requirement for specific NEB approvals or filings where required by statute, regulation, or by NEB decisions, orders or directions.

### 3 GOVERNANCE AND SEPARATION OF TCPL BUSINESS

### 3.1 Governance

### 3.1.1 Separate Operations

The commercial business and affairs of TCPL Mainline should be managed and conducted separately from the commercial business and affairs of its Non-Regulated Affiliates, except as required to fulfill corporate governance, policy, and strategic direction responsibilities of a corporate group of businesses as a whole.

### 3.1.2 Common Directors

TCPL may have common directors with its Affiliates.

### 3.1.3 Separate Management

TCPL Mainline must have a separate management team from its Non-Regulated Affiliates. Subject to Section 3.1.4 hereof, TCPL must have separate officers from TCPL Mainline's Non-Regulated Affiliates. However, TCPL Mainline may share management team members, and TCPL may share officers, with other Regulated Affiliates of TCPL Mainline.

### 3.1.4 Separate Management Exception

Officers of TCPL may also be officers of any Affiliate, as may be required to perform corporate governance, policy and strategic direction responsibilities of an affiliated group of businesses. However, this exception shall not allow a Non-Executive Officer in a commercial or operational role to be an officer of a Non-Regulated Affiliate that has or reasonably expects to have commercial or operational arrangements with TCPL Mainline.

### 3.1.5 Guiding Principle

Notwithstanding sections 3.1.2, 3.1.3 and 3.1.4 hereof, an individual shall not act both as a director, or officer of TCPL, or a member of a management team of TCPL Mainline, and as a director, or officer, or member of a management team of any other Affiliate (thereby acting in a dual capacity) unless the individual is able to carry out his/her responsibilities in a manner that preserves the form, and the spirit and intent, of this Code. In particular, an individual:

- (a) shall not agree to act in a dual capacity if the individual, acting reasonably, determines that acting in a dual capacity could be detrimental to the interests of customers of TCPL Mainline; and
- (b) if acting in a dual capacity, shall abstain from engaging in any activity that the individual acting reasonably, determines could be detrimental to the interests of customers of TCPL Mainline.

### 3.2 Degree of Separation

### 3.2.1 Accounting Separation

TCPL shall ensure accounting separation of TCPL Mainline from all Affiliates and shall maintain separately identifiable financial records and books of accounts.

### 3.2.2 Separation of Information Services

Where TCPL Mainline shares Information Services with a Non-Regulated Affiliate, all Confidential Information must be protected from unauthorized access by the Non-Regulated Affiliate. Access to TCPL Mainline's Information Services shall include appropriate computer data management and data access protocols as well as contractual provisions regarding the

breach of any access protocols. Compliance with the access protocols shall be periodically confirmed by TCPL Mainline.

### 3.2.3 Financial Transactions with Affiliates

TCPL shall ensure that any loan, investment, or other financial support provided by TCPL Mainline to a Non-Regulated Affiliate is provided on terms no more favorable than what that Non-Regulated Affiliate would be able to obtain as a stand-alone entity from the capital markets.

### 3.2.4 Physical Separation

TCPL Mainline shall put appropriate measures in place to restrict physical access of representatives with commercial responsibilities for Non-Regulated Affiliates to Confidential Information.

### 3.3 Resource Sharing

### 3.3.1 Sharing of Assets

The operational plant, assets and equipment of TCPL Mainline shall be separately identifiable from the operation plant, assets and equipment of other TCPL lines of business and separated in ownership from the operational plant, assets and equipment of other Non-Regulated Affiliates.

### 3.3.2 Shared Services Permitted

Where TCPL determines it is prudent in operating TCPL Mainline's business to do so, it may obtain Shared Services from, or provide Shared Services to, an Affiliate. TCPL shall periodically review the prudence of continuing Shared Services arrangements with a view to making any necessary adjustments to ensure that each of TCPL Mainline and its Affiliates bears its proportionate share of costs.

### 3.3.3 Services Agreement

TCPL shall enter into a Services Agreement with respect to any Shared Services it provides to, or acquires from, an Affiliate for the operation of TCPL Mainline.

### 3.3.4 Sharing of Employees

### 3.3.4.1 TCPL Mainline and its Affiliates

Subject to section 3.3.4.2 hereof, TCPL Mainline may share employees with an Affiliate on a Cost Recovery Basis, provided that the employees to be shared are able to carry out their responsibilities in a manner that preserves the form, spirit and intent of this Code. In particular, an employee:

- (a) shall not be shared if it could reasonably be considered detrimental to the interests of TCPL Mainline's customers, and
- (b) if being shared, shall abstain from engaging in any activity that could reasonably be considered detrimental to the interests of TCPL Mainline's customers.

### 3.3.4.2 Employees That May Not Be Shared

TCPL Mainline may not share employees with a Non-Regulated Affiliate that:

- (a) routinely participate in making decisions with respect to the provision of TCPL Mainline Services or how TCPL Mainline Services are delivered;
- (b) routinely deal with or have direct contact with customers of TCPL Mainline; and
- (c) are routinely involved in commercial management of the business of TCPL Mainline.

### 3.3.5 Occasional Services Permitted

Where TCPL Mainline has otherwise acted prudently, it may receive, or provide, one-off, infrequent or occasional services ("Occasional Services") to, or from, an Affiliate on a Cost Recovery Basis, documented by way of work order, purchase order or similar instrument. In the event that occasional services become material as to value, frequency or use of resources, TCPL shall enter into a Services Agreement with the Affiliate for Shared Services.

### 3.3.6 Emergency Services Permitted

In the event of an emergency, TCPL Mainline may share services and resources with an Affiliate without a Services Agreement on a Cost Recovery Basis.

### 4 TRANSFER PRICING

#### 4.1 For Profit Affiliate Services

Where TCPL determines it is prudent in operating TCPL Mainline's business to do so, it may obtain For Profit Affiliate Services from an Affiliate or provide For Profit Affiliate Services to an Affiliate.

If TCPL intends to outsource to an Affiliate a service it presently provides for TCPL Mainline, TCPL shall, in addition to any other analysis it may require to demonstrate the prudence of a For Profit Affiliate Services arrangement, undertake a net present value analysis appropriate to the life cycle or operating cycle of the services involved.

TCPL shall periodically review the prudence of continuing For Profit Affiliate Services arrangements.

### 4.2 Pricing For Profit Affiliate Services

### 4.2.1 TCPL Acquires For Profit Affiliate Service

When TCPL acquires For Profit Affiliate Services it shall pay no more than the Fair Market Value of such services. The onus is on TCPL to demonstrate that the For Profit Affiliate Services have been acquired at a price that is no more than the Fair Market Value of such services.

### 4.2.2 TCPL Provides For Profit Affiliate Service

When TCPL provides For Profit Affiliate Services, it shall not charge less than the Fair Market Value of such services. The onus is on TCPL to demonstrate that the For Profit Affiliate Services have been charged at a price that is not less than the Fair Market Value of such services.

### 4.3 Services Agreement

TCPL shall enter into a Services Agreement with respect to any For Profit Affiliate Services it acquires or provides for the operation of TCPL Mainline.

### 4.4 Asset Transfers

Assets transferred, mortgaged, leased or otherwise disposed of by TCPL Mainline to a Non-Regulated Affiliate shall be at Fair Market Value.

### 4.5 Determination of Fair Market Value

In demonstrating that Fair Market Value was paid or received pursuant to a For Profit Affiliate Service arrangement or a transaction contemplated by sections 4.1, 4.2 and 4.4 hereof, TCPL Mainline, subject to any prior or contrary direction by the NEB, may utilize any method to determine Fair Market Value that it believes appropriate in the circumstances. These methods may include, without limitation: competitive tendering, competitive quotes, bench-marking studies, catalogue pricing, replacement cost comparisons or recent market transactions. TCPL Mainline shall bear the onus of demonstrating that the methodology or methodologies utilized in determining the Fair Market Value of the subject goods or services was appropriate in the circumstances.

### 4.6 Asset Transfers Between TCPL Mainline and Regulated Affiliates

Where operational efficiencies between TCPL Mainline and Regulated Affiliates can be obtained through the use of common facilities (such as shared warehousing or field offices), combined purchasing power or through the use of other cost saving procedures, individual assets or groups of assets used in TCPL Mainline's and Regulated Affiliates' operations (such as equipment, plant inventory, spare parts or similar assets) may be transferred in the ordinary course of business between TCPL Mainline and Regulated Affiliates at net book value or other reasonable standard acceptable to the Board. All such transactions shall be properly accounted for on the books of TCPL.

### 5 EQUAL TREATMENT WITH RESPECT TO TCPL MAINLINE SERVICES

### 5.1 Impartial Application of Tariff

TCPL Mainline shall apply and enforce all tariff provisions relating to TCPL Mainline Services impartially, in the same timeframe, and without preference in relation to its Affiliates and all other customers or prospective customers.

### 5.2 Equal Access

TCPL Mainline shall not favor any Affiliate with respect to access to information concerning TCPL Mainline Services or with respect to the obtaining of, or the scheduling of, TCPL Mainline Services. Requests by an Affiliate or an Affiliate's customers for access to TCPL Services shall be processed and provided in the same manner as would be processed or provided for other customers or prospective customers of TCPL Mainline.

### 5.3 No Undue Influence

TCPL Mainline shall not condition or otherwise tie the receipt of TCPL Mainline Services to a requirement that a customer must also deal with an Affiliate. TCPL Mainline shall ensure that its representatives do not, explicitly or by implication, suggest that an advantage will accrue to a customer in dealing with TCPL Mainline if the customer also deals with an Affiliate of TCPL Mainline.

### 5.4 Affiliate Activities

TCPL Mainline shall take reasonable steps to ensure that an Affiliate does not imply in its marketing material or otherwise, favored treatment or preferential access to TCPL Mainline Services. If TCPL Mainline becomes aware of any such inappropriate activity by an Affiliate, it shall:

- (a) immediately take reasonable steps to notify affected customers of the violation;
- (b) take necessary steps to ensure the Affiliate is aware of the concern; and
- (c) inform the NEB in writing of such activity and the remedial measures that were undertaken by TCPL Mainline.

### 5.5 Access to Shared and Occasional Services

TCPL Mainline is not required to provide non-Affiliated parties with equal access to Shared Services or Occasional Services.

### 6 CONFIDENTIALITY OF INFORMATION

### 6.1 TCPL Mainline Information

Subject to section 6.2 hereof, TCPL Mainline shall not provide Non-Regulated Affiliates with information relating to the planning, operations, finances or strategy of TCPL Mainline before such information is publicly available.

### 6.2 Management Exception

Officers of TCPL who are also officers of an Affiliate as permitted pursuant to section 3.1.4 hereof may disclose, subject to the provisions of section 3.1.5 hereof, TCPL Mainline planning, operational, financial and strategic information to the Affiliate to fulfill their responsibilities with

respect to corporate governance, policy and strategic direction of an affiliated group of businesses, but only to the extent necessary and not for any other purpose.

### 6.3 No Release of Confidential Information

Subject to section 6.5, TCPL Mainline shall not release to an Affiliate Confidential Information relating to a customer or prospective customer, without receiving the prior written consent of the customer or prospective customer, unless such Confidential Information may be disclosed to an Affiliate in connection with a disclosure required:

- (a) for the purpose of a court proceeding or a proceeding before a quasi-judicial body to which the customer is a party;
- (b) for the purpose of complying with a subpoena, warrant, or order issued or made by a court, person or body having jurisdiction to compel the production of information or with a rule of court that relates to the production of information;
- (c) to a municipal or provincial police service for the purpose of investigating an offence involving the customer, if the disclosure is not contrary to the express request of the customer;
- (d) by law or by an order of a government or agency having jurisdiction over TCPL Mainline; or
- (e) for the purpose of providing Shared Services or For Profit Affiliate Services to the Affiliate or for the purpose of receiving Shared Services or For Profit Affiliate Services from the Affiliate; provided appropriate measures are first put in place by the Affiliate to protect the Confidential Information and the Confidential Information is used by the Affiliate only for the purpose intended by TCPL Mainline.

