



Oral Presentation

Exposé oral

Submission from Hatch

Mémoire de Hatch

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



Extension of Bruce Power Licence



Expression of Support

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HATCH

About Hatch

- A professional services firm combining engineering & technical acumen
- Employee-owned; partners who think like owners
- In business for 6 decades
- Projects in more than 150 countries
- 9,000 professionals worldwide
- More than US\$50 billion of projects and assignments under management

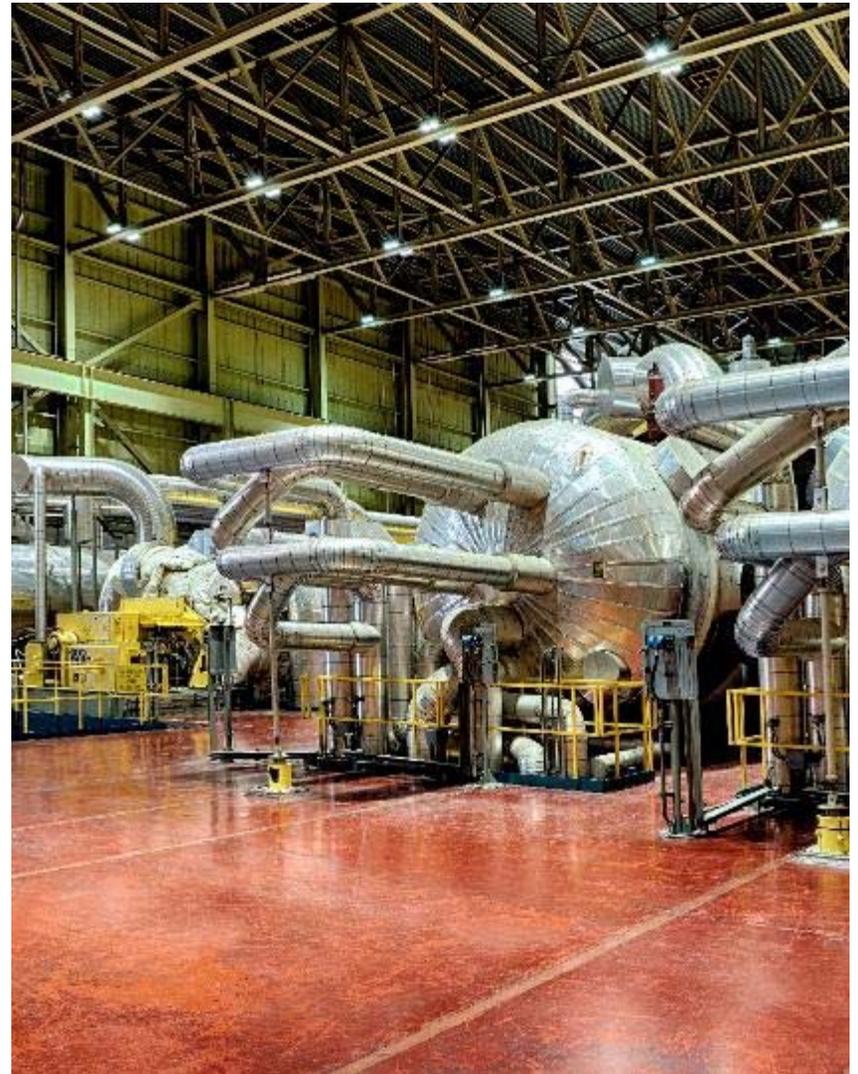
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Our Business

- Serve 3 sectors:
 - Mining & metals
 - Energy
 - Infrastructure
- Provide 3 services:
 - Advisory & technology
 - Major project implementation
 - Operational performance

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Ontario Headquartered

- Hatch's head office is located in Mississauga, Ontario employing 2,500 in the Greater Toronto Area
- Hatch's Nuclear Centre of Excellence is located in Mississauga with approximate 250 staff
- Hatch opened an office in Port Elgin in July of 2016 to support Bruce Power work

