NATIONAL ENERGY BOARD

IN THE MATTER OF the *National Energy Board Act*, R.S.C. 1985, c. N-7, as amended, and the regulations made thereunder;

IN THE MATTER OF the *Canadian Environmental Assessment Act, 2012*, S.C. 2012, c. 19 as amended, and the regulations made thereunder;

IN THE MATTER OF an application by Energy East Pipeline Ltd., as general partner on behalf of the Energy East Pipeline Limited Partnership and the Canaport Energy East Marine Terminal Limited Partnership, for a *Certificate of Public Convenience and Necessity* and related approvals pursuant to Parts I, III and IV of the *National Energy Board Act*; and

IN THE MATTER OF an application by TransCanada PipeLines Limited and Energy East Pipeline Ltd. respecting the transfer of certain natural gas pipeline assets pursuant to Parts I, IV and V of the *National Energy Board Act*.

TRANSCANADA PIPELINES LIMITED AND ENERGY EAST PIPELINE LTD.
ENERGY EAST PROJECT AND ASSET TRANSFER APPLICATIONS

Consolidated May 2016

To: The Secretary
National Energy Board
517 Tenth Avenue SW
Calgary, Alberta
T2R 0A8

CONSOLIDATED
ENERGY EAST PROJECT AND ASSET TRANSFER APPLICATIONS

The Energy East Project (Project or Energy East Pipeline) is an approximate 4,500 km pipeline intended to transport crude oil from receipt points in Alberta and Saskatchewan to delivery locations in Québec and New Brunswick.

The Project is comprised of both new pipeline and pipeline-related facilities and existing pipeline facilities that will be transferred from TransCanada PipeLines Limited (TransCanada) to Energy East Pipeline Ltd. (Energy East) and converted from natural gas to oil service.

To implement the Project, both Energy East and TransCanada will require regulatory approvals. Energy East requires, and is applying for approvals pursuant to the *National Energy Board Act* (NEB Act), the *Canadian Environmental Assessment Act, 2012* (CEAA, 2012) and associated regulations, while TransCanada requires, and is applying for approvals pursuant to the NEB Act and associated regulations (altogether, Application). The scope of the Energy East Project and requested approvals are described in the balance of this Application.

Applicants

1. Energy East is a company incorporated pursuant to the *Canada Business Corporations Act*, is a "company" as that term is defined in the NEB Act, and is indirectly owned by TransCanada. Energy East is the general partner acting on behalf of the Energy East Pipeline Limited Partnership (Energy East LP) and is a general partner of Canaport Energy East Marine Terminal Limited Partnership (Canaport Energy East LP).

2. Energy East LP will own all the facilities comprising the Project except for the Canaport Energy East marine terminal, which will be owned by Canaport Energy East LP. Energy East and a jointly-owned subsidiary of TransCanada and Irving Oil Company, Limited (Irving Oil) are the general partners of Canaport Energy East LP.

3. TransCanada is a corporation continued under the *Canada Business Corporations Act*, and a "company" as that term is defined in the NEB Act.

4. TransCanada owns and operates a natural gas transmission system that extends from the Alberta border across Saskatchewan, Manitoba and Ontario, through a portion of Québec, and connects to various downstream Canadian and international pipelines (TransCanada Mainline).

5. The TransCanada Mainline is subject to regulation by the National Energy Board (Board or NEB).

Natural Gas Asset Transfer

6. TransCanada and Energy East have entered into an agreement to transfer certain natural gas facilities (Conversion Facilities) from the TransCanada Mainline to Energy East (Transfer Agreement). The gas assets in this agreement include approximately:

- 940 km of the Prairies Line
- 1,640 km of the Northern Ontario Line
- 420 km of Line 1200-2 on the North Bay Shortcut

7. As part of the Transfer Agreement, Energy East will pay to TransCanada a purchase price estimated to be approximately $1.5 billion, comprised of a net book value (NBV) estimated at $744 million and an Acquisition Premium estimated at $734 million. The Conversion Facilities will be transferred in 2018 and 2019. The NBV portion of the purchase price in the Transfer Agreement reflects the estimated NBV of the Conversion Facilities at the transfer dates and the Acquisition Premium reflects a settlement agreement reached with three local distribution companies in Eastern Canada addressing various matters relating to the Project (LDC Energy East Agreement).