### 6.4 Aggregated Confidential Information

TCPL Mainline may disclose Confidential Information when aggregated with the Confidential Information of other customers in such a manner that an individual customer's Confidential Information can not be identified.

### 6.5 Release of Confidential Information to Regulated Affiliates

TCPL Mainline may release Confidential Information on an as-needed basis, to a Regulated Affiliate that is operated by the same entity that operates TCPL Mainline, or is operated by any Affiliate of TCPL Mainline, provided that the Regulated Affiliate does not release the Confidential Information to any other entity without receiving the prior written consent of the customer.

### 7 COMPLIANCE MEASURES

### 7.1 Responsibility for Compliance

TCPL Mainline shall be responsible for ensuring compliance with this Code.

### 7.2 Communication of Code

TCPL Mainline shall:

- (a) communicate the contents of the Code, and any modifications to it from time to time, to each of its directors, officers, employees, consultants, contractors, agents and Affiliates; and
- (b) make the Code available on TCPL's web site.

### 7.3 Compliance Officer

TCPL shall appoint a compliance officer (the "Compliance Officer"). TCPL shall ensure that the Compliance Officer is an officer of TCPL and has adequate resources to fulfill his or her responsibilities.

### 7.4 Responsibilities of the Compliance Officer

The responsibilities of the Compliance Officer shall include:

- (a) providing advice and information to TCPL Mainline for the purpose of ensuring compliance with this Code;
- (b) monitoring and documenting compliance with the Code by TCPL, TCPL Mainline, and as applicable, their directors, officers, representatives, consultants, contractors and agents;
- (c) monitoring and documenting compliance with the Code by Affiliates of TCPL Mainline with respect to the interactions of the Affiliates with TCPL Mainline;
- (d) providing for the preparation and updating, of a Compliance Plan for TCPL Mainline pursuant to Section 7.5 hereof;
- (e) filing the Compliance Plan and any modifications or replacements with the NEB, posting the Compliance Plan on the TCPL's website, and advising interested parties promptly when the Compliance Plan, or any modifications or replacements, have been posted on the website;
- (f) performing an annual review of compliance with the Compliance Plan and preparing an annual compliance report ("Compliance Report") containing the information required in section 7.6 hereof. The Compliance Officer shall file the Compliance Report with the NEB within 120 days of the fiscal year end of TCPL with respect to the immediately preceding fiscal year, post the Compliance Report on TCPL's website, and advise interested parties promptly when the Compliance Report has been posted on the website;

- (g) receiving and investigating internal and external disputes, complaints and inquiries with respect to the application of, and alleged non-compliance, with the Code in accordance with Section 8 hereof;
- (h) recommending to TCPL Mainline measures required to address events of non-compliance with the Code; and
- (i) maintaining adequate records with respect to all aspects of the Compliance Officer's responsibility.

### 7.5 The Compliance Plan

TCPL Mainline shall prepare a Compliance Plan. The Compliance Plan shall detail the measures, policies, procedures and monitoring mechanisms that TCPL Mainline will employ to ensure its full compliance with the provisions of the Code by TCPL, TCPL Mainline, and as applicable, their directors, officers, representatives, consultants, contractors and agents, and by Affiliates of TCPL Mainline with respect to the interactions of the Affiliates with TCPL Mainline. TCPL Mainline shall review and update the Compliance Plan at least annually.

### 7.5.1 Responsibilities of the Compliance Plan Committee

The Compliance Plan Committee will meet at least quarterly, and will discharge its responsibilities as set out in the Compliance Plan by:

- (a) receiving and reviewing the documentation including the certificates and reports as required by the Compliance Plan;
- (b) making appropriate inquiries as to the sufficiency of the aforementioned certificates and reports;
- (c) making appropriate recommendations regarding the sufficiency of the processes and mechanisms intended to maintain compliance as set out in the Compliance Plan;
- (d) identifying any instances of non-compliance as set out in the Compliance Plan and ensuring that any such instance is treated as an inquiry under the Code (see Section 8).

### 7.6 The Compliance Report

The Compliance Report shall include the following information prepared in respect to the period of time covered by the Compliance Report:

- (a) a copy of the Compliance Plan and any amendments thereto;
- (b) a corporate organization chart for TCPL and its Affiliates indicating relationships and ownership percentages;
- (c) a list of all Affiliates with whom TCPL Mainline transacted business, including business addresses, a list of the Affiliates' officers and directors, and a description of the Affiliates' business activities;

- (d) a list of all Services Agreements in effect at any time during such period;
- (e) an overall assessment of compliance with the Code by TCPL and TCPL Mainline, including as applicable compliance by the directors, officers, representatives, consultants, contractors and agents of TCPL and TCPL Mainline, and by Affiliates of TCPL Mainline with respect to the interactions of the Affiliates with TCPL Mainline;
- (f) an assessment of the effectiveness of the Compliance Plan and any recommendations for modifications thereto;
- (g) in the event of any material non-compliance with the Code, a comprehensive description thereof and an explanation of all steps taken to correct such non-compliance;
- (h) subject to the confidentiality provisions of section 8.1 hereof, a summary of disputes, complaints and inquiry activity during the year;
- (i) an Affiliated Party Transactions Summary;
- (j) a summary list of any exemptions granted to this Code or exceptions utilized, including the exception for emergency services; and
- (k) two certificates, each in the form attached as Schedule "A" attached to this Code, attesting to completeness of the Compliance Report and compliance with the Code, one certificate signed by the Compliance Officer and a second certificate signed by the highest ranking operating officer of TCPL.

### 7.7 Documents to be Provided to the NEB upon Request

If required by the NEB, TCPL Mainline shall provide the NEB with a copy of any document referred to in a Compliance Report or other supporting records and material.

### 7.8 Compliance Records and Audit

The records required to be maintained by the Compliance Officer pursuant to section 7.4(i) hereof shall be retained for a period of at least six years. Compliance records shall be maintained in a manner sufficient to support a third party audit of the state of compliance with the Code by TCPL and TCPL Mainline, and as applicable, their directors, officers, representatives, consultants, contractors and agents, and by Affiliates of TCPL Mainline with respect to the interactions of the Affiliates with TCPL Mainline. Subject to the confidentiality provisions of section 8.1 hereof, all such records shall be made available for inspection or audit as may be required by the NEB from time to time.

### 8 DISPUTES, COMPLAINTS AND INQUIRIES

### 8.1 Filing with the Compliance Officer

Disputes, complaints or inquiries from within TCPL Mainline, or from external parties respecting the application of, or alleged non-compliance with, the Code shall be submitted in writing to the Compliance Officer and may be made confidentially. The identity of the party

making the submission to the Compliance Officer shall be kept confidential by the Compliance Officer unless the party otherwise agrees.

### 8.2 Processing by TCPL Mainline

### 8.2.1 Compliance Officer Acknowledgment

The Compliance Officer shall acknowledge all disputes, complaints or inquiries in writing within five working days of receipt.

### 8.2.2 Disposition

The Compliance Officer shall respond to the dispute, complaint or inquiry within 21 working days of its receipt. The response shall include a description of the dispute, complaint or inquiry and the initial response of TCPL Mainline to the issues identified in the submission. TCPL Mainline's final disposition of the dispute, complaint or inquiry shall be completed as expeditiously as possible in the circumstances, and in any event within 60 days of receipt of the dispute, complaint or inquiry, except where the party making the submission otherwise agrees.

### 8.3 Referral to the NEB

In the event:

- (a) TCPL Mainline fails to abide by the process identified in section 8.2 hereof,
- (b) TCPL Mainline or a party is unsatisfied with the resolution of a dispute, complaint or inquiry following the conclusion of the section 8.2 process, or
- (c) of an urgent and significant matter, where there is a reasonable expectation that a party's position may be prejudiced by allowing the process contemplated by section 8.2 to operate,

TCPL Mainline (subject to the confidentiality provisions of section 8.1 hereof) or a party with a dispute, complaint or inquiry may refer the matter to the NEB for consideration. A referral to the NEB must be in writing and shall describe the dispute, complaint, or inquiry and must include the response, if any, of TCPL Mainline to the submission.

### 9 NON-COMPLIANCE WITH THE CODE

### 9.1 Non-Compliance

Any non-compliance with the Code by any director, officer, employee, consultant, contractor or agent of TCPL or TCPL Mainline, as applicable, or by an Affiliate (or any director, officer, employee, consultant, contractor or agent of an Affiliate) with respect to the interactions of the Affiliate with TCPL Mainline will be considered to be non-compliance by TCPL Mainline.

### 9.2 Consequences for Non-Compliance with Code

Non-compliance with the Code by TCPL Mainline shall subject TCPL Mainline to the full range of powers and authorities of the NEB. Non-compliance with the Code by a director, officer, employee, consultant, contractor or agent of TCPL or TCPL Mainline, as applicable, may subject such individual to disciplinary action by TCPL.

### SCHEDULE A – OFFICERS CERTIFICATE

### **OFFICER'S CERTIFICATE**

10:	The National Energy Board	
	of the City of, in the Province of erta, acting in my position as an officer of TransCanada PipeLines Limited and not in my onal capacity, to the best of my knowledge do hereby certify as follows:	
1.	My position with TCPL is, and as such I have personal knowledge of, or have conducted due inquiry of individuals who have personal knowledge of, the facts and matters herein stated.	
2.	Capitalized terms used herein (which are not otherwise defined herein) shall have the meanings ascribed thereto in the TCPL Mainline Code of Conduct (the Code).	
3.	I have read the Code, the Compliance Plan of TCPL Mainline dated and the Compliance Report of TCPL Mainline dated	
4.	The form and contents of the Compliance Report comply with the requirements of the Code and the matters reported therein are fully and accurately described.	
5.	I am not aware of any material non-compliance with the provisions of the Code by any director, officer, employee, consultant, contractor or agent of TCPL or TCPL Mainline, as applicable, or by any Affiliate of TCPL Mainline (including any director, officer, employee, consultant, contractor or agent of the Affiliate) with respect to the any interaction between an Affiliate and TCPL Mainline that is not fully and accurately described in the Compliance Report.	
	Name:	
	Title:	
	Date:	

### NOVA GAS TRANSMISSION LTD.

**CODE OF CONDUCT** 

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### NOVA GAS TRANSMISSION LTD.

### **CODE OF CONDUCT**

### 1 PURPOSE AND OBJECTIVES OF THE CODE

### 1.1 Purpose of the Code

The purpose of this Code is to establish standards and conditions for interaction between NGTL and its Affiliates.

This Code sets parameters for transactions, information sharing and the sharing of services and resources, while permitting economies of scale and operating efficiencies. These parameters are intended to:

- i) prevent NGTL from cross-subsidizing Affiliate activities;
- ii) protect confidential customer information collected by NGTL in the course of providing NGTL services:
- iii) ensure Affiliates and their customers do not have preferential access to NGTL services; and
- iv) avoid uncompetitive practices between NGTL and its Affiliates, which may be detrimental to the interests of NGTL's customers.

### 1.2 Objectives of Code

While the overall purpose of the Code is to establish standards and parameters that prohibit inappropriate Affiliate conduct, preferences or advantages, which may adversely impact the customers of regulated businesses, this purpose reflects several important underlying objectives, including:

- i) creating a clearly defined set of rules designed to enhance transparency, fairness and senior management accountability with respect to interactions between NGTL and its Affiliates;
- ii) providing an environment in which inter-affiliate economies and efficiencies can legitimately occur for the mutual advantage of both NGTL's customers and its shareholders;
- iii) developing support and respect for the Code by the employees, officers and directors of the TransCanada group of companies, which will in turn promote ratepayer confidence in the application of the Code; and
- iv) the creation of regulatory processes and cost efficiencies through the consistent application of a clear set of standards and reporting requirements for transactions between NGTL and its Affiliates, enhanced by a practical, resolution driven, dispute process.

### 1.3 Respect for the Code

Standards and rules alone, however, will always be insufficient to achieve the objectives of this Code. These objectives can only be fully realized through a demonstrated respect for the spirit and intent behind the words by those individuals to whom the Code applies.

