

NEED FOR PROPOSED FACILITIES

1.0 BACKGROUND

As set out in its Transmission Licence, Hydro One must comply with the requirements of the Transmission System Code (“TSC”) and various regulatory bodies. The need for the proposed facilities is based on these requirements including maintenance of acceptable voltages, keeping equipment operating within established ratings, and maintaining system stability, during both normal operation and under recognized contingency conditions on the transmission system. These requirements of government and industry regulatory authorities include those of NPCC, NERC, and the Ontario Energy Board (“OEB”).

2.0 NEED FOR THE PROJECT

Under the *Electricity Act, 1998* (the “Act”), the OPA has the responsibility for long-term power system planning in Ontario. In accordance with the Act, the OPA is required to periodically develop an IPSP. As part of the IPSP development work, the OPA has identified the transmission system need in southwestern Ontario and in particular for the Bruce area. The OPA’s Analysis of Need and supporting information (collectively, “the OPA Materials”) including a letter dated March 23, 2007 advising Hydro One to seek the necessary approvals for a new 500kV line to increase the transmission transfer capability from the Bruce to the GTA are attached in Exhibit B, Tab 6, Schedule 5. This Section 92 application relies on the OPA’s identification of need.

Hydro One concurs with the OPA’s determination that there is a need to increase the long-term transmission capacity out of the Bruce area as quickly as possible. As indicated in the OPA Materials, the present transmission system has the capability to transmit about 5,000 MW of the generation from the Bruce area. Given the amount of

1 additional nuclear and wind generation capacity committed, the OPA estimates that the
2 total generation available will be about 5,500 MW by 2009, and 7,100 MW by 2013.
3 This schedule reflects the amended contract between Bruce Power and the OPA
4 announced in August, 2007. Please see Exhibit B, Tab 6, Schedule 5, Appendix 1, page
5 2 for more information. With the additional wind generation opportunities also identified
6 by the OPA in the area, the total generation in the area could reach 8,100 MW, for a
7 shortfall in transmission capacity of about 3,100 MW.

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9 Given the expected shortfall between transmission capability and forecast available
10 generating capacity in the Bruce area, the OPA has determined that there is a need to
11 reinforce the transmission system out of the Bruce area as early as possible both to permit
12 full deployment of the committed generating resources and to enable the development of
13 potential new renewable energy resources in the Bruce area consistent with Government
14 policies and directives (see Exhibit B, Tab 6, Schedule 5, Appendices 8 to 12).