8. Energy East and TransCanada are seeking approvals from the Board for the asset transfer in accordance with the terms and conditions set out in the Transfer Agreement and this Application.

Eastern Mainline Project Application

9. On 30 October 2014, in a related but separate and concurrent application, TransCanada applied under Part III of the NEB Act for approval to construct and operate the Eastern Mainline Project (EMP). An amended EMP application was filed in December 2015. Through the EMP, TransCanada proposes to construct new gas pipelines and facilities along its existing Montréal Line in southeastern Ontario in order to continue meeting its firm transportation service obligations after transferring the Conversion Facilities to Energy East.

10. The scope of the EMP reflects increased firm service requirements informed by open seasons and other commercial processes completed in 2015, and the LDC Energy East Agreement.

11. The EMP application is conditional on Board approval of this Application. TransCanada will only construct the EMP if the Project is approved on terms that are satisfactory to Energy East and TransCanada.

Energy East Project

12. The Project is a crude oil pipeline system extending approximately 4,500 km from an oil supply complex near Hardisty, Alberta to an existing oil refining, storage and marine terminal facility near Saint John, New Brunswick.

13. The Energy East Pipeline is designed to transport approximately 175,000 m^3/d (1.1 million bbl/d) of light to heavy crude oil from Hardisty, Alberta, and a Prairie receipt point at a new tank terminal near Moosomin, Saskatchewan to delivery points at three existing refineries in Eastern Canada and a tank and single marine terminal (Canaport Energy East marine terminal) near Saint John, New Brunswick.

14. The Project involves construction and operation of approximately 1,520 km of new pipeline and pipeline-related facilities, as well as the conversion and operation of approximately 3,000 km of the TransCanada Mainline to oil from gas service.

15. The new and converted pipelines, together with the related facilities, comprise the Energy East Pipeline. Under an operating agreement entered into with TransCanada, the pipeline and related facilities will be operated by TransCanada as an integrated system. Energy East has also entered into an operating agreement with a subsidiary of Irving Oil for the operation of the Canaport Energy East marine terminal.

16. The Energy East Pipeline consists primarily of 1,067 mm nominal pipe size (NPS 42) pipeline. This pipe size applies to:

    - new and converted mainline comprising eight segments that together create a direct connection or “bullet line” for crude oil shipments from Hardisty, Alberta to Saint John, New Brunswick (Energy East Mainline)
    - pipeline laterals from the Energy East Mainline to existing oil refineries on the Island of Montréal and near Lévis, Québec (Montréal and Lévis laterals, respectively)
    - approximately 5 km of mainline pipe to re-align the route for conversion purposes
    - parallel terminal connection pipelines between the new tank and marine terminal facilities near Saint John (part of the Saint John Connection)

    Exceptions to the 1,067 mm (NPS 42) pipe size are:

    - a lateral from an existing oil supply hub near Cromer, Manitoba to the Prairie receipt point, comprising 406 mm (NPS 16) pipe
    - two terminal connection pipelines, comprising 914 mm (NPS 36) pipe between the new tank terminal and the existing Irving Oil Canaport tank terminal connection, and two 610 mm (NPS 24) vapour recovery laterals (all as part of the Saint John Connection)

17. For ease of reference and future operational purposes, the Energy East Mainline is divided into eight integrated mainline segments, and further divided into 73 pipeline sections.

    From West to East, the Energy East Mainline segments are:

    - Alberta Segment (new)
    - Prairies Segment (conversion)
    - Ontario West Segment (conversion)
    - Northern Ontario Segment (conversion)
    - North Bay Shortcut Segment (conversion)
    - Ontario East Segment (new)
    - Québec Segment (new)
    - New Brunswick Segment (new)

    For the most part, the pipeline sections extend between mainline pump stations with spacing at intervals of approximately 65 km along the Energy East Mainline. Detailed maps of the Energy East Pipeline as described above are provided at scales of 1:50,000 and 1:200,000.

18. The Alberta Segment consists of approximately 284 km of new mainline pipe and five pump stations. It extends from a new tank terminal in the Hardisty complex (Hardisty D tank terminal), which will include an initiating pump station, to a pressure control valve station (Burstall station) to be located adjacent to an existing TransCanada compressor station near Burstall, Saskatchewan, approximately 2 km from the Alberta/Saskatchewan border.