+ Bruce Power and the Life Extension Program

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Safety

- Nuclear power has the best safety record of any major form of electricity generation
- Bruce Power has a decades-long track record for safe operation
- Bruce Power's has industry-leading training programs for operations staff
- Bruce Power's industry-leading security and fire personnel keeps the site safe and secure

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Indigenous Relations

- Bruce Power Indigenous Relations Suppliers Network
- Hatch achieved bronze-level supplier status in the CCAB Progressive Aboriginal Relations (PAR) program — the only engineering solutions provider to obtain this level

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The Economic Effects

- Normal operations create 22,000 direct and indirect jobs
- 2020 - 2036 investment program will create 5,000 direct and indirect jobs annually
- ~ \$1 billion in direct and indirect annual spend in equipment, supplies and materials.
- > 90 % spent in Ontario (hundreds of businesses)

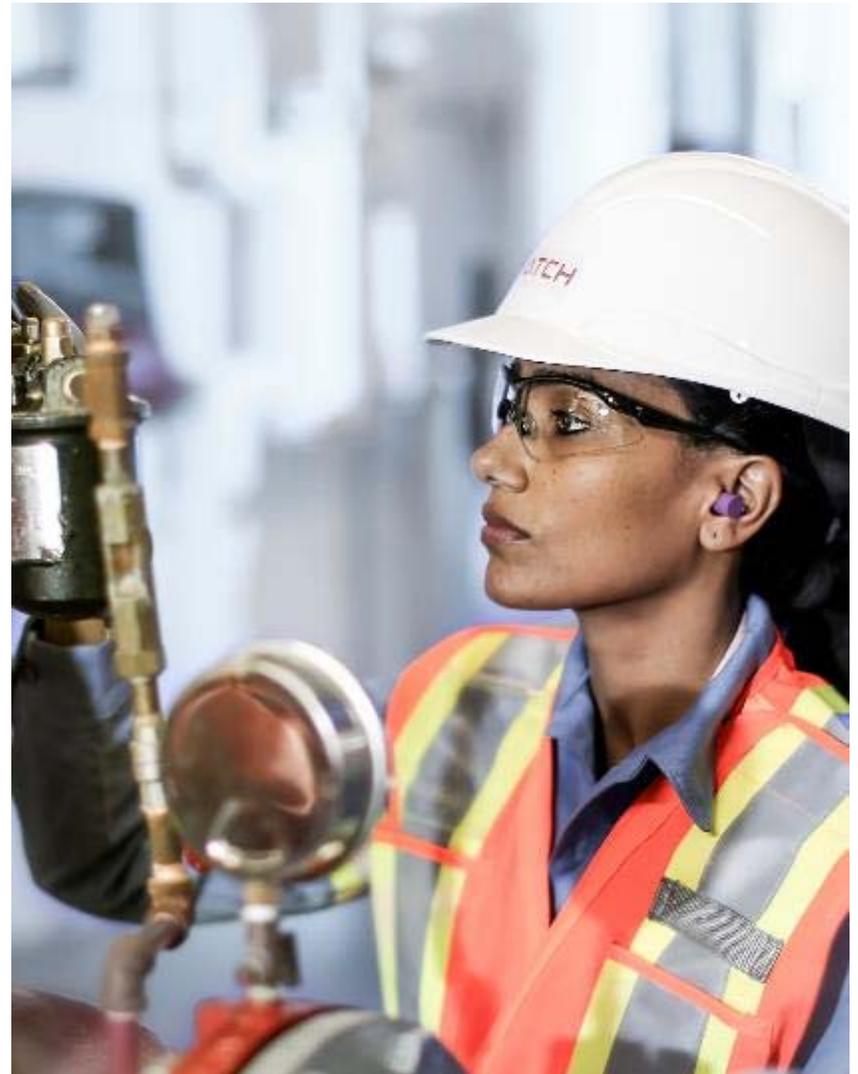
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High-Value Jobs & the Next Generation