### 1.4 Application

This Code does not replace or modify in any manner, any statutory or regulatory requirements relating to NGTL.

### 2 General Provisions

### 2.1 Definitions

In this Code the following words and phrases shall have the following meanings:

- a) "ABCA" means the Business Corporations Act, R.S.A. 2000, c. B-9.
- b) "Affiliate" means with respect to NGTL:
  - i) an "affiliate" as defined in the ABCA:
  - ii) a unit or division within NGTL or any Body Corporate referred to in clause (b)(i) above:
  - a partnership, joint venture, or Person in which NGTL or any Body Corporate referred to in clause (b)(i) above has a controlling interest or that is otherwise subject to the control of NGTL or such Body Corporate, or that has or reasonably expects to have a commercial or operational arrangement with NGTL and NGTL or any Body Corporate referred to in clause (b)(i) above owns more than 10% of the votes necessary to elect directors;
  - iv) any partnership, joint venture, or Person deemed by the EUB to be an affiliate of NGTL for the purposes of this Code; and
  - v) an agent or other Person acting on behalf of any Body Corporate, unit, division, partnership, joint venture or Person referred to in clauses (b)(i) to (iv) above.
- c) "Affiliated Party Transactions Summary" unless otherwise directed by the EUB, means in respect of any period of time, a summary overview of each type of business transaction or service, other than Major Transactions or Utility Services, performed by an Affiliate for NGTL or by NGTL for an Affiliate, which summary shall contain a general description of the transactions and services, the parties involved and the approximate aggregate value of each type of transaction or service during the said period
- d) "Body Corporate" means a "body corporate" as defined in the ABCA.
- e) "Code" means this NGTL Code of Conduct.
- f) "Compliance Officer" shall have the meaning ascribed thereto in section 7.3 hereof.

- g) "Compliance Plan" shall mean the document to be prepared and updated by NGTL pursuant to section 7.5 hereof.
- h) "Compliance Report" shall have the meaning ascribed thereto in section 7.6 hereof.
- i) "Confidential Information" means any information relating to a specific customer or potential customer of NGTL, which information NGTL has obtained or compiled in the process of providing current or prospective NGTL Services and which is not otherwise available to the public.
- j) "Cost Recovery Basis" with respect to:
  - i) the use by NGTL of an Affiliate's personnel, means the fully burdened costs of such personnel for the time period they are used by NGTL, including salary, benefits, vacation, materials, disbursements and all applicable overheads;
  - ii) the use by NGTL of an Affiliate's equipment, means an allocated share of capital and operating costs appropriate for the time period the equipment is utilized by NGTL;
  - iii) the use by an Affiliate of NGTL's equipment, means an allocated share of the capital and operating costs appropriate for the time period the equipment is utilized by the Affiliate:
  - iv) the use by NGTL of an Affiliate's services, means the complete costs of providing the services, determined in a manner acceptable to NGTL, acting prudently;
  - v) the use by an Affiliate of NGTL's services, means the complete costs of providing the services, determined in a manner acceptable to NGTL, acting prudently; and
  - vi) the transfer of equipment, plant inventory, spare parts or similar assets between NGTL and a Regulated Affiliate, means the net book value of the transferred assets.
- k) "EUB" means the Alberta Energy and Utilities Board.
- 1) "Fair Market Value" means the price reached in an open and unrestricted market between informed and prudent parties, acting at arms length and under no compulsion to act.
- m) "For Profit Affiliate Service" means any service, provided by NGTL to an Affiliate, or by an Affiliate to NGTL on a for-profit basis.
- n) "Information Services" means any computer systems, computer services, databases, electronic storage services or electronic communication media utilized by NGTL relating to NGTL customers or NGTL operations.
- o) "Major Transactions" means a transaction or series of related transactions within a calendar year between NGTL and an Affiliate relating to the sale or purchase of an asset(s) or to the provision of a service or a similar group of services, other than Utility Services, which has an aggregate value within that calendar year of \$500,000 or more.
- p) "NGTL" means NOVA Gas Transmission Ltd.

- q) "NGTL Service" means a service, the terms and conditions of which are regulated by the EUB.
- r) "Non-Executive Officer" means an officer of NGTL who is not also a senior officer of TransCanada Corporation with an executive officer title.
- s) "Non-Regulated Affiliate" means an Affiliate that is not a Regulated Affiliate.
- t) "Occasional Services" shall have the meaning ascribed thereto in section 3.3.6 hereof.
- u) "Person" means a "person" as defined in the ABCA.
- v) "Regulated Affiliate" means an Affiliate whose tolls and tariffs are regulated by the EUB, the National Energy Board or the Federal Energy Regulatory Commission.
- w) "Services Agreement" means an agreement entered into between NGTL and one or more Affiliates for the provision of Shared Services or For Profit Affiliate Services and shall provide for the following matters as appropriate in the circumstances:
  - i) the type, quantity and quality of service;
  - ii) pricing, allocation or cost recovery provisions;
  - iii) confidentiality arrangements;
  - iv) the apportionment of risk;
  - v) dispute resolution provisions; and
  - vi) a representation by NGTL and each Affiliate party to the agreement that the agreement complies with the Code.
- x) "Shared Service" means any service provided on a Cost Recovery Basis by NGTL to an Affiliate or by an Affiliate to NGTL.
- y) "Subsidiary" shall have the meaning ascribed thereto in section 2(4) of the ABCA.
- z) "Utility Service" means a service, the terms and conditions of which are regulated by the EUB, and includes services for which an individual rate, joint rate, toll, fare, charge or schedule of them, have been approved by the EUB.

### 2.2 Interpretation

Headings are for convenience only and shall not affect the interpretation of this Code. Words importing the singular include the plural and vice versa. A reference to a statute, document or a provision of a document includes an amendment or supplement to, or a replacement of, that statute, document or that provision of that document.

### 2.3 To Whom this Code Applies

NGTL is obligated to comply with this Code and all Affiliates of NGTL are obligated to comply with the Code to the extent they interact with NGTL.

### 2.4 Coming into Force

This Code comes into force 90 days after approval by the Board, provided however that, to the extent existing agreements or arrangements are in place between parties to whom this Code applies that do not conform with this Code, such agreements or arrangements must be brought into compliance with this Code within 60 days after this Code comes into force.

### 2.5 Amendments to this Code

This Code may be reviewed and amended from time to time by the EUB on its own initiative, or pursuant to a request by any party to whom this Code applies or by any interested party.

### 2.6 Exemptions

NGTL may apply to the EUB for an exemption with respect to compliance with any provision of this Code. Any such application will specify if the requested exemption is in respect of a particular transaction, series of transactions, for a specified period of time, or is for a general exemption from a particular provision.

### 2.7 Authority of the EUB

This Code does not detract from, reduce or modify in any way, the powers of the EUB to deny, vary, approve with conditions, or overturn, the terms of any transaction or arrangement between NGTL and one or more Affiliates that may be done in compliance with this Code. Compliance with the Code does not eliminate the requirement for specific EUB approvals or filings where required by statute, regulation, or by EUB decisions, orders or directions.

### 3 GOVERNANCE AND SEPARATION OF NGTL BUSINESS

### 3.1 Governance

### 3.1.1 Separate Operations

The commercial business and affairs of NGTL should be managed and conducted separately from the commercial business and affairs of its Non-Regulated Affiliates, except as required to fulfill corporate governance, policy, and strategic direction responsibilities of a corporate group of businesses as a whole.

### 3.1.2 Common Directors

NGTL may have common directors with its Affiliates.

### 3.1.3 Separate Management

Subject to section 3.1.4 hereof, NGTL must have a separate management team and separate officers from its Non-Regulated Affiliates, but may share management team members or officers with other Regulated Affiliates.

### 3.1.4 Separate Management Exception

Officers of NGTL may also be officers of any Affiliate, as may be required to perform corporate governance, policy and strategic direction responsibilities of an affiliated group of businesses.

However, this exception shall not allow a Non-Executive Officer in a commercial or operational role to be an officer of a Non-Regulated Affiliate that has or reasonably expects to have commercial or operational arrangements with NGTL.

### 3.1.5 Guiding Principle

Notwithstanding sections 3.1.2, 3.1.3 and 3.1.4 hereof, an individual shall not act both as a director, officer or member of a management team of NGTL and as a director, officer or member of a management team of any other Affiliate (thereby acting in a dual capacity) unless the individual is able to carry out his/her responsibilities in a manner that preserves the form, and the spirit and intent, of this Code. In particular, an individual:

- (a) shall not agree to act in a dual capacity if it could reasonably be considered to be detrimental to the interests of customers of NGTL, and
- (b) if acting in a dual capacity, shall abstain from engaging in any activity that could reasonably be considered to be detrimental to the interests of customers of NGTL

### 3.2 Degree of Separation

### 3.2.1 Accounting Separation

NGTL shall ensure accounting separation from all Affiliates and shall maintain separate financial records and books of accounts.

### 3.2.2 Separation of Information Services

Where NGTL shares Information Services with a Non-Regulated Affiliate, all Confidential Information must be protected from unauthorized access by the Non-Regulated Affiliate. Access to NGTL's Information Services shall include appropriate computer data management and data access protocols as well as contractual provisions regarding the breach of any access protocols. Compliance with the access protocols shall be periodically confirmed by NGTL, through a review that complies with the provisions of the Canadian Institute of Chartered Accountants Handbook and updates thereto.

### 3.2.3 Financial Transactions with Affiliates

NGTL shall ensure that any loan, investment, or other financial support provided to a Non-Regulated Affiliate is provided on terms no more favorable than what that Non-Regulated Affiliate would be able to obtain as a stand-alone entity from the capital markets.

### 3.2.4 Physical Separation

NGTL shall put appropriate measures in place to restrict physical access of representatives with commercial responsibilities for Non-Regulated Affiliates to Confidential Information.

### 3.3 Resource Sharing

### 3.3.1 Sharing of Assets

The operational plant, assets and equipment of NGTL shall be separated in ownership from the operational plant, assets and equipment of other Non-Regulated Affiliates.

#### 3.3.2 Shared Services Permitted

Where NGTL determines it is prudent in operating NGTL's business to do so, it may obtain Shared Services from, or provide Shared Services to, an Affiliate. NGTL shall periodically review the prudence of continuing Shared Services arrangements with a view to making any necessary adjustments to ensure that each of NGTL and its Affiliates bears its proportionate share of costs.

### 3.3.3 Services Agreement

NGTL shall enter into a Services Agreement with respect to any Shared Services it provides to, or acquires from, an Affiliate.

### 3.3.4 Sharing of Employees

#### 3.3.4.1 NGTL and its Affiliates

Subject to section 3.3.4.2 hereof, NGTL may share representatives with an Affiliate on a Cost Recovery Basis, provided that the representatives to be shared are able to carry out their responsibilities in a manner that preserves the form, spirit and intent of this Code. In particular, a representative:

- (a) shall not be shared if it could reasonably be considered detrimental to the interests of NGTL's customers, and
- (b) if being shared, shall abstain from engaging in any activity that could reasonably be considered detrimental to the interests of NGTL's customers.

### 3.3.4.2 Employees That May Not Be Shared

NGTL may not share representatives with a Non-Regulated Affiliate that:

- (a) routinely participate in making decisions with respect to the provision of NGTL Services or how NGTL Services are delivered;
- (b) routinely deal with or have direct contact with customers of NGTL; and
- (c) are routinely involved in commercial management of the business of NGTL.

### 3.3.5 Transferring of Representatives

NGTL may transfer representatives to or from an Affiliate, provided any representative transferred by NGTL who had access to Confidential Information shall execute a confidentiality agreement with respect to such Confidential Information prior to the transfer.

### 3.3.6 Occasional Services Permitted

Where NGTL has otherwise acted prudently, it may receive, or provide, one-off, infrequent or occasional services ("Occasional Services") to, or from, an Affiliate on a Cost Recovery Basis, documented by way of work order, purchase order or similar instrument. In the event that occasional services become material as to value, frequency or use of resources, NGTL shall enter into a Services Agreement with the Affiliate for Shared Services.

