



Oral Presentation

Exposé oral

**Submission from the
Ontario Chamber of Commerce**

**Mémoire de la
Chambre de commerce de l'Ontario**

In the Matter of

À l'égard de

**Bruce Power Inc. – Bruce A and B
Nuclear Generating Station**

**Bruce Power Inc. - Centrale nucléaire de
Bruce A et Bruce B**

Request for a ten-year renewal of its Nuclear Power Reactor Operating Licence for the Bruce A and B Nuclear Generating Station

Demande de renouvellement, pour une période de dix ans, de son permis d'exploitation d'un réacteur nucléaire de puissance à la centrale nucléaire de Bruce A et Bruce B

Commission Public Hearing – Part 2

**Audience publique de la Commission –
Partie 2**

May 28-31, 2018

28-31 mai 2018



**Bruce Power's 10-year license application
to the Canadian Nuclear Safety
Commission (CNSC)**

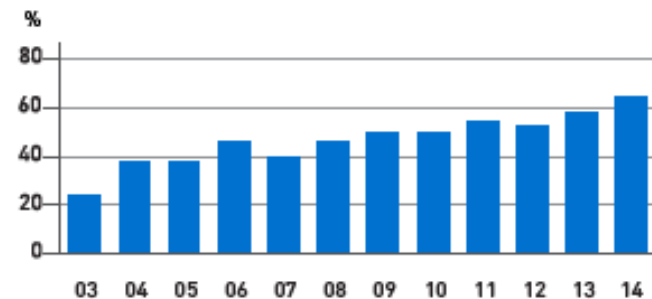
About the Ontario Chamber of Commerce

- For more than a century, the Ontario Chamber of Commerce (OCC) has been the independent, non-partisan voice of Ontario business.
- The OCC's mission is to support economic growth in Ontario by defending business priorities at Queen's Park on behalf of its network's diverse 60,000 members
- The OCC represents over 135 communities across Ontario, steering public policy conversations provincially and within local communities.



Nuclear Power and Ontario

- Nuclear power meets just under 60% of Ontario's electricity needs.
- From 2003 to 2014, the share of power generated from nuclear steam turbines increased from 42 percent to 62 per cent in 2014
- In Ontario, nuclear generation is currently paid 6.8 cents per kilowatt/hour (kWh) compared to the average residential price of 11 cents per kwh
- The nuclear industry is a major driver of Ontario's economy:
 - Made up of 180 companies; and
 - Employs about 60,000 people per year



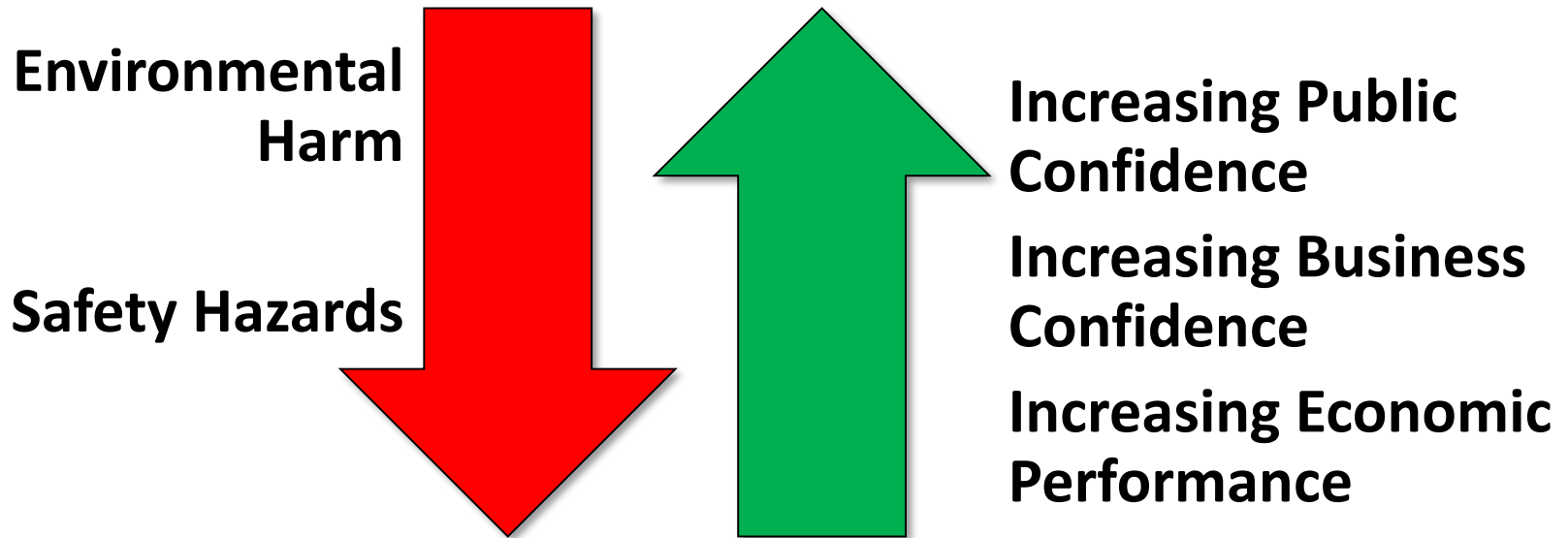
Source: Statistics Canada CANSIM Tables 127-0001 and 127-0002 Independent Electricity System Operator; The Conderence Board of Canada