- Nuclear in Canada = 30,000 direct, long-lasting, highly skilled jobs (many in Ontario)
- Bruce Power supported by 50 to 150 Hatch professionals
- In 2018, Bruce Power & Hatch both:
 - Canada's Top Employers for Young People
 - Canada's Top 100 Employers

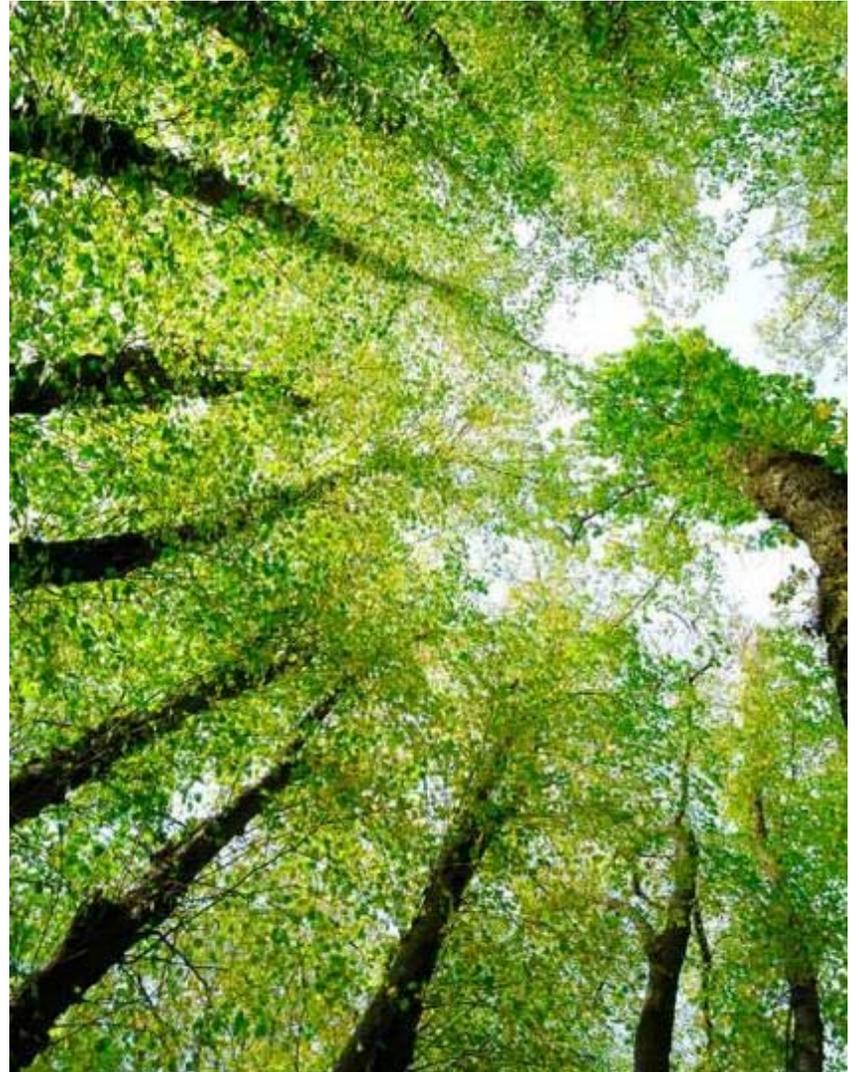
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Environment and Climate

- Stable, reliable, affordable, non-emitting power
- Little waste and the industry is fully accountable for all financial and custodial costs
- Limited impact on the environment with small physical footprint

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Hatch and Bruce Power

- In July 2016 Hatch opened an office in Port Elgin, staffed by members of our nuclear team to support Bruce Power
- In 2017, Hatch signed a long-term services agreement with Bruce Power
- Project work to date:
 - Feeder mock-up
 - MCR Upper Feeder Platform
 - Steam generator replacement
 - Protected Area Office Complex
 - Decontamination Facility

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Hatch and Bruce County

- Member and board participant Saugeen Shores Chamber of Commerce
- Partnered with Bruce County Public Library to bring STEM to local schools
- Since opening our office we have donated \$5,000 to Community Foundation of Grey Bruce to fund scholarships and over \$70,000 to Bruce Power-led charities

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Thank you.