### 3.3.7 Emergency Services Permitted

In the event of an emergency, NGTL may share services and resources with an Affiliate without a Services Agreement on a Cost Recovery Basis.

### 4 TRANSFER PRICING

#### 4.1 For Profit Affiliate Services

Where NGTL determines it is prudent in operating its business to do so, it may obtain For Profit Affiliate Services from an Affiliate or provide For Profit Affiliate Services to an Affiliate.

If NGTL intends to outsource to an Affiliate a service it presently provides for itself, NGTL shall, in addition to any other analysis it may require to demonstrate the prudence of a For Profit Affiliate Services arrangement, undertake a net present value analysis appropriate to the life cycle or operating cycle of the services involved.

NGTL shall periodically review the prudence of continuing For Profit Affiliate Services arrangements.

### 4.2 Pricing For Profit Affiliate Services

### 4.2.1 NGTL Acquires For Profit Affiliate Service

When NGTL acquires For Profit Affiliate Services it shall pay no more than the Fair Market Value of such services. The onus is on NGTL to demonstrate that the For Profit Affiliate Services have been acquired at a price that is no more than the Fair Market Value of such services.

### 4.2.2 NGTL Provides For Profit Affiliate Service

When NGTL provides For Profit Affiliate Services, it shall not charge less than the Fair Market Value of such services. The onus is on NGTL to demonstrate that the For Profit Affiliate Services have been charged at a price that is not less than the Fair Market Value of such services.

### 4.3 Services Agreement

NGTL shall enter into a Services Agreement with respect to any For Profit Affiliate Services it acquires or provides.

### 4.4 Asset Transfers

Assets transferred, mortgaged, leased or otherwise disposed of by NGTL to a Non-Regulated Affiliate shall be at Fair Market Value.

### 4.5 Determination of Fair Market Value

In demonstrating that Fair Market Value was paid or received pursuant to a For Profit Affiliate Service arrangement or a transaction contemplated by sections 4.1, 4.2 and 4.4 hereof, NGTL, subject to any prior or contrary direction by the EUB, may utilize any method to determine Fair Market Value that it believes appropriate in the circumstances. These methods may include, without limitation: competitive tendering, competitive quotes, bench-marking studies, catalogue

pricing, replacement cost comparisons or recent market transactions. NGTL shall bear the onus of demonstrating that the methodology or methodologies utilized in determining the Fair Market Value of the subject goods or services was appropriate in the circumstances.

### 4.6 Asset Transfers Between NGTL and Regulated Affiliates

Where operational efficiencies between NGTL and Regulated Affiliates can be obtained through the use of common facilities (such as shared warehousing or field offices), combined purchasing power or through the use of other cost saving procedures, individual assets or groups of assets used in NGTL's and Regulated Affiliates' operations (such as equipment, plant inventory, spare parts or similar assets) may be transferred in the ordinary course of business between NGTL and Regulated Affiliates at net book value or other reasonable standard acceptable to the Board. All such transactions shall be properly accounted for on the books of NGTL.

### 5 EQUAL TREATMENT WITH RESPECT TO NGTL SERVICES

### 5.1 Impartial Application of Tariff

NGTL shall apply and enforce all tariff provisions relating to NGTL Services impartially, in the same timeframe, and without preference in relation to its Affiliates and all other customers or prospective customers.

### 5.2 Equal Access

NGTL shall not favor any Affiliate with respect to access to information concerning NGTL Services or with respect to the obtaining of, or the scheduling of, NGTL Services. Requests by an Affiliate or an Affiliate's customers for access to NGTL Services shall be processed and provided in the same manner as would be processed or provided for other customers or prospective customers of NGTL.

#### 5.3 No Undue Influence

NGTL shall not condition or otherwise tie the receipt of NGTL Services to a requirement that a customer must also deal with an Affiliate. NGTL shall ensure that its representatives do not, explicitly or by implication, suggest that an advantage will accrue to a customer in dealing with NGTL if the customer also deals with an Affiliate of NGTL.

### 5.4 Affiliate Activities

NGTL shall take reasonable steps to ensure that an Affiliate does not imply in its marketing material or otherwise, favored treatment or preferential access to NGTL Services. If NGTL becomes aware of any such inappropriate activity by an Affiliate, it shall:

- (a) immediately take reasonable steps to notify affected customers of the violation;
- (b) take necessary steps to ensure the Affiliate is aware of the concern; and
- (c) inform the EUB in writing of such activity and the remedial measures that were undertaken by NGTL.

### 5.5 Access to Shared and Occasional Services

NGTL is not required to provide non-Affiliated parties with equal access to Shared Services or Occasional Services.

### 6 CONFIDENTIALITY OF INFORMATION

### 6.1 NGTL Information

Subject to section 6.2 hereof, NGTL shall not provide Non-Regulated Affiliates with information relating to the planning, operations, finances or strategy of NGTL before such information is publicly available.

### 6.2 Management Exception

Officers of NGTL who are also officers of an Affiliate as permitted pursuant to section 3.1.4 hereof may disclose, subject to the provisions of section 3.1.5 hereof, NGTL planning, operational, financial and strategic information to the Affiliate to fulfill their responsibilities with respect to corporate governance, policy and strategic direction of an affiliated group of businesses, but only to the extent necessary and not for any other purpose.

### 6.3 No Release of Confidential Information

Subject to section 6.5, NGTL shall not release to an Affiliate Confidential Information relating to a customer or prospective customer, without receiving the prior written consent of the customer or prospective customer, unless such Confidential Information may be disclosed to an Affiliate in connection with a disclosure required:

- (a) for the purpose of a court proceeding or a proceeding before a quasi-judicial body to which the customer is a party;
- (b) for the purpose of complying with a subpoena, warrant, or order issued or made by a court, person or body having jurisdiction to compel the production of information or with a rule of court that relates to the production of information;
- (c) to a municipal or provincial police service for the purpose of investigating an offence involving the customer, if the disclosure is not contrary to the express request of the customer;
- (d) by law or by an order of a government or agency having jurisdiction over NGTL; or
- (e) for the purpose of providing Shared Services or For Profit Affiliate Services to the Affiliate or for the purpose of receiving Shared Services or For Profit Affiliate Services from the Affiliate; provided appropriate measures are first put in place by the Affiliate to protect the Confidential Information and the Confidential Information is used by the Affiliate only for the purpose intended by NGTL.

### 6.4 Aggregated Confidential Information

NGTL may disclose Confidential Information when aggregated with the Confidential Information of other customers in such a manner that an individual customer's Confidential Information can not be identified.

### 6.5 Release of Confidential Information to Regulated Affiliates

NGTL may release Confidential Information on an as-needed basis, to a Regulated Affiliate that is operated by the same entity that operates NGTL, or is operated by any Affiliate of NGTL, provided that the Regulated Affiliate does not release the Confidential Information to any other entity without receiving the prior written consent of the customer.

### 7 COMPLIANCE MEASURES

### 7.1 Responsibility for Compliance

NGTL shall be responsible for ensuring compliance with this Code.

### 7.2 Communication of Code

NGTL shall:

- (a) communicate the contents of the Code, and any modifications to it from time to time, to each of its directors, officers, representatives, consultants, contractors, agents and Affiliates; and
- (b) make the Code available on NGTL's web site.

### 7.3 Compliance Officer

NGTL shall appoint a compliance officer (the "Compliance Officer"). NGTL shall ensure that the Compliance Officer is an officer of NGTL and has adequate resources to fulfill his or her responsibilities.

### 7.4 Responsibilities of the Compliance Officer

The responsibilities of the Compliance Officer shall include:

- (a) providing advice and information to NGTL for the purpose of ensuring compliance with this Code;
- (b) monitoring and documenting compliance with the Code by NGTL, its directors, officers, representatives, consultants, contractors and agents;
- (c) monitoring and documenting compliance with the Code by Affiliates of NGTL with respect to the interactions of the Affiliates with NGTL;
- (d) providing for the preparation and updating, of a Compliance Plan for NGTL pursuant to Section 7.5 hereof;
- (e) filing the Compliance Plan and any modifications or replacements with the EUB, posting the Compliance Plan on the NGTL's website, and advising interested parties promptly when the Compliance Plan, or any modifications or replacements, have been posted on the website;
- (f) performing an annual review of compliance with the Compliance Plan and preparing an annual compliance report ("Compliance Report") containing the information required in section 7.6 hereof. The Compliance Officer shall file the Compliance Report with the EUB within 120 days of the fiscal year end of NGTL with respect to the immediately

- preceding fiscal year, post the Compliance Report on NGTL's website, and advise interested parties promptly when the Compliance Report has been posted on the website;
- (g) receiving and investigating internal and external disputes, complaints and inquiries with respect to the application of, and alleged non-compliance, with the Code in accordance with Section 8 hereof;
- (h) recommending to NGTL measures required to address events of non-compliance with the Code; and
- (i) maintaining adequate records with respect to all aspects of the Compliance Officer's responsibility.

#### 7.5 The Compliance Plan

NGTL shall prepare a Compliance Plan. The Compliance Plan shall detail the measures, policies, procedures and monitoring mechanisms that NGTL will employ to ensure its full compliance with the provisions of the Code by NGTL its directors, officers, representatives, consultants, contractors and agents, and by Affiliates of NGTL with respect to the interactions of the Affiliates with NGTL. NGTL shall review and update the Compliance Plan at least annually.

#### 7.6 The Compliance Report

The Compliance Report shall include the following information prepared in respect to the period of time covered by the Compliance Report:

- (a) a copy of the Compliance Plan and any amendments thereto;
- (b) a corporate organization chart for NGTL and its Affiliates indicating relationships and ownership percentages;
- (c) a list of all Affiliates with whom NGTL transacted business, including business addresses, a list of the Affiliates' officers and directors, and a description of the Affiliates' business activities:
- (d) a list of all Services Agreements in effect at any time during such period;
- (e) an overall assessment of compliance with the Code by NGTL, including compliance by the directors, officers, representatives, consultants, contractors and agents of NGTL and by Affiliates of NGTL with respect to the interactions of the Affiliates with NGTL;
- (f) an assessment of the effectiveness of the Compliance Plan and any recommendations for modifications thereto;
- (g) in the event of any material non-compliance with the Code, a comprehensive description thereof and an explanation of all steps taken to correct such non-compliance;
- (h) subject to the confidentiality provisions of section 8.1 hereof, a summary of disputes, complaints and inquiry activity during the year;
- (i) a list and detailed description of all Major Transactions between NGTL and its Affiliates;
- (j) an Affiliated Party Transactions Summary;
- (k) a summary list of any exemptions granted to this Code or exceptions utilized, including the exception for emergency services; and

(l) two certificates, each in the form attached as Schedule "A" attached to this Code, attesting to completeness of the Compliance Report and compliance with the Code, one certificate signed by the Compliance Officer and a second certificate signed by the highest ranking operating officer of NGTL.

#### 7.7 Documents to be Provided to the EUB upon Request

If required by the EUB, NGTL shall provide the EUB with a copy of any document referred to in a Compliance Report or other supporting records and material.

## 7.8 Compliance Records and Audit

The records required to be maintained by the Compliance Officer pursuant to section 7.4(i) hereof shall be retained for a period of at least six years. Compliance records shall be maintained in a manner sufficient to support a third party audit of the state of compliance with the Code by NGTL, its directors, officers, representatives, consultants, contractors and agents, and by Affiliates of NGTL with respect to the interactions of the Affiliates with NGTL. Subject to the confidentiality provisions of section 8.1 hereof, all such records shall be made available for inspection or audit as may be required by the EUB from time to time.

#### 8 DISPUTES, COMPLAINTS AND INQUIRIES

#### 8.1 Filing with the Compliance Officer

Disputes, complaints or inquiries from within NGTL or from external parties respecting the application of, or alleged non-compliance with, the Code shall be submitted in writing to the Compliance Officer and may be made confidentially. The identity of the party making the submission to the Compliance Officer shall be kept confidential by the Compliance Officer unless the party otherwise agrees.

#### 8.2 Processing by NGTL

#### 8.2.1 Compliance Officer Acknowledgment

The Compliance Officer shall acknowledge all disputes, complaints or inquiries in writing within five working days of receipt.

## 8.2.2 Disposition

The Compliance Officer shall respond to the dispute, complaint or inquiry within 21 working days of its receipt. The response shall include a description of the dispute, complaint or inquiry and the initial response of NGTL to the issues identified in the submission. NGTL's final disposition of the dispute, complaint or inquiry shall be completed as expeditiously as possible in the circumstances, and in any event within 60 days of receipt of the dispute, complaint or inquiry, except where the party making the submission otherwise agrees.

#### 8.3 Referral to the EUB

In the event:

(a) NGTL fails to abide by the process identified in section 8.2 hereof,

- (b) NGTL or a party is unsatisfied with the resolution of a dispute, complaint or inquiry following the conclusion of the section 8.2 process, or
- (c) of an urgent and significant matter, where there is a reasonable expectation that a party's position may be prejudiced by allowing the process contemplated by section 8.2 to operate,

NGTL (subject to the confidentiality provisions of section 8.1 hereof) or a party with a dispute, complaint or inquiry may refer the matter to the EUB for consideration. A referral to the EUB must be in writing and shall describe the dispute, complaint, or inquiry and must include the response, if any, of NGTL to the submission.

#### 9 NON-COMPLIANCE WITH THE CODE

#### 9.1 Non-Compliance

Any non-compliance with the Code by any director, officer, representative, consultant, contractor or agent of NGTL or by an Affiliate (or any director, officer, representative, consultant, contractor or agent of an Affiliate) with respect to the interactions of the Affiliate with NGTL will be considered to be non-compliance by NGTL.

### 9.2 Consequences for Non-Compliance with Code

Non-compliance with this Code could be considered as *prima facie* evidence in a regulatory proceeding of inappropriate conduct by NGTL or of an inappropriate transaction, expense or activity by NGTL. Non-compliance with the Code by NGTL shall subject NGTL to the full range of powers and authorities of the EUB. Non-compliance with the Code by a director, officer, representative, consultant, contractor or agent of NGTL may subject such individual to disciplinary action by NGTL.

#### SCHEDULE A – OFFICERS CERTIFICATE

#### **OFFICER'S CERTIFICATE**

To: The Alberta Energy and Utilities Board I, \_\_\_\_\_ of the City of \_\_\_\_\_\_, in the Province of Alberta, acting in my position as an officer of \_\_\_\_\_\_ (NGTL) and not in my personal capacity, to the best of my knowledge do hereby certify as follows: My position with NGTL is \_\_\_\_\_\_, and as such I have personal knowledge of, or have conducted due inquiry of individuals who have personal knowledge 1. of, the facts and matters herein stated. 2. Capitalized terms used herein (which are not otherwise defined herein) shall have the meanings ascribed thereto in the NGTL Group Inter-Affiliate Code of Conduct (the Code). I have read the Code, the Compliance Plan of NGTL dated and the 3. Compliance Report of NGTL dated . 4. The form and contents of the Compliance Report comply with the requirements of the Code and the matters reported therein are fully and accurately described. 5. I am not aware of any material non-compliance with the provisions of the Code by any director, officer, employee, consultant, contractor or agent of NGTL, or by any Affiliate of NGTL (including any director, officer, employee, consultant, contractor or agent of the Affiliate) with respect to the any interaction between an Affiliate and NGTL that is not fully and accurately described in the Compliance Report. Name: \_\_\_\_\_

Title:

Date: \_\_\_\_\_

Please provide details of the specific changes that would be required to TransCanada's present data management and access protocols in order to comply with sections 2.2.2 and 2.2.3 of the ARC.

#### **RESPONSE:**

#### Compliance with Section 2.2.2 of the ARC:

TransCanada's present data management and access protocols are based on classifying TransCanada's personnel into three functional categories: (a) Regulated Business (i.e., the Canadian Mainline); (b) Non-Regulated Business; and (iii) Shared Corporate Services. A corresponding classification system for all electronic assets is also in place.

Based on this classification, TransCanada personnel in the Regulated Business and Shared Corporate Services groups are entitled to access information (to the extent required to perform their roles) related to TransCanada's Regulated Businesses. TransCanada personnel classified in the Non-Regulated Business are not permitted to access information related to TransCanada Regulated Business. This personnel and asset classification system was put in place to reflect the fact that TransCanada operates using an integrated organizational structure, which employs shared corporate services. This has, in turn, enabled TransCanada to achieve significant efficiencies and cost savings for its Regulated Business customers.

Under TransCanada's current classification system, TPT personnel would be classified as "Regulated Business" and TPT confidential information would, similarly, be classified as "Regulated Business", with the result that other Regulated Business and Shared Corporate Services would be entitled to access the information (to the extent required to perform their role). Non-Regulated personnel would not have access to TPT confidential information.

To comply with sections 2.2.2 of the ARC, TransCanada would be required to isolate TPT's confidential information, not only from Non-Regulated Business personnel, but also from all other Regulated Business and Shared Corporate Services personnel. The changes required to isolate TPT personnel and assets from other Regulated Business and Shared Corporate Services would be significant.

TransCanada's data management and data access protocols were recently enhanced over a five year period, at a cost of approximately \$10 million, and included the implementation of an identity management system and a comprehensive assessment of access permissions and monitoring controls for all of TransCanada's electronic assets, including:

• business applications

- internal and external Sharepoint sites
- internal websites
- data repository system (FileNet)
- shared/group folders

To require the isolation of TPT from TransCanada's Regulated Business and Shared Corporate Services would involve a code re-write to TransCanada's identity management system, which would in turn require an additional review of each of the above mentioned assets. The costs of doing this is difficult to forecast, but would be significant.

TransCanada's data access management protocols also include security controls in respect of the physical premises at which hard copy documentation is stored. These security controls include card key systems and monitoring processes.

TransCanada acquired new premises in Toronto during the latter half of 2010 and it is expected that TPT personnel would be based out of these offices. The Toronto premises contain restricted areas that correlate to the Regulated Business and Non-Regulated Business. The isolation of TPT information and personnel from not only the Non-Regulated Business, but also from TransCanada's other Regulated Business and Shared Corporate Service personnel and assets would require physical changes to the premises (including card-key access system) or additional office space. In addition, equipment such as dedicated printers, photocopies and fax machines would be required.

## Compliance with Section 2.2.3 of the ARC:

Section 2.2.3 of the ARC would prohibit TPT from utilizing TransCanada's Shared Corporate Services, which is comprised of:

- Tax
- Legal
- Accounting
- Human Resources
- Information Services
- Risk Management (e.g., contracts, insurance, counterparty, trading limits, etc.)
- Internal Audit
- Certain job functions within Operations and Major Projects("OM&P")(e.g., engineering, project management, health and safety, environmental management, asset reliability and maintenance, land and community relations, supply chain, records management)

As noted above, TransCanada's Shared Corporate Services provides significant cost efficiencies for TransCanada's Regulated Businesses (which will include TPT).

TPT believes that foregoing these cost efficiencies in order to strictly comply with section 2.2.3 of the ARC is unnecessary for a few reasons:

- As noted above, personnel in Shared Corporate Services are prohibited from providing any information about the Regulated Business to the Non-Regulated Business.
- Personnel in Shared Corporate Services are prohibited from having commercial or operational roles in TransCanada, eliminating the potential for any competitive advantage to accrue to Non-Regulated Business affiliates by virtue of the sharing of these personnel.
- Personnel in Shared Corporate Services receive annual training on these requirements.

If required to strictly comply with section 2.2.3 of the ARC, TPT would have to establish a duplicative structure of dedicated employees to provide those functions or a shifting of personnel in ways that may not be efficient and does not further the purposes of the ARC as expressed in Section 1.1.

Please provide an estimate of the expenditure required to enable the applicant's conformance with the ARC.

#### **RESPONSE:**

As indicated in the response to Board Staff Information Request #2, the costs associated with strict ARC compliance would include:

- Costs of amending existing data management and data access protocols, including:
  - o Costs of review of all information assets
  - o Costs of code re-write
  - o Costs of testing
- Costs of physically isolating TPT personnel, including:
  - o Costs of renovation or new office space
  - o Costs of security systems, such as card key access systems
  - o Costs of additional office equipment (printers, faxes, copiers)
- Costs of establishing dedicated corporate services functions to provide support in the following areas:
  - o Tax
  - o Legal
  - o Accounting
  - o Information Services
  - o Risk Management
  - o Internal Audit
  - o Corporate Security
  - o Certain job functions within O&MP

These costs would include:

- Hiring of additional personnel, resulting in additional compensation costs (salary, incentive compensation, benefits, etc.) and training costs
- Personnel relocation costs
- Additional equipment and systems costs (accounting systems, incident management and tracking costs)

In order to provide an estimate of these costs, numerous assumptions would have to made. Because of the broad range of variables in providing such an estimate, including the number of development projects in respect of which TPT would be involved, providing a reliable estimate of the associated costs at this time is not possible.

The Board may deny these exemption requests, may defer consideration of these exemption requests or may consider these exemption requests in a separate proceeding from this licence application proceeding. Please indicate if TransCanada would wish to be licensed if the Board granted a licence without these exemptions from the ARC.

#### **RESPONSE:**

TPT believes that TransCanada's existing organizational structure based on the three functional groups (i.e., Regulated Business, Non-Regulated Business, and Shared Corporate Services) achieves in principle precisely what the ARC seeks to address; namely, the separation of regulated utility businesses from their non-regulated affiliates to ensure no unfair advantage accrues to these non-regulated affiliates. This organizational structure is driven by Codes of Conduct that are compliant with the requirements of the Federal Energy Regulatory Commission ("FERC") and approved by the National Energy Board ("NEB"). These FERC and NEB requirements are meant to address the same issues as the ARC (i.e., the separation of regulated and non-regulated businesses). Because of this, TPT's position is that a permanent exemption from sections 2.2.2 and 2.2.3 of the ARC is warranted.

TransCanada's existing organizational structure also poses challenges prior to TPT being designated as a transmitter in respect of a particular transmission project. In order to comply with the spirit and intent of TransCanada's Codes of Conduct and internal policies with regard to the separation of its Regulated and Non-Regulated businesses, TPT's commercial and operating personnel would have to be classified as Regulated Business personnel, and would be limited to transmission-related business despite not being designated by the OEB to develop any specific transmission assets.

Accordingly, TPT respectfully requests a temporary blanket exemption from the transmitter obligations in the ARC until such time as TPT: (a) is designated by the OEB to undertake transmission development work; or (b) becomes active in the Ontario transmission market (i.e., by owning or operating a transmission system in Ontario). Upon Board designation to undertake transmission development work or upon becoming active in the Ontario transmission market, this temporary blanket exemption would expire, leaving only the permanent exemptions from Sections 2.2.2 and 2.2.3 of the ARC.

If the Board denies the request for the blanket exemption prior to designation or prior to becoming an active participant in the Ontario transmission market, TransCanada would be required to establish at great expense a separate entity solely for the purpose of participating in a designation proceeding or simply doing development work. Because this work is being completed at the expense of TransCanada shareholders and not Ontario ratepayers we believe that a blanket exemption is appropriate at this time.

#### TRANSCANADA POWER TRANSMISSION L.P.

# RESPONSES TO INTERROGATORIES FROM HYDRO ONE NETWORKS INC.

#### **GENERAL QUESTIONS**

#### **INTERROGATORY #1**

Ref: TPT application Section 9 Technical Ability (pages 24-25)

- (a) Please indicate whether TPT or its affiliates has any experience in developing, constructing and operating network (>115kV) transmission facilities, and if so provide details.
- (b) Specifically with respect to the development stage for new electrical transmission facilities, please elaborate on TPT's or its affiliates' experience with regulatory approvals, acquisition of rights of way (including landowner and First Nations & Métis consultation), and planning and design.

#### **RESPONSE:**

(a) In the past ten years, TransCanada has expanded its lines of business beyond the development, construction and operation of natural gas pipelines. Specifically, TransCanada has successfully moved into the electricity generation business and the oil pipeline business. In both of these business lines, TransCanada has been involved in the development, construction and operation of many transmission connection lines, telecommunications systems and protection systems. A listing of these transmission facilities is found in the Table attached to the response to Information Request #1(c) from Great Lakes Power Transmission L.P. Further details about TransCanada's transmission facilities are set out below.

#### **Generator Connection Lines**

TransCanada owns approximately 10,800 MW of electricity generation facilities throughout North America. These generation facilities range in size from 27 MW to over 2,400 MW, and include hydro, wind, gas-fired and co-generation plants. TransCanada owns and operates numerous generator connection lines (underground and overhead), ranging in voltage from 69 kV to 345 kV. For several of these facilities TransCanada has developed and maintained, in conjunction with local transmitters and system operators, NERC-compliant interconnection and NERC-compliant operating processes.

#### **Load Connection Lines**

TransCanada's Keystone crude oil pipeline (from Alberta to Illinois) is currently in commercial operation, and a second crude oil pipeline (from Alberta to the Gulf Coast) is currently in the permitting process. The Keystone Pipeline uses large electric motors at

each of its 88 pumping stations. The electrical load at each pumping station ranges from 15 to 22 MW. Each of these loads is connected to local transmission systems ranging in voltage from 25 kV to 230 kV. These load connection lines are not owned by TransCanada; however, uninterrupted service is critical to the operation of the pipeline. Consequently, TransCanada engaged in a detailed review of the protection and voltage support capabilities at each location. In many cases, the size of the pumping station loads required TransCanada to work closely with the host transmitters to assess their bulk system capabilities, in order to reliably and cost-effectively serve the station loads.

#### Major Merchant Lines

TransCanada has been actively developing HVDC transmission projects in the western USA and Canada.

NorthernLights: The NorthernLights Project from Alberta to the Pacific Northwest was a 1600 km 500 kV line that connected the Alberta Electric System and the Bonneville Power Administration. NorthernLights progressed through the Western Electricity Coordinating Council Regional Planning and Path Rating Process and achieved a Phase 2 rating for delivery or removal of 2000 MW from the Pacific Northwest. This process involved assessing the impacts and coordinating the development of eight major transmission projects in the Pacific Northwest (including the NorthernLights Project) in order to ensure that NERC reliability standards would be met.

Zephyr: TransCanada's proposed Zephyr Project will be a 1,770 km, 500 kV power transmission line designed to carry wind energy from southeast Wyoming to load serving entities in the US southwest. The project is in the development stage and as currently contemplated, the Zephyr Project would be one of the longest transmission lines in the world. The Zephyr Project's commercial viability was confirmed through a fully-subscribed, non-discriminatory and binding open season for capacity on the transmission line. This open season, conducted in 2009, resulted in the full 3000 MW of capacity being subscribed entirely by wind developers operating in Wyoming.

Chinook: The Chinook Project is a proposed 500 kV, HVDC electric transmission line originating near Harlowton, Montana, traversing Idaho and terminating in the Eldorado Valley, south of Las Vegas, Nevada. The Chinook open season closed on December 16, 2010, and TransCanada is currently evaluating the results.

(b) TransCanada has a long record of successfully developing major linear energy infrastructure, gas storage sites and power plants, all of which involve extensive regulatory approvals, project planning, design, and right-of-way management, including aboriginal relations

TransCanada owns approximately 60,000 km of pipelines in Canada and the US, and approximately 27,000 km of right-of-ways. In addition, TransCanada maintains

relationships with approximately 50,000 landowners in North America of which approximately 20,000 are in Canada, including 9,000 in Ontario.

In North America, TransCanada's facilities are in proximity to approximately 250 aboriginal and Native American communities. In Canada, TransCanada has 27 agreements with aboriginal communities, and 13 other agreements in development. In 1999, TransCanada developed an Aboriginal Relations Policy to better reflect its long-term commitment to its aboriginal stakeholders and to guide the development of mutually beneficial relationships. To this end, supporting employment and educational/capacity-building opportunities for aboriginal persons is a key TransCanada commitment.

With TransCanada's expansion into the electricity transmission business, TransCanada has relied on this experience in the development of the NorthernLights, Chinook and Zephyr Projects.

Please indicate whether TPT or its affiliates has any experience creating a NERC-compliant network interconnection with other transmitters and if so, please explain the administrative arrangement and describe the physical connections.

#### **RESPONSE**:

Please see response to Information Request #1 (above) and the response to GLPTLP's Information Request #1(c).

- (a) Please explain how TPT intends to operate and maintain new transmission network facilities that it may build in the province.
- (b) Please indicate whether TPT or its affiliates has any experience operating and maintaining shared electrical stations.

#### **RESPONSE**:

- (a) TPT will operate and maintain new transmission network facilities that it may build in Ontario using in-house resources or via contractual arrangements with external service providers. In either case, TPT will operate and maintain the network assets in accordance with good utility practice and in compliance with all regulatory requirements.
- (b) Yes. TPT affiliates have experience operating and maintaining shared electrical stations in Canada and the US.

#### WILDHORSE TRANSMISSION LINE

## **INTERROGATORY #4**

Ref: TPT application Section 7 (page 13) and Section 9 (page 24)

Please indicate the age, length and voltage of the line.

## **RESPONSE**:

The Wildhorse Transmission Line is approximately 13.5 years old. The TransCanada portion (Canadian side of the border) is 15 km in length and operates a voltage of 69 kV.

- (a) Please provide the most recent 5-year operating history of the line including outage statistics and restoration time.
- (b) Please indicate who operates and maintains the line. If the work is outsourced, please provide information concerning the technical capabilities and experience of the service provider(s).
- (c) For the most recent 5 year period, please compare the budgeted and actual cost of operating and maintaining the line, and include variance explanations for material changes.
- (d) Please provide the repair history of the line since inception (major components only).

#### **RESPONSE:**

- (a) There were no unscheduled outages on the line in the past five years. There were approximately three days of scheduled outages in each of 2006 and 2007.
- (b) The operation and maintenance of the line is outsourced to a third party service provider based in western Canada. The contractor has over 30 years of experience in transmission line maintenance, and provides services to a wide range of transmission companies, including AltaLink (Alberta's largest transmission company).
- (c) The line is not a rate-regulated asset. A bilateral contract negotiated between TransCanada and the end-use customer details the terms and conditions of the service. Consequently, the budgeted and actual cost of operating and maintaining the line cannot be provided.
- (d) To date, no major repairs have been conducted since the line went into service in 1997. Climbing inspections are carried out on the line as part of regular inspections.

Please compare the budgeted construction cost of the line and the actual construction cost of the line, and include variance explanations for material changes.

## **RESPONSE**:

In the application to the National Energy Board to construct the line, the cost to construct the line was estimated at \$725,000. The line was completed on time and on budget.

Please compare the original schedule for planning, approvals and construction of the line with the actual schedule, and include explanations for material changes.

## **RESPONSE:**

The line was scheduled to be completed in the spring of 1997. It was placed into service in May 1997.

Please provide a listing of any complaints received during construction of the line along with their resolution.

#### **RESPONSE:**

Two landowners came forward and indicated that they would be affected by the proposed transmission line. Their concerns were addressed, and the line was completed in accordance with the proposed schedule. One landowner's concerns were alleviated by relocation of poles.

Please provide any monitoring reports or plans relating to the construction of the line that TransCanada was required to file with the NEB, and where follow-up action was required, provide the follow-up documents.

#### **RESPONSE**:

The NEB Certificate of Public Convenience and Necessity to construct the Wildhorse international power line (dated February 13, 1997) is attached. Paragraph 10 of the Certificate required TransCanada to file with the NEB a plan in respect of spans crossing Milk River Lake. Two items were filed with the NEB in respect of this matter, and both are attached (see March 19, 1997 letter and April 7, 1997 letter).

lational Energy Board



Office national de l'énergie

Certificate EC-III-23

IN THE MATTER OF the National Energy Board Act ("the Act") and the regulations made thereunder; and

IN THE MATTER OF an application dated 24 September 1996, by TransCanada Power Corp ("TPC") pursuant to section 58.16 of the Act, for a Certificate, filed with the Board under File: 2200-T027-1

WHEREAS in the application TPC requested authorization to construct and operate an international power line extending across the international boundary near Wild Horse, Alberta and terminating in the Province of Alberta, within Legal Subdivision 16, Section 1, Township 2, Range 3, West of the 4th Meridian;

AND WHEREAS TPC, on 9 November 1996, published a notice of the application in the Canada Gazette;

AND WHEREAS the Board has examined the application in an oral public hearing held pursuant to Hearing Order EH-1-96, in the City of Calgary, Alberta on 9 and 10 December 1996;

AND WHEREAS pursuant to the Canadian Environmental Assessment Act ("CEAA") the Board has considered the information submitted by TPC and has performed an environmental screening for the construction and operation of the proposed international power line;

AND WHEREAS the Board has determined, pursuant to paragraph 20(1)(a) of the CEAA, that taking into account the implementation of TPC's proposed mitigative measures and those set out in the attached conditions, the proposal is not likely to cause significant adverse environmental effects;

AND WHEREAS the Board has determined that the applied-for international power line is and will be required by the present and future public convenience and necessity;

AND WHEREAS on 16 January 1997 TPC advised that effective 1 January 1997 it was amalgamated with affiliated corporations to become TransCanada Energy Ltd. ("TCE") under section 185 of the Canada Business Corporations Act;

AND WHEREAS the Governor in Council by Order in Council No. P.C. 1997- 220 dated the 13 day of February. 1997, has approved the issue of this certificate;

NOW THEREFORE pursuant to section 58.16 of the Act, the Board hereby issues this certificate in respect of the applied-for international power line.

This Certificate is subject to the following terms and conditions:

- 1. The international power line to be constructed and operated pursuant to this Certificate of Public Convenience and Necessity shall be owned and operated by TCE.
- 2. The new facilities to be constructed pursuant to this Certificate of Public Convenience and Necessity shall consist of a radial circuit constructed as a single wood pole overhead transmission line. The circuit will be operated at a nominal 69 000 volts (phase to phase) and 60 hertz. Phase conductors will be 4/0 6/1 ACSR (Penquin) One conductor per phase will be utilized. The transmission line will be constructed with a 3/8" high strength steel overhead static conductor for lightning diversion.
- 3. The new facilities to be constructed pursuant to this Certificate of Public Convenience and Necessity shall extend from the United States of America at the international boundary near Wild Horse, Alberta and terminate in the Province of Alberta, within Legal Subdivision 16, Section 1, Township 2, Range 3, West of the 4th Meridian, a total length of approximately 15 km.
- 4. The new facilities shall be constructed, operated and maintained to meet or exceed the requirements of Canadian Standards Association Standard C22.3 No.I-M87.
- 5. TCE is required to implement or cause to be implemented all of the policies, practices, recommendations and procedures included or referred to in its application, including the environmental reports and other materials filed as part of its application, its responses to information requests and the undertakings and statements made by it in this proceeding where they do not conflict with any of the following conditions.
- 6. TCE is required to use only native seed mixes in the revegetation of the power line right-of-way.
- 7. TCE shall contact Environment Canada in regard to wildlife, if power line construction is delayed past the 15th of April.
- 8. TCE shall complete all construction-related activities within 500 m of the known Burrowing Owl site prior to the 15th of April.
- 9. TCE shall complete all construction-related activities within 200 m of the Milk River Lake prior to the 15th of April.
- 10. TCE shall file a plan in respect of the spans crossing Milk River Lake, for Board approval, prior to the commencement of construction, showing the installation of:
  - (a) Spiral Vibration Dampeners as described in the evidence and,
  - (b) in addition to (a), marker spheres or Bird Flight Diverters on the wires along the centre of the spans, in order to minimize the potential for collisions by birds with the wires. This plan shall show the size, location and spacing of the marker spheres or Bird Flight Diverters.
- 11. TCE shall file, within six months after the first growing season, an environmental letter report detailing any environmental issues that have arisen and the measures TPC proposes to take, or has taken, in respect of the unresolved issues.