Bruce Power and the OCC

- Local events
- Thought-leading summits
- Partnership for prosperity



Bruce Power and the Community



Bruce Power and Ontario's Economy



- Presently, Bruce Power supplies 30 percent of Ontario's electricity at 30 percent less than the average cost to generate residential power
- It directly employs 4,200 employees each year
- The planned \$13 billion to refurbish its station on Lake Huron will have a sizeable positive impact on the Ontario economy including:
 - An annual contribution of 22,000 jobs and \$4 billion in economic benefit through direct and indirect spending on engineering, specialized equipment, materials, and labour income.



Over **5,000** direct and indirect jobs annually.

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Bruce Power and the Environment



- Improving air quality
- Promoting clean transportation through clean energy
- Ongoing climate change monitoring



Lending our Voice



Innovation at work



ontario
chamber of
commerce

- The OCC supports Bruce Power's 10-year license application to the Canadian Nuclear Safety Commission (CNSC).
- The nuclear industry contributes to the Ontario economy by creating jobs, supporting a large-scale supply chain, and stabilizes the production of power contributing to our energy security.



March 09, 2018

Canadian Nuclear Safety Commission
280 Slater Street, P.O. Box 1046, Station B
Ottawa, ON K1P 5S9



Dear Louise Levert,

On behalf of the Ontario Chamber of Commerce (OCC), we welcome the opportunity to provide this submission in support of Bruce Power's 10-year license application to the Canadian Nuclear Safety Commission (CNSC).

For more than a century, the OCC has been the independent, non-partisan voice of business. As Ontario's business advocate, the OCC represents over 135 communities and over 60,000 members across the province, all of which are committed to working with government to promote economic growth and prosperity in Canada.

The purpose of this submission is to demonstrate the OCC's support for Bruce Power's 10-year license application for its Power Reactor Operating License (PROL) for the Bruce Nuclear Generating Stations A and B located near Tiverton, Ontario. The OCC has long recognized the importance of the nuclear industry to Ontario's economy, and specifically acknowledges the critical role of Bruce Power as an economic driver, creating jobs across its high-tech supply chain, contributing to research and innovation, all while supporting the Province's climate change goals.

Through our annual resolution process our Chamber Network members have advocated for an affordable, reliable, clean and innovative energy system that supports Ontario businesses.¹ Those resolutions have highlighted the need to take advantage of Ontario's nuclear expertise to support both our economy and the global transition to a low-carbon future.² As the voice of those chambers the OCC is supporting those calls with this submission.

1 Note: The Ontario Chamber Network has passed a series of resolutions on energy policy in Ontario. These are included in our Current Policy Compendium found here: <http://www.occ.ca/wp-content/uploads/Compendium-of-Policy-Resolutions-2017-2020.pdf>

2 Note: A resolution passed at the OCC AGM in 2015 entitled *Canadian Nuclear Innovation* emphasizes the need for Ontario and Canada to remain a nuclear leader and to leverage our expertise internationally for economic growth.

Over the past few years, Bruce Power and the OCC have collaborated on local events, thought-leading summits, and partnered to support our shared vision of a prosperous Ontario. Through this relationship, we have worked diligently to enhance the business community's understanding of the importance of nuclear power to Ontario not only as a clean and reliable source of energy, but as an integral part of our economy.

Because of this partnership, both business and public confidence in Ontario's nuclear industry has increased. Ontario's refurbishment of the Darlington Nuclear Station and Life-Extension Project at the Bruce Site is broadly supported amongst the OCC's 60,000-member chamber network. Additionally, polling of residents in Bruce, Grey and Huron County reveals increasing support for the Bruce Power facility (currently at 85 percent support, an increase from 79 percent in 2014). This a true testament to the proactive community outreach performed by Bruce Power and their demonstrated importance to the greater Kincardine economy.

The CNSC's current review of Bruce Power's 10-year license application presents an ideal opportunity to ensure that the health and safety of our local communities and the environment remain paramount. The OCC supports the CNSC's robust and comprehensive review process as we feel it is important to continue to update and review Canada's regulatory oversight to allow for no compromise to safety, or the environment.