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HATCH

March 29, 2018

Canadian Nuclear Safety Commission

Dear To Whom it May To Concern:

Subject: Bruce Power's Licence Renewal

As a 9,000-person global professional services firm headquartered in Mississauga, Hatch is pleased to offer our support to Bruce Power's request to extend their licence. The 10-year licence will allow Bruce Power to proceed with their Life-Extension Program, which will see \$13 billion invested into the site, allowing it to operate through to 2064.

Ontario's nuclear generating stations at Bruce, Darlington and Pickering provide almost two thirds of the province's power, emissions-free, with Bruce Power providing over 30% of the total. Renewing Bruce Power's license will help Bruce Power continue to provide Ontarians a reliable, affordable means of supplying base load power to the province.

Safety

Nuclear power has the best safety record of any major form of electricity generation. The nuclear industry is subject to some of the most rigorous regulatory regimes in the world. From construction to operation to decommissioning, the industry is licensed and closely monitored. With a 50-year track record of safe operation, Ontario's CANDU reactors are among the best in the world in terms of reliability, durability and efficiency.

Bruce Power's four pillars of safety: reactor, radiological, conventional and environment has meant a decades-long track record for safe operation. Their industry-leading training programs translate into qualified and experienced staff running and maintaining the site. Bruce Power's industry-leading security and fire personnel allows staff at Bruce Power to work, every day, at a safe and secure site.

Indigenous Relations

The Bruce Power Life-Extension Program provides a unique opportunity to engage with and support the indigenous community in Canada. Hatch is proud to be working with Bruce Power to help grow their engagement and as such we are pleased to be a member of the Bruce Power Indigenous Relations Suppliers Network. Hatch is proud to have achieved bronze-level supplier status from the Canadian Council of Aboriginal Businesses' (CCAB) Progressive Aboriginal Relations program—the only engineering solutions provider to obtain this level with CCAB's PAR program and we will bring this achievement to help Bruce Power this their important indigenous relations initiative.

Economic Benefit

Over a decade of experience and millions of man-hours of engineering, analysis, training and planning have prepared Ontario's Bruce Power, and its world-class workforce to execute the successful, cost-effective refurbishment of the Bruce stations.

The Economic Impact Study on the positive role the Bruce Power site plays in the province 'Affordable Power, Jobs & Growth.', updated in 2016, highlights the positive impact Bruce Power's eight nuclear units have on keeping power prices stable and low in Ontario, while providing a major boost to the province's economy.

- An estimated 22,000 jobs, directly and indirectly, and \$4 billion in annual economic benefit in Ontario through direct and indirect spending on operational equipment, supplies, materials and labour income.
- An additional 5,000 direct and indirect jobs annually, contributing between \$980 million and \$1.2 billion in direct and indirect labour income annually, during the investment program (2020-36).
- In addition, between \$751 million and \$1.07 billion in direct and indirect annual economic benefit will be realized through the purchasing of equipment, supplies and materials. Over 90 per cent of Bruce Power's spend takes place in Ontario and the company's supply chain supports hundreds of businesses throughout the province.
- This investment program will also create significant, long-term employment for Ontario's Building and Construction Trades.

Innovation, High-Value Jobs and Training Young People

Nuclear technology is constantly evolving and improving. It is used to make many everyday products and provide essential services from healthcare to safe aircraft. Nuclear energy and science is also a critical piece of Canada's innovation ecosystem in which more than 30 universities and six major research centres are actively engaged, many of them in Ontario.

