

SUMMARY OF PREFILED EVIDENCE

Hydro One has applied to the Board for an order granting leave to construct a 500 kV transmission line passing through four counties and one regional municipality (Bruce, Grey, Wellington, Dufferin, and Halton, respectively) and eleven municipalities (Kincardine, Brockton, Hanover, West Grey, Southgate, Wellington North, Erin, East Luther Grand Valley, East Garafraxa, Halton Hills and Milton) pursuant to Section 92 of the *Ontario Energy Board Act, 1998*.

The line facilities are in the public interest. As confirmed by the Independent Electricity System Operator in its System Impact Assessment (refer to Exhibit B, Tab 6, Schedule 2), by the Ontario Power Authority in its determination of need, discussion papers and letters (refer to Exhibit B, Tab 6, Schedule 5), and by Hydro One in its Customer Impact Assessment (refer to Exhibit B, Tab 6, Schedule 3) the new line will improve the adequacy, reliability, and quality of electric service to consumers and will not have an adverse impact on the system or other transmission customers. The new line will have an average bill impact of approximately 0.45% or \$6.48 per year on the delivered cost of electricity for the typical Ontario residential customer consuming 1000 kWh per month. Under the *OEB Act, 1998, s. 96 (2)*, “public interest” is defined to mean the interests of consumers with respect to prices and the reliability and quality of electricity service.

The OPA has determined that a new 500 kV double-circuit transmission line is needed from the Bruce area to the Greater Toronto Area (see Exhibit B, Tab 6, Schedule 5, Appendix 1). The only alternative that meets the need and the key objectives highlighted in Exhibit B, Tab 3, Schedule 1 is a new line from the Bruce Power Complex to Milton SS within a widened existing Bruce to Milton transmission corridor. The proposed

1 facilities will also meet the technical requirements of the Transmission System Code
2 (TSC) and all other relevant codes and guidelines.

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4 The proposed line supports the Government's off-coal initiatives and also has a
5 secondary benefit of allowing the existing provincial transmission system to
6 accommodate additional renewable generation development in northern Ontario.

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8 The proposed line will be owned and operated by Hydro One, and will include the
9 following facilities:

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- 11 ■ A 3 km 500 kV single-circuit line from the Bruce A Transmission Station (TS) to
12 Bruce Junction along the existing multi-line corridor within the Bruce Power
13 Complex.
 - 14 ■ A 3 km 500 kV single-circuit line from the Bruce B Switching Station (SS) to Bruce
15 Junction along the existing multi-line corridor within the Bruce Power Complex.
 - 16 ■ A 173 km 500 kV double-circuit line from the Bruce Junction to Milton TS within a
17 widened existing transmission corridor.
 - 18 ■ Modifications at Milton SS, Bruce A TS and Bruce B SS to terminate and
19 accommodate the new transmission line.
- 20

21 | A map showing the proposed location of the transmission facilities is provided in Exhibit
22 B, Tab 3, Schedule 2. |

23
24 As part of the Integrated Power System Plan (IPSP) development work, the OPA has
25 identified the need to increase the transmission capacity out of the Bruce area as quickly
26 as possible (see the Transmission Discussion Paper No. 5 in Exhibit B, Tab 6, Schedule
27 5, pages 39 to 53). The OPA has reconfirmed the need based on the revised contract
28 signed with Bruce Power in August 2007 (please see Exhibit B, Schedule 6, Tab 5,

1 Appendix 1 updated November 30, 2007). The IESO also highlighted the need for these
2 transmission enhancements in its March 2007 Ontario Reliability Outlook at pages 8 to 9
3 and Table 3 at page 12. The 2007 Outlook is filed as Exhibit B, Tab 6, Schedule 4.
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5 The IESO has carried out its System Impact Assessment (SIA) of the proposed facilities
6 in accordance with the Grid Connection Requirements of the Market Rules and the
7 associated IESO Connection Assessment and Approval Process. The IESO's SIA filed as
8 Exhibit B, Tab 6, Schedule 2 confirms that the proposed facilities will satisfy the need for
9 this project as identified by the OPA. The IESO SIA also indicates that Hydro One's
10 proposed transmission solution is adequate and does not adversely impact the IESO-
11 controlled grid.
12

13 Hydro One carried out a Customer Impact Assessment (CIA) in accordance with the TSC
14 to determine the impact of the proposed facilities on transmission customers. Hydro
15 One's CIA filed as Exhibit 6, Tab 6, Schedule 3 presents results of short-circuit and
16 voltage performance study analyses. The new 500 kV transmission line can be
17 incorporated without any adverse impacts on southwestern Ontario customers.
18

19 The total cost of the project is estimated to be \$635 million. The costs of the new
20 facilities are to be recovered through incremental transmission Network Pool Rates. No
21 capital contribution is required, consistent with the applicable provisions of the TSC.
22

23 Prior to making this application, Hydro One has completed the initial stage of its
24 consultation process for the project. Subsequent to this application, Hydro One will
25 undertake an extensive consultation program. Further details can be found in Exhibit B,
26 Tab 6, Schedule 6.
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1 The project is subject to an Individual Environmental Assessment (EA) under Ontario's
2 *Environmental Assessment Act*. The EA will rely upon the previous work of the OPA to
3 address need and alternatives. Hydro One will seek to scope the EA in accordance with
4 the OPA's assessment and determination, the conclusions of which are found in the
5 March 23rd OPA letter to Hydro One (Exhibit B, Tab 6, Schedule 5, Appendix 4).

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7 To meet the target in-service date, the Terms of Reference (TOR) for the individual EA
8 were submitted in August 2007 and they are expected to be approved by late 2007 or
9 early 2008. Throughout the EA process, Hydro One will consult with various levels of
10 government, Aboriginal groups, landowners, and other interested parties (refer to Exhibit
11 B, Tab 6, Schedule 6, Exhibit B, Tab 6, Schedule 7 and Exhibit B, Tab 6, Schedule 8).
12 EA approval is required by January 2009 to meet the target in-service date.

13
14 Except for the potential route refinement in the Brockton, Hanover and West Grey area
15 where greenfield corridors are under consideration (requiring a width of 250 feet), a
16 widening of the existing transmission corridor by approximately 53 m to 61 m (175 ft to
17 200 ft) for the entire length of the line is required as the existing corridor is not wide
18 enough to accommodate the new line. Further details can be found in Exhibit B, Tab 6,
19 Schedule 9. Discussions with landowners to secure the land rights required for the
20 widened corridor began in the summer of 2007. In order to meet the urgent in-
21 service timelines, Hydro One plans to utilize the expropriation process under the *Ontario*
22 *Energy Board Act* and the *Expropriations Act* after receiving EA approval. In addition,
23 Hydro One applied for and received early access rights under Section 98 of the *OEB Act*
24 to conduct surveys and other pre-construction activities prior to receiving Leave to
25 Construct approval.

26
27 A detailed construction schedule may be found at Exhibit B, Tab 5, Schedule 2. This
28 schedule assumes Board approval by September 2008 and EA Approval by January 2009

1 to enable a December 2011 in-service date. These timelines are challenging and will
2 depend on cooperation amongst all stakeholders in the Section 92, the EA and the
3 negotiation/expropriation processes.

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5 For the reasons provided in support of this Application, Hydro One respectfully submits
6 that the proposed transmission reinforcement within the municipalities listed above is in
7 the public interest and should be approved under Section 92 of the *OEB Act, 1998*.
8 Accordingly, Hydro One requests an Order from the Board pursuant to Section 92 of the
9 *Ontario Energy Board Act* granting leave to construct the proposed line by September
10 2008.