The OCC is lending its support to Bruce Power as part of this license renewal process in part due to their economic contributions to Ontario, but also their strong commitment to the environment and safety. Since its last license renewal in 2015 (now being renewed to include the Major Component Replacement [MCR] Project), Bruce Power has continued to improve its provisions to ensure the protection of the environment and nearby communities. Recent Environmental Risk Assessments (ERAs) of the Bruce site, which quantify and characterize a baseline for environmental and human health conditions, have revealed the impact of the site on the surrounding environment to be very low, with no adverse effects.

Furthermore, Bruce Power has championed and instituted a Predictive Effects Assessment (PEA), which identified potential changes to the environment and human health as a result of Bruce Power's future activities. The PEA examined how life-extension activities might impact air quality, surface water, groundwater, geology and soil, aquatic and terrestrial environments, human environments and noise, and predicted no radiological or non-radiological risks to human and ecological health.

In addition to its robust environmental protection, Bruce Power executes periodic safety reviews that compares the plant, as it currently operates, against modern codes and standards for identifying opportunities to enhance nuclear safety. The attention to safety at the Bruce Power facility is apparent to its visitors, its employees and is engrained within the very culture of the company.

Overall, it is evident that Bruce Power practices comprehensive environmental monitoring, adheres to and exceeds CNSC standards on ERA, and places the safety and protection of both its workers and the local community above all else.

Beyond the impeccable safety record and demonstrated environmental protection at the Bruce facility, of particular interest to the OCC are the further economic and climate change benefits as a result of Bruce Power's Ontario operations.

Presently, Bruce Power supplies 30 percent of Ontario's electricity at 30 percent less than the average cost to generate residential power.³ It directly employs 4,200 employees each year⁴ and the planned \$13 billion to refurbish its station on Lake Huron will have a sizeable positive impact on the Ontario economy.

An economic impact analysis conducted by a coalition of organizations, led by the Canadian Manufacturers & Exporters, found that the Life-Extension Project at Bruce Power will provide Ontario with an annual contribution of 22,000 jobs and \$4 billion in economic benefit through direct and indirect spending on engineering, specialized equipment, materials, and labour income.⁵ This includes supporting the over 180 companies within the nuclear supply chain, many of which are sources of high-tech jobs. These include employment via large firms such as SNC-Lavalin and Aecon Group Inc., and smaller firms such as ATS Automation Tooling Systems Inc. and BWXT Canada Ltd.

Nuclear power helped facilitate Ontario's transition to a low-carbon energy mix and, with a global shift away from GHG-emitting fuels, nuclear energy is an integral part of the larger low-carbon future. When considering the entire power generation life cycle, including construction, mining, operation and decommissioning, nuclear is found to be one of the cleanest technologies available.

3 Bruce Power. 2018. Bruce Power's 2018 Licence Renewal Briefing: Playing a Role in the Prosperity of Our Communities. http://www.brucepower.com/wp-content/uploads/2017/09/170222-2017-Licence-Renewal_DigitalOct17.pdf

4 Bruce Power. 2018. Getting the Facts on Bruce Power's Impact on the Economy. http://www.brucepower.com/wp-content/uploads/2018/01/180017A_FactSheets_EconomyR001.pdf

5 Provincial Building and Construction Trades Council of Ontario, and the Canadian Manufacturers & Exporters. 2016. Affordable Power. Jobs & Growth. By the Numbers: Securing Both Affordable Power and Growing Ontario's Economy from Bruce Power Site. <http://www.brucepower.com/wp-content/uploads/2016/11/Economic-Impact-Study-2016.pdf>

Annually Bruce Power avoids 31 million tonnes of carbon dioxide, which is equivalent to taking approximately six million cars off the road each year and almost equivalent to the air pollution released by coal plants in 2001.⁶ To put the role of the Bruce Power site into perspective: without it, the province would need to replace 6,400 megawatts of clean, reliable and flexible baseload supply.

The nuclear industry contributes to the Ontario economy by creating jobs, supporting a large-scale supply chain, and stabilizes the production of power contributing to our energy security. The OCC is pleased to have the opportunity to provide this submission in support Bruce Power's 10-year license renewal application and look forward to providing its comments in person at the hearing in May.

Sincerely,



Rocco Rossi
President and CEO
Ontario Chamber of Commerce

⁶ Ontario Power Generation and Bruce Power. 2017. Working Together to Deliver the Future of Nuclear in Ontario An Interim Report on Collaboration to Extend Ontario's Nuclear Fleet. <https://www.opg.com/generating-power/nuclear/Documents/WorkingTogetherToDeliverTheFutureOfNuclearInOntario.PDF>