- 12. TCE shall not make any change in the international power line authorized by this Certificate of Public Convenience and Necessity without prior approval by the Board.
- 13 If the international power line is at any time in the future reconfigured to operate in the export mode, TCE shall obtain a copy of the NEB electricity export permit from each person seeking to use the line in order to facilitate an export of electricity from Canada, prior to transmitting the electricity over the international power line.
- 14 If the power line is reconfigured in the future to operate in the export mode TCE will submit, for approval by the Board, a plan providing for the installation of metering facilities to be located at or near the international boundary near Wild Horse, Alberta

#### 15. ICE:

- (a) shall give notice to the Board of its intention to commence operation of the international power line at least seven days prior to the commencement of operations, in order to permit the Board to inspect the condition of the line; and
- (b) may commence operations at any time after the completion of an inspection of the international power line by the Board.
- 16. TCE shall comply with all of the conditions contained in this Certificate unless the Board otherwise directs.

#### Expiration of Certificate

17. If the international power line has not been placed in operation by 31 December 1998, this certificate shall expire on that date or upon such other date as may, upon application, be fixed by the Board.

Issued at Calgary, Alberta on the 14 day of February, 1997

NATIONAL ENERGY BOARD

Approved by Order in Council P.C. 1997-220 dated 13 February 1997

M.L. Mantha A/Secretary



**TransCanada** 

March 19, 1997

NATIONAL ENERGY BOARD LIBRARY MAR 2.1, 1997

BLBT TO THE OME

TransCanada Energy Ltd.

1400. 421 - 7th Avenue S W. Calgary Alberta Canada T2P 4K9 Telephone: (403) 262-6800 Fax: (403) 262-0113 Direct Phone: (403) 267-1639 Fax: (403) 267-1055

Via Fax & Courier

NATIONAL ENERGY BOARD (the "Board") Energy Plaza 311 - 6th Avenue S.W Calgary, Alberta T2P 3H2



Attention: M. L. Mantha

Dear Sirs:

Re:

TransCanada Energy Ltd. ("TCE")

EH-1-96 Wildhorse International Power Line Certificate No. EC-III-23 dated February 14, 1997

Ü

Pursuant to the Board's Certificate EC-III-23 dated February 14, 1997 (the "Certificate"), and more particularly, Condition 10 contained therein, TransCanada Energy Ltd. ("TCE") encloses a plan in respect of the spans crossing Milk River Lake, for Board approval, which shows the installation of:

- (a) Spiral Vibration Dampeners as described in the evidence and,
- (b) Marker spheres or Bird Flight Diverters on the wires along the centre of the spans, in order to minimize the potential for collisions by birds with the wires

This plan shows the size, location and spacing of the marker spheres or Bird Flight Diverters.

K 9 C16 Dec.'96 no. Supp. inf. #14 In addition, as soon as practicable following formal approval by the Board of the Plan, Profile and Book of Reference, and filing thereof with the Registrar of Land Titles, TCE plans to commence construction of the international power line. In compliance with Condition 15(a) of the Certificate, TCE shall provide seven days' advance notice of TCE's intention to commence line operations.

Yours truly,

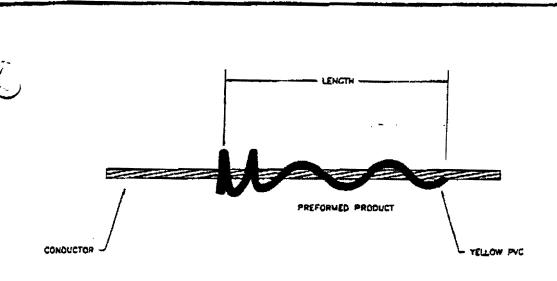
Jul B Kathryn Chisholm

Neelicard

BKC\*dlp

Encls.

cc Rick Barteluk, TransCanada Energy Ltd. Mike McDonald, Express Pipeline Burl Miner, Hill County Electric

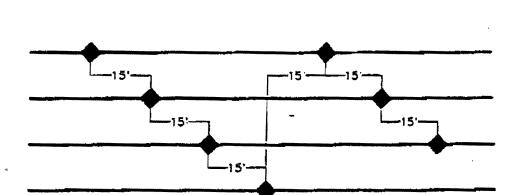


BIRD FLIGHT DIVERTER

APPLICATION OF DIVERTER ON 69 KV LINE

TH- BFD

NOTE: SIZE TO CABLE DIAMETER



BIRD FLIGHT DIVERTER

MAGNA IV ENGINEERING LTD

OCT. 1996

TM - BFD

NOTE . - DAMPING SECTION SHALLER HELIX MOUNT 4" TO 6" FROM END OF ARMOR ROD SPIRAL VIBRATION DAMPER NOTE: SIZE TO CABLE DIAMETER. 45-3/STATIC & UNDERBUILD AGS UNIT LENGTH . - NOTE -- DALIPING SECTION SHALLER HELIX GRIPPING SECTION MOUNT 4" TO 8" FROM END OF ARMOR RCD SPIRAL VIBRATION DAMPER NOTE: SIZE TO CABLE DIAMETER. TMS-3/TRANSMISSION SPIRAL VIBRATION DAMPERS MAGNA IV ENGINEERING LTD TM-SVD/TM5-3 OCT. 1996

TransCanada

SALL

Mr 7 12 34 附生

TransCanada Energy Ltd.

1400, 421 - 7th Avenue SW. Calgary Alberta Canada T2P 4K9 Telephone: (403) 262-6800 Fax: (403) 262-0113

HER OFE

Direct Phone: (403) 267-3288 Fax: (403) 267-1055

April 7, 1997

National Energy Board 311 - 6 Avenue S.W. Calgary, Alberta T2P 3H2

Attention: Mr. M L. Mantha, A/Secretary

Dear Sirs:

TransCanada Energy Ltd. ("TCE")

EH-1-96 Wildhorse Internațional Power Line Certificate No. EC-III-23 dated February 14, 1997

Board File No. 2200-T27-1

Copy By Fax Original By Courier

NATIONAL ENERGY SUANU 5244BRARY

APR 2 9 1997 OPPICE NATIONAL DE L'ÉNERGIE BIBLIOTHEQUE

Further to the Board's letter of 3 April 1997, ICE has been advised that the particular Bird Flight Diverters ("BFDs") previously approved by the Board and stipulated in Condition 10 of Certificate EC-III-23 are not available in time to meet our April 15 deadline.

TCE respectfully requests that the Board approve the substitution of Cone type BFDs instead of the Spiral type for the overhead and phase conductors in the Milk River Lake area and amend Condition 10 accordingly.

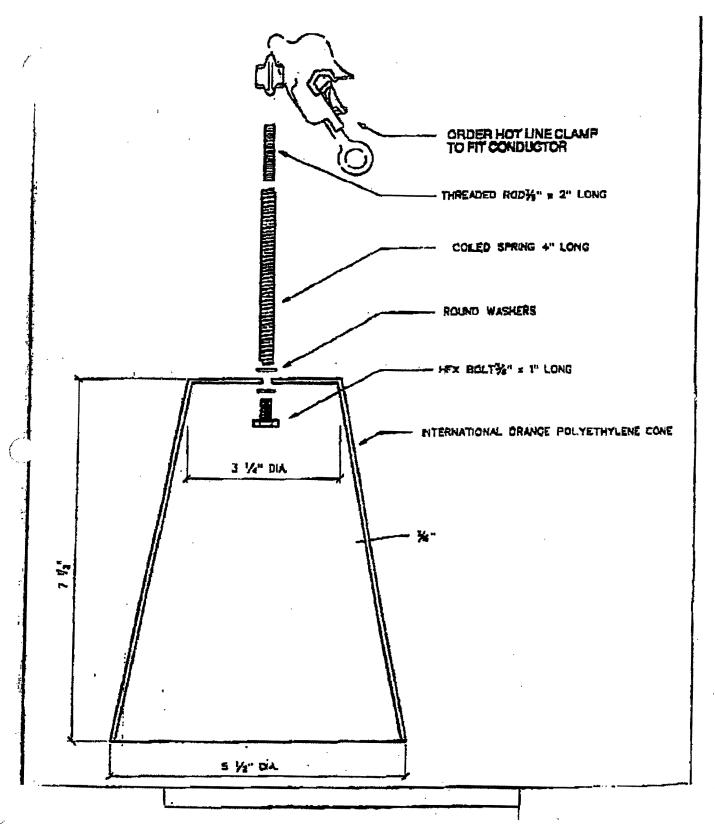
Please see the attached drawing. The installation configuration on the wires will be the same as for the Spiral BFDs.

Yours truly,

Richard W. Graw Barrister & Solicitor

RWC/ina

K 9 C16 Dec. '96 no. Supp. inf. #15



LINE MARKER FOR MIGRATORY BIRDS

Please indicate whether the line is connected to the AESO system.

## **RESPONSE**:

The line is not connected to the AESO system.

#### ZEPHYR PROJECT

#### **INTERROGATORY #11\***

\*Note: HONI incorrectly numbered this interrogatory as #13

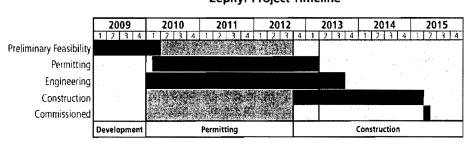
Ref: TPT application Section 7 (page 22) and Section 9 (page 24)

Please indicate the status of the Zephyr project and compare the original and current schedule for planning, approvals and construction, and provide explanations for material changes.

#### **RESPONSE:**

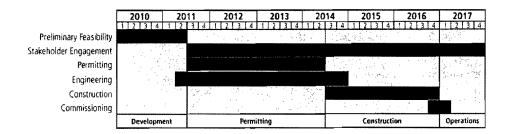
The Zephyr Project's commercial viability was confirmed through a fully-subscribed, non-discriminatory and binding open season for capacity on the transmission line. This open season, conducted in 2009, resulted in the full 3000 MW of capacity being subscribed entirely by wind developers operating in Wyoming. As noted in the response to Information Request #1(a) above, the Zephyr Project is in the development stage. As evidenced in the charts below, the Zephyr Project schedule has been delayed by a year due to an increased level of regulatory uncertainty faced during 2010 by Wyoming energy projects planning to sell their energy into the California power market. The uncertainties resulted from a number of concurrent policy initiatives that were being considered in California during 2010 which focused on whether renewable energy projects from outside California would be eligible resources under California's 20%-by-2010 Renewable Portfolio Standard (RPS) or its 33%-by-2020 Renewable Energy Standard (RES).

Zephyr project timeline, as of February, 2010:



**Zephyr Project Timeline** 

Zephyr project timeline, as of January, 2011:



#### TRANSCANADA POWER TRANSMISSION L.P.

# RESPONSES TO INTERROGATORIES FROM GREAT LAKES POWER TRANSMISSION L.P.

#### **INTERROGATORY #1**

- Ref: (1) Sections 4, 6 and 17 of TransCanada Power Transmission (Ontario) LP's application form
  - (2) Parts II and III of the October 26, 2010 cover letter to the application from Mr. F. Karabetsos, Legal Counsel to the Applicant

#### Preamble:

(1) In section 4 of the application, in response to the request for a description of the transmission facilities involved in the application, the applicant responds:

"To be determined, please see attached letter."

(2) In section 6 of the application, in response to the request for a description of the applicant's business activities, the applicant responds:

"TransCanada Power Transmission (Ontario) L.P. ("TPT") is a newly formed Ontario partnership. The purpose of TPT is to develop, construct, operate and own transmission facilities within Ontario. For additional information please see TPT's response to Q. 17."

- (3) In section 17 of the application, the applicant states:
  - "... TPT is applying for an electricity transmission license so that it is positioned to respond to requests from the OEB to develop transmission plans and eventually construct, own and operate these facilities..."
- (4) In Part II of Reference (1), the applicant states that it "is making this application in order to participate in any upcoming designation process."
- (5) In Part III of Reference (2), the applicant explains that "the OEB decision on the Lexi application noted two "threshold tests" applicable to transmission license applications: (a) whether there is a specific project which underpins the application; and (b) in the absence of a specific project, whether the applicant is engaged in transmission activity elsewhere and whether it has the necessary technical and financial expertise to undertake transmission activity in Ontario...we respectfully submit that the license review (for TPT) should be on the licensee, not existing transmission assets or the prospective transmission project."