Canada's nuclear sector is responsible for more than 30,000 direct, long-lasting, highly skilled jobs across the country, the majority of which are in Ontario and which exist almost entirely as a result of public investment in power generation and scientific research.

Hatch and Bruce Power share in a commitment to creating positive and engaging workplaces for all staff. Hatch was recently recognized once again as one of Canada's Top Employers for Young People and as one of Canada's Top 100 employers for 2018, both of which Bruce Power has also been recognized for.

Since late 2015, Hatch has supported Bruce Power with a team of around 50 engineers, technologists and project delivery specialists from our offices in Bruce County and Mississauga. We anticipate this team growing to around 100 to 150 professionals as the Life-Extension Program advances; this represents a significant economic benefit to our employee-owned firm, our staff and the local Ontario communities in which our employees live, work and play.

Environment and Climate

Refurbishing ten units at Bruce and Darlington will ensure Ontario has the stable, reliable, affordable and non-emitting foundation to pursue further modernization and decarbonization of the province's electricity system and economy. A refurbished nuclear baseload fleet in Ontario will displace approximately 30-million tonnes per year of carbon dioxide or nearly 4% of Canada's total expected emissions in 2030 (NRCAN). The refurbishments will ensure another 30 years of safe, reliable energy that's over 99 per cent free of smog and greenhouse gas emissions.

Unlike other energy sources that release their waste into the environment and are not accountable for their waste (causing large scale water and air pollution) nuclear generates very little waste and the industry is fully accountable for all related financial and custodial costs. From uranium mining to plant decommissioning, GHG emissions from nuclear power are very low.

Nuclear power production has a very small physical footprint thereby limiting its impact on natural resources. Nuclear power helps combat rising global temperatures while ensuring a healthier environment.

Hatch and Bruce Power

Hatch is a top-tier service provider to the nuclear industry, both in Canada and abroad. We're engineers, project managers, and consultants that love to tackle the tough problems to drive positive change. Our clients benefit when we apply our extensive experience to the wide array of new nuclear systems, design, construction and refurbishments projects they undertake. We go above and beyond to ensure quality, safety and efficiency in our projects that consider important issues such as fire protection, seismicity, security, human factors and radiation safety.

In July 2016 Hatch opened an office in Port Elgin, staffed by members of our nuclear team to support work under way at Bruce Power.

On our second anniversary in Port Elgin, Bruce Power and Hatch signed a long-term service agreement providing Bruce Power with professional services and access to Hatch' global engineering expertise, state-of-the-art technologies, and innovation-creating partnerships.

Hatch is providing the detailed design of the MCR Upper Feeder Platform and we have supported the steam generator replacement project, feeder mock-up project, Protected Area Office Complex, Decontamination Facility, and other major component-replacement infrastructure projects. Recently Hatch announced an innovation consortium, the Nuclear Innovation Consortium, with key partners to deliver fresh innovation to the nuclear industry.

Community Initiatives & Benefits

At Hatch we believe in contributing to the communities in which we live and work. We have enjoyed participating in local Bruce County community events and contributing both time and money to charities and community initiatives, including: membership and board participation in the Saugeen Shores Chamber of Commerce; partnering with the Bruce County Public Library to bring STEM to local schools; providing \$5,000 to the Community Foundation of Grey Bruce for Indigenous and STEM scholarships; and, sponsoring community social events.

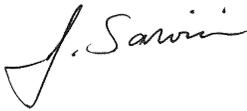
Hatch has also proudly participated in many Bruce Power-led charity initiatives including the United Way, the Right to Play, Unity for Autism and Wounded Warriors campaigns. Since opening our Port Elgin office Hatch has donated over \$70,000 to local causes and other Bruce Power supported charities.

Closing Comments

It is clear that extending Bruce Power's license has important benefits to Ontario and Canada in terms of: bolstering the economy; sustaining and creating high value jobs; training the next generation of technical and scientific leaders of our country; meeting environmental and climate change objectives; providing local benefits to Ontario communities; