
Memorandum of Understanding on Collaboration during Ontario's Refurbishment Period

Between

Bruce Power LP (Bruce Power)

and

Ontario Power Generation Inc. (OPG)**Effective Date:** November 12, 2015**BACKGROUND**

- I. The Bruce Power and Darlington generating stations provide a low-cost, reliable and clean source of electricity for the province. Ontario's 2013 Long Term Energy Plan (2013 LTEP) outlines an important continued role for nuclear power in the Province meeting approximately 50% of the Province's electricity for decades to come through the refurbishment of the Bruce Power and Darlington Units.
- II. The 2013 LTEP also outlines the importance of collaboration between the Province's two nuclear operators in order to "*find ways of finding ratepayer savings through leveraging economies of scale in the areas of refurbishment and operations. This could include arrangements with suppliers, procurement of materials, shared training, lessons learned, labour arrangements and asset management strategies*".
- III. Bruce Power operates the world's largest operating nuclear generating facility and is the source of roughly 30 per cent of the electricity for the Province of Ontario in Canada. The company's site is in Tiverton, Ontario and is Canada's only private sector nuclear operator. Formed in 2001, Bruce Power is an all-Canadian partnership among Borealis Infrastructure Management (a division of the Ontario Municipal Employees Retirement System), TransCanada, the Power Workers' Union and the Society of Energy Professionals. Bruce Power operates 8 CANDU nuclear Units under long-term lease from OPG.
- IV. OPG, a successor in title of Ontario Hydro, was established in 1999 under the *Business Corporations Act* (Ontario) and is wholly owned by the Province of Ontario. The company operates a diversified generating portfolio, consisting of two nuclear (Darlington and Pickering), 65 hydroelectric, and three thermal generating stations. Through these generating facilities, OPG generates about 50 per cent of Ontario's electricity.
- V. All nuclear facilities in Canada are regulated by the Federal Government through the *Canadian Nuclear Safety Commission* (CNSC) and as such the Bruce Power and OPG facilities share a common regulatory model.
- VI. Bruce Power and OPG have a long-standing relationship as operators of CANDU reactors sharing best practices and information through a range of industry forums including the CANDU Owners Group (COG) and the World Association of Nuclear Operators (WANO).

- VII. Both organizations historically and since the release of the 2013 LTEP have been collaborating in a range of areas that allow both operators collectively to leverage economies of scale to continue to position nuclear power as a low-cost provider of electricity to ratepayers.
- VIII. Bruce Power and OPG have developed a range of lessons learned and strengths through their respective operation of CANDU reactors and are committed to building a long-term relationship to enhance the co-operation between the two organizations.
- IX. Bruce Power and OPG have experience with the refurbishment of CANDU nuclear reactors and a range of other important investment activities that will be continued for many years to come as these CANDU Units play an important role in meeting the electricity needs of the province.
- X. Both organizations share a similar labour relations environment with their two primary unions – the Power Workers Union and the Society of Energy Professionals, along with bargaining arrangements through the Electrical Power Systems Construction Association (EPSCA) for construction labour.
- XI. As nuclear operators, Bruce Power and OPG are committed to the value of ‘Safety First’ and achieve this high standard through active collaboration, transparency and continuous improvement.
- XII. Bruce Power and OPG have a joint liaison committee that meets to work together on issues related to the lease of the Bruce Site and related ancillary agreements including waste and heavy water services.

The parties accept the following non-binding Memorandum of Understanding.

PURPOSE

The purpose of this MOU is to confirm a bilateral collaboration framework in which Bruce Power and OPG can build on their successful working relationship over the last 14 years with a particular focus on further leveraging the economies of scale of both organizations and successfully delivering the refurbishment programs anticipated at both Bruce Power and Darlington nuclear generating stations.

AREAS OF COOPERATION

The parties endeavour to collaborate with each other to implement the following objectives which will focus on improving both parties’ refurbishment programs.

- a) Ensure strong alignment between the Executive Team at both Bruce Power and OPG to continue to leverage economies of scale wherever possible in the operations and refurbishment programs for both facilities. This will be achieved by establishing a joint forum of the leadership from both organizations who will review the areas of collaboration on a regular basis.
- b) To build on a strong, long-standing relationship as operators of CANDU reactors sharing best practices and information through a range of industry forums including the CANDU Owners Group (COG), Operational Safety and Review Team (OSART) Missions and the World Association of Nuclear Operators (WANO).
- c) To consider opportunities to leverage economies of scale in the areas of procurement, contract services and strategic spares of key plant components in both refurbishment and operations activities.
- d) To pursue a continued collaborative approach to labour relations as both organizations work with the Power Workers Union and the Society of Energy Professionals, along with bargaining arrangements through the Electrical Power Systems Construction Association (EPSCA) for construction labour.

- e) To identify opportunities to become more efficient in the reduction of waste generated from nuclear facilities and refurbishment activities using best practices and new technology.
- f) To advance innovation and business development opportunities
- g) Seek opportunities to develop a joint approach to solving issues facing both operators in order to reduce the cost of operation or refurbishment activities.
- h) To share and collaborate on approaches and strategies to communicate openly with the public and on the safe, cost-effective and reliable operations from CANDU reactors.

ENGAGEMENT & REPORTING

- a) Bruce Power and OPG will continue to engage and advance these areas of co-operation. A joint steering committee will meet on a regularly scheduled basis to align and advance these various issues with management representatives from both organizations.
- b) Bruce Power and OPG will create the Executive Committee responsible for setting strategy and objectives and reviewing results of collaboration. The Executive Committee will consist of senior executives of both organizations and will be chaired by Chief Nuclear Officers of Bruce Power and OPG. The Executive Committee will meet on an as required basis. It is estimated that the Executive Committee will be meeting approximately twice a year.
- c) This MOU will be made available to the public through the Bruce Power and OPG websites.
- d) An annual *summary report* of collaboration activities will be prepared through mutual agreement by Bruce Power and OPG, and the report will be jointly published by both organizations.
- e) Both the annual *summary report* and a more detailed technical report will be submitted annually to the Ontario Ministry of Energy for review and to follow-up on activities taking place under this MOU.

CHANNEL OF COMMUNICATION AND NOTICES

For the purpose of facilitating the implementation of this memorandum, the single points of contact are:

- a) For execution:

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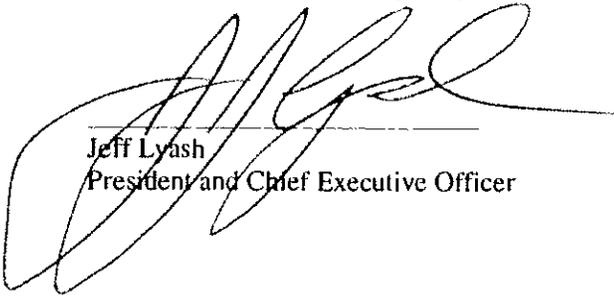
The parties have, by their duly authorized representatives, executed this non-binding Memorandum of Understanding on the Effective Date.

**Bruce Power L.P., by its General Partner
Partner Bruce Power Inc.**



Duncan Hawthorne
President

Ontario Power Generation Inc.



Jeff Lyash
President and Chief Executive Officer