#### **Questions:**

- (a) The November 23, 2010 release of Ontario's Long Term Energy Plan significantly restricts the number of transmission projects that will be subject to the designation process in the foreseeable future to just one project. TPT's application, which pre-dates the release of the Long Term Energy Plan, appears to reflect an expectation that there will be numerous designation processes in the near future. Does the Long Term Energy Plan enable TPT to provide greater particularity as to (a) TPT's need for the requested transmission license, and (b) TPT's timing requirements for obtaining the requested transmission license? If so, please explain in detail.
- (b) Given the first branch of the "threshold test" described in preamble (5) and given the Long Term Energy Plan only identifies one transmission project available for designation, is that project one for which TPT now intends to develop transmission plans and can it be regarded as underpinning TPT's application?
- (c) Having regard to the second branch of the "threshold test" described in preamble (5), and the descriptions in Part III of the cover letter regarding several electrical transmission assets that TPT's affiliates are involved with, please provide a summary table which identifies, for each of (a) the Zephyr Power Transmission Project, (b) the Wildhorse Transmission Line, (c) the Kibby line and (d) any other electricity transmission line that TPT or its affiliates own or operate or are developing, each the following items: location, length, capacity, technology, in-service date/proposed in-service date, as well as a description of the current status and expected timelines for those projects that are still under development (including with respect such aspects as environmental approvals, regulatory approvals and construction) or the duration of operating experience for those projects that are in service.

#### **RESPONSE:**

- (a) While the Long Term Energy Plan identifies only one project that will initially be subject to the designation process, the Long Term Energy Plan clearly indicates the need to update, renew and expand the Ontario transmission system. Consequently, the Long Term Energy Plan does not impact TPT's need for the requested transmission license or the timing for obtaining the transmission license.
- (b) TPT is exploring the potential to develop a number of different transmission projects in Ontario, including the East-West Tie. TPT's application is not dependent on any one potential project.
- (c) See the attached table. For additional details on the Northern Lights, Zephyr and Chinook Projects under development, please see the response to Hydro One Information Request #1.

## TransCanada Transmission/Connection Projects

# Project Description	Current Status	Location	Length (km)	Technology	In-Service Date
1 Kibby	Complete	Franklin County, Maine	43 km	115 kV	2010
2 Wildhorse	Complete	Southern Alberta	15 km	69 kV	1997
3 Zephyr	In Development	Southeast Wyoming to Las Vegas, Nevada	1770 km	500 kV	2017
4 Chinook	In Development	Southcentral Montana to Las Vegas, Nevada	1609 km	500 kV	TBD
5 Northern Lights	In Development	Fort McMurray, Alberta to Buckley, Oregon	1600 km	500 kV	TBD
6 Halton Hills	Complete	Milton, Ontario	2 km	230 kV	2010
7 Coolidge GS	energized - testing	City of Coolidge, Pinal County, Arizona	1 km	230 kV	2010
8 Ravenswood 1	Complete	New York City, USA	1 km	138 kV	1963
9 Ravenswood 2	Complete	New York City, USA	1 km	138 kV	1963
10 Ravenswood 3	Complete	New York City, USA	· 1 km	345 kV	1965
11 Ravenswood 4	Complete	New York City, USA	1 km	138 kV	2003
12 Ravenswood GT 1	Complete	New York City, USA	1 km	138 kV	1969
13 Ravenswood GT 2-1 through 2-4	Complete	New York City, USA	1 km	345 kV	1970
14 Ravenswood GT 3-1 through 3-4	Complete	New York City, USA	1 km	345 kV	1970
15 Ravenswood GT 4 through GT 11	Complete	New York City, USA	1 km	345 kV	1970
16 Keystone - Hardisty	Complete	Alberta	1 km	25 kV	2009
17 Keystone - Lakesend	Complete	Alberta	26 km	138 kV	2009
18 Keystone - Monitor	Complete	Alberta	11 km	144 kV	2009
19 Keystone - Oyen	Complete	Alberta	3 km	144 kV	2009
20 Keystone - Bindloss	Complete	Alberta	15 km	144 kV	2009
21 Keystone - Liebenthal	Complete	Saskatchewan	17 km	230 kV	2010
22 Keystone - Cabri	Complete	Saskatchewan	8 km	72 kV	2010
23 Keystone - Stewart Valley	Complete	Saskatchewan	14 km	138 kV	2009
24 Keystone - Herbert	Complete	Saskatchewan	1 km	138 kV	•
25 Keystone - Chaplin	Complete	Saskatchewan	7 km	138 kV	2009 2010
26 Keystone - Caron	Complete	Saskatchewan	2 km	138 kV	
27 Keystone - Belle Plain	Complete	Saskatchewan	2 km	138 kV	2009
28 Keystone - Regina	Complete	Saskatchewan	1 km	138 kV	2010 2009
29 Keystone - Kendal	Complete	Saskatchewan	1 km	230 kV	2009
30 Keystone - Grenfell	Complete	Saskatchewan	2 km	138 kV	2009
31 Keystone - Whitewood	Complete	Saskatchewan	1 km	230 kV	2009
32 Keystone - Moosomin	Complete	Saskatchewan	25 km	72 kV	2010
33 Keystone - Crandall	Complete	Manitoba	24 km	66 kV	2009
34 Keystone - Rapid City	Complete	Manitoba	7 km	66 kV	2010
35 Keystone - Wellwood	Complete	Manitoba	32 km	66 kV	
.36 Keystone - Portage	Complete	Manitoba	21 km		2010
37 Keystone - Carmen .	Complete	Manitoba	1 km	66 kV 66 kV	2009
38 Keystone - Haskett	Complete	Manitoba	13 km		2009
39 Keystone - Edinburg	Complete	North Dakota	9 km	66 kV	2009
40 Keystone - Niagra	Complete	North Dakota	2 km	69 kV 69 kV	2009
41 Keystone - Luverne	Complete	North Dakota	18 km		2009
42 Keystone - Ft. Ransom	Complete	North Dakota	16 km	69 kV	2009
43 Keystone - Ludden	Complete	North Dakota	38 km	115 kV 115 kV	2009
44 Keystone - Ferney	Complete	South Dakota	22 km		2009
45 Keystone - Carpenter	Complete	South Dakota	2 km	115 kV	2009
46 Keystone - Roswell	Complete	South Dakota	48 km	69 kV	2009
47 Keystone - Freeman	Complete	South Dakota	35 km	115 kV	2009
48 Keystone - Hartington	Complete	Nebraska	3 km	115 kV 69 kV	2009
49 Keystone - Stanton	Complete	Nebraska	13 km	69 kV	2009
50 Keystone - David City	Complete	Nebraska	13 km	69 KV	2009
51 Keystone - Wilber	Complete	Nebraska	1 km		2009
52 Keystone - Steele City	Complete	Nebraska	10 km	34 kV	2009
53 Keystone - Seneca	Complete	Kansas	13 km	115 kV 115 kV	2009
54 Keystone - Severance	Complete	Kansas	18 km	115 kV	2009
	-		10 MII	LIDKA	2009

## TransCanada Transmission/Connection Projects

# Project Description	Current Status	Location	Length (km)	Technology	In-Service Date
55 Keystone - Hope 56 Keystone - Rock	Complete	Kansas	6 km	115 kV	2009
57 Keystone - Cushing	Complete	Kansas	21 km	138 kV	2009
58 Keystone - Cushing	Complete	Oklahoma	8 km	138 kV	2009
59 Keystone - Tina	Complete	Missouri	1 km	161 kV	2009
60 Keystone - Yilla 60 Keystone - Salisbury	Complete	Missouri .	. 15 km	34 kV	2009
61 Keystone - Centralia	Complete	Missouri	1 km	34 kV	2009
62 Keystone - Middletown	Complete	Missouri	1 km	69 kV	2009
63 Keystone - St. Paul	Complete	Missouri	1 km	69 kV	2009
64 Keystone - Heartford	Complete	Missouri	1 km	161 kV	2009
65 Keystone - Pierron	Complete	Illinois	1 km	34 kV	2009
66 Keystone XL - Lakesend East	Complete	Illinois	5 km	34 kV	2010
67 Keystone XL - Monitor South	In Development	Alberta	7 km	. 138 kV	2012
68 Keystone XL - Oyen South	In Development	Alberta	1 km	144 kV	2012
69 Keystone XL - Bindloss South	In Development	Alberta	1 km	144 kV	2012
70 Keystone XL - Fox Valley	In Development	Alberta	1 km	144 kV	2012
71 Keystone XL - Plapot	in Development	Saskatchewan	24 km	230 kV	2012
	In Development	Saskatchewan	115 km	230 kV	2012
72 Keystone XL - Grassey Creek	In Development	Saskatchewan	114 km	138 kV	2012
73 Keystone XL - Phillips Pump Station Station	in Development	Montana	80 km	115 kV	2012
74 Keystone XL - Valley Pumping Station	In Development	Montana	83 km	115 kV	2012
75 Keystone XL - Fort Peck Pumping Station	In Development	Montana	1 km	230 kV	2012
76 Keystone XL - Circle Pumping Station	in Development	Montana	5 km	115 kV	2012
77 Keystone XI Prairie Pumping Station	in Development	Montana	24 km	115 kV	2012
78 Keystone XL - Fallon Pumping Station	In Development	Montana	10 km	115 kV	2012
79 Keystone XL - Harding Pumping Station	In Development	South Dakota	39 km	115 kV	2012
80 Keystone XL - Buffalo Pumping Station	In Development	South Dakota	65 km	115 kV	2012
81 Keystone XL - Faith Pumping Station	in Development	South Dakota	18 km	115 kV	2012
82 Keystone XL - Haakon Pumping Station	In Development	South Dakota	42 km	115 kV	2012
83 Keystone XL - Murdo Pumping Station	In Development	South Dakota	33 km	115 kV	2012
84 Keystone XL - Winner Pumping Station	In Development	South Dakota	28 km	115 kV	2012
85 Keystone XL - Colome Pumping Station	in Development	South Dakota	32 km	115 kV	2012
86 Keystone XL - Attinson Pumping Station	In Development	Nebraska	38 km	115 kV	2012
87 Keystone XL - Ericson Pumping Station	in Development	Nebraska	58 km	115 kV	2012
88 Keystone XL - Central City Pumping Station	In Development	Nebraska	14 km	115 kV	2012
89 Keystone XL - Exeter Pumping Station	In Development	Nebraska	1 km	69 kV	2012
90 Keystone XL - Steele City B Pumping Station	In Development	Nebraska	1 km	115 kV	2012
91 Keystone XL - Riliey Pumping Station	In Development	Kansas	16 km	115 kV	2012
92 Keystone XL - Burns Pumping Station	In Development	Kansas	18 km	138 kV	2012
93 Keystone XL - Cushing Pumping Station	In Development	Oklahoma	10 km	138 kV	2012
94 Keystone XI Crowmwell Pumping Station	In Development	Oklahoma	2 km	138 kV	2012
95 Keystone XL - Tupelo Pumping Station	in Development	Oklahoma	7 km	138 kV	2012
96 Keystone XL - Bryan Pumping Station	in Development	Oklahoma	1 km	138 kV	2012
97 Keystone XI Delta Pumping Station	In Development	Texas	11 km	138 kV	2012
98 Keystone XL - Winnsboro Pumping Station	in Development	Texas	1 km	138 kV	2012
99 Keystone XL - Lake Tyler Pumping Station	in Development	Texas	2 km	138 kV	2012
100 Keystone XL - Lufkin Pumping Station	In Development	Texas	13 km	138 kV	2012
101 Keystone XL - Corrigan Pumping Station	in Development	Texas	1 km	138 kV	2012
102 Keystone XL - Liberty Pumping Station	in Development	Texas	1 km	240 kV	2012
		•	. 1911	ATO NY	2012

Notes: For the connections identified in #16 through #102 the lines are owned and operated by the transmisison operator, not TransCanada, Keystone, Keystone XL or any of its affiliates. For further information see Hydro One IR #1(a).