19. The Prairies Segment consists of approximately 1,060 km of converted mainline and 19 pump stations. It extends from the Burstall Station to a pump station (Falcon Lake pump station) that will be located adjacent to an existing TransCanada compressor station approximately 92 km east Sainte-Anne-des-Chênes, Manitoba.

20. The Ontario West Segment consists of approximately 720 km of converted mainline and 11 pump stations. It extends from the Falcon Lake Pump Station to a pump station to be located approximately 12 km northeast of the amalgamated town of Geraldton, Ontario (Geraldton pump station).

21. The Northern Ontario Segment consists of approximately 790 km of converted mainline and 12 pump stations. It extends from the Geraldton pump station to a pump station approximately 15 km north of North Bay, Ontario (North Bay pump station).

22. The North Bay Shortcut Segment consists of approximately 430 km of converted mainline and six pump stations. The segment extends from the North Bay pump station to a pump station at the junction between the North Bay Shortcut and the TransCanada Montréal Line approximately 6 km northeast of Iroquois, Ontario (Iroquois Pump Station).

23. The Ontario East Segment consists of approximately 106 km of new mainline and two pump stations. It extends from the Iroquois pump station to a point on the Ontario/Québec border approximately 16 km south of Lachute, Québec.

24. The Québec Segment consists of approximately 625 km of new mainline and 10 pump stations. It extends from the Ontario/Québec border to the Québec/New Brunswick border, approximately 21 km northwest of Edmundston, New Brunswick.

25. The New Brunswick Segment consists of approximately 412 km of new mainline pipe and five pump stations. It extends from the Québec/New Brunswick border to the Saint John tank terminal in the Energy East Complex, approximately 6 km southeast of Saint John, New Brunswick.

26. Over 500 new valves will be required at pump stations and along the Energy East Mainline, laterals and connection pipelines to isolate the pipeline, including at select watercourse crossings and environmentally sensitive areas.

27. Energy East will install 71 new pump stations, including 70 mainline pump stations and one lateral pump station.

28. Tank terminals will be required at two receipt locations on the Energy East Pipeline, being Hardisty D, in Alberta, and the Prairie receipt point at Moosomin, Saskatchewan. At these terminals, oil will be accumulated in batches for delivery into the pipeline. The terminals will have oil storage tanks with a nominal capacity of approximately 55,600 m^3 (350,000 bbl). Up to 14 tanks will be installed at Hardisty D, while Moosomin will have up to three tanks. The tanks will have associated booster pumps, piping and valve manifolds, control systems, and safety and environmental protection measures built into their design.

29. A tank terminal will be required at the delivery location on the Energy East Pipeline at Saint John. At the tank terminal, batches of oil will be accumulated for delivery onto oil tankers through the associated Canaport Energy East marine terminal. The tank terminal will contain custody transfer metering to facilitate further delivery to the Irving Canaport tank terminal. The Saint John tank terminal will have up to 22 oil storage tanks with nominal capacities of 95,400 m^3 (600,000 bbl). The tank terminal will have associated booster pumps, custody transfer metering, piping and valve manifolds, control systems, and safety and environmental protection measures.

30. The Canaport Energy East marine terminal will be located approximately 2 km from the existing Irving Canaport marine terminal. The new terminal will be designed to load crude oil onto Aframax, Suezmax and very large crude carrier class oil tankers with cargo capacities of approximately 111,000 m^3 (0.7 million bbl), 173,700 m^3 (1.1 million bbl) and 350,000 m^3 (2.2 million bbl), respectively. An access trestle will connect shore-based facilities with two marine berths. The marine berths will

have a loading platform connected to a header of pipe feeding dedicated oil loading arms. The terminal will have a vapour management system.

31. Custody transfer metering facilities will be required at the Hardisty D tank terminal in Alberta, and the pump station at Cromer, Manitoba, to measure receipts of oil flowing into the Energy East Pipeline.

32. To measure deliveries of oil flowing out of the Energy East Pipeline, custody transfer metering facilities will be installed at the Saint John tank terminal and at the stand-alone delivery meter stations to be located at the termini of the Montréal and Lévis laterals.

33. Pressure controls and overpressure protection measures will be incorporated into the design of the tank terminals, pump stations, marine terminal, and delivery meter stations. The Burstall station will be installed at the interface between the Alberta Segment and Prairies Segment, where the maximum operating pressure will change from 8,450 kPa on the new line to 6,065 kPa on the converted line.

34. The Project requires an environmental assessment under the NEB Act and is subject to the CEAA, 2012. As the proposed pipeline exceeds 40 km in length and will be regulated by the Board, the Project is a “designated project” under the *Regulations Designating Physical Activities* (October 2013).

35. To maintain the construction schedule and staged in-service dates for the Project, exemptions from the detailed route process are being sought as part of this Application. The exemptions are for:

- activities and works required to convert TransCanada’s Conversion Facilities from gas to oil service
- pump stations along the conversion segments of the Energy East Mainline – Prairies Segment, Ontario West Segment, Northern Ontario Segment, and North Bay Shortcut Segment
- Hardisty D and Saint John tank terminals and related facilities

36. Temporary infrastructure will be required before and during pipeline and facility construction. Construction-related infrastructure is typically developed on temporary workspace and includes access, stockpile sites and laydown areas, borrow sites and dugouts, contractor yards, warehouses and construction camps. Work on temporary infrastructure is scheduled to begin in the third quarter of 2018 and an exemption from the detailed route process is sought as part of this Application.

37. The works and facilities for which exemptions from the detailed route process are being sought will only be undertaken on lands where the required land rights have been obtained and only once a *Certificate of Public Convenience and Necessity* (Certificate or CPCN) has been issued for the entire Project and any applicable

conditions have been satisfied. Environmental protection plans are provided with this Application and will be implemented for the works exempted from the detailed route process.

38. The Project will be designed, constructed and operated in accordance with the *National Energy Board Onshore Pipeline Regulations* (OPR) and *Canadian Standards Association Z662-15, Oil and Gas Pipeline Systems* (CSA Z662-15). If there are inconsistencies between the OPR and CSA Z662-15, the OPR will govern.

39. The Project will be designed for the potential effects of conditions not specifically addressed in CSA Z662-15. This is confirmed in a written statement from a qualified engineer, and in an addendum attached thereto.

40. To meet firm transportation service obligations, earliest in-service dates for the Project are scheduled for fourth quarter 2021.

41. The estimated cost of the Project is approximately $19.3 billion, including an allowance for funds used during construction (AFUDC) and the cost of acquiring the TransCanada Conversion Facilities. Before AFUDC, the estimated cost is $17.1 billion.

Purpose and Justification

42. Binding transportation service agreements demonstrate commercial support and the need for increased market access for Western Canadian crude oil. The amount of 158,000 m^3/d (995,000 bbl/d) is now committed under executed TSAs. Of that volume, 134,300 m^3/d (845,000 bbl/d) has a contract delivery point of either a Quebec refinery or Saint John. The remaining 23,900 m^3/d (150,000 bbl/d) under contract is the subject of ongoing commercial discussions with shippers related to:

- election to deliver to the Saint John delivery point
- continued evaluation of the viability of a Québec marine terminal project that could be pursued by Energy East as a subsequent project

43. The Project is supported by crude oil supply and market forecasts that indicate growth in supplies from Western Canada, which will require access to new and diverse markets and further, that additional oil transportation capacity from Western Canada is required. The forecasted supply and market demand, combined with robust contractual underpinnings, indicates that the applied-for facilities will be used and useful over their economic life.

44. The Project will enable the timely expansion and diversification of markets for Canadian oil without adversely affecting TransCanada Mainline shippers. This is because the EMP facilities will enable TransCanada to continue meeting its firm service obligations, and because the estimated $734 million Acquisition Premium will be used to reduce the TransCanada Mainline rate base in the Eastern Triangle region.

Transportation Services and Tolls

45. The proposed toll methodology for contracted shippers reflects the terms of the negotiated transportation agreements. Tolls derived from this methodology will be used to determine the maximum toll for shippers without long-term transportation contracts.

Application Content and Supporting Material

46. This Application provides information required for the consideration of a CPCN and other approvals, as reflected in Parts I, III, IV and V of the NEB Act and as outlined in the *National Energy Board Filing Manual* (Filing Manual). It also provides information required under section 19(1) of the CEAA, 2012.

47. This Application was prepared in response to a National Energy Board direction of 3 February 2016 and specifically supersedes filings NEB Exhibit No. A63936-3 and NEB Exhibit No. A74779-4, which were a Project application filed by Energy East and TransCanada in October of 2014 (2014 Application) and a subsequent Amendment to the 2014 Application filed in December 2015 (2015 Amendment), respectively.

48. In support of this Application, Energy East and TransCanada provide and rely on, or continue to rely on:

- the information attached to the Application
- the information Energy East or TransCanada has filed with the NEB in response to the Board's requests for additional information on the 2014 Application
- any additional information that Energy East and TransCanada may file, as directed or permitted by the Board

Relief Requested

49. Energy East requests that the Board:

    a. grant leave under paragraph 74(1)(b) of the NEB Act to purchase natural gas assets from TransCanada

    b. issue a Certificate under section 52 of the NEB Act authorizing:

        (i) construction and operation of the new oil pipeline and pipeline-related facilities

        (ii) operation of the converted oil pipeline and pipeline-related facilities

    c. issue an order under section 43 of the OPR approving the change of service to oil from gas service

d. issue an order under section 58 of the NEB Act granting relief from the provisions of paragraphs 31(c), 31(d) and 33 for:
   (i) transferred natural gas assets and associated activities required to convert those assets to oil service
   (ii) tank terminals and related facilities at Hardisty, Alberta and Saint John, New Brunswick
   (iii) pump stations and related facilities along the conversion segments
   (iv) temporary infrastructure for construction
e. issue an order under section 45(1) of the NEB Act approving changes to the approved plans, profiles and books of reference for those portions of the transferred and converted TransCanada assets requiring a route re-alignment
f. issue an order under section 44 of the OPR for the deactivation of an existing 914 mm nominal pipe size (NPS 36) crossing of the Assiniboine River
g. issue an order under section 45.1 of the OPR, as may be necessary, for the decommissioning of transferred TransCanada gas assets that will not be required for oil service after conversion
h. issue an order under section 48(2.1) and 48 (2.2) of the NEB Act exempting certain ancillary piping systems from section 17 of the OPR
i. issue an order under section 59 of Part IV of the NEB Act approving the negotiated tolling methodology for oil transportation services described in this Application
j. issue an order pursuant to section 129(1.1) of the NEB Act exempting Energy East from section 15(4) of the *Oil Pipeline Uniform Accounting Regulations* (OPUAR), the effect of which would authorize the purchase, at the agreed price, of the TransCanada Mainline gas assets
k. issue an order pursuant to section 59 of the NEB Act for approval to include the amount of the transfer price of the Conversion Facilities in the Energy East Oil Plant Under Construction at the date of transfer and subsequently, in the Energy East rate base (Oil Plant in Service) at the start of operation of the Energy East Pipeline for crude oil transmission
l. issue an order pursuant to section 129(1.1) of the NEB Act exempting Energy East from filing requirements related to Financial Surveillance Reports and OPUAR requirements to file depreciation rates, in recognition of the negotiated nature of the Energy East tolls
m. grant such further and other relief as Energy East may request or the Board may consider appropriate

50. TransCanada requests that the Board:

a. grant leave under paragraph 74(1)(a) of the NEB Act to sell certain natural gas assets from the TransCanada Mainline to Energy East

b. issue an order pursuant to section 129 (1.1) of the NEB Act exempting TransCanada from section 15(4) of the *Gas Pipeline Uniform Accounting Regulations* (GPUAR), the effect of which would be to authorize the sale, at the agreed price, of the TransCanada Mainline gas assets

c. issue an order pursuant to section 40 of the GPUARs approving the proposed accounting treatment for the sale of the TransCanada Mainline gas assets

d. issue an order pursuant to section 59 of the NEB Act for approval to reduce the Mainline rate base by the amount of the agreed transfer price

e. issue an order pursuant to section 59 of the NEB Act approving:

(i) the three adjustment accounts set out in section 4.4 of the LDC Energy East Agreement

(ii) the methodology for proposed future treatment of certain costs as illustrated in Appendix A – Financial Impact Base Case to the LDC Energy East Agreement

f. issue an order under section 21 of the NEB Act to vary existing TransCanada certificates and orders to remove the Conversion Facilities

g. grant such further and other relief as TransCanada may request or the Board may consider appropriate.

Respectfully submitted,

Calgary, Alberta
17 May 2016

Energy East Pipeline Ltd. and TransCanada PipeLines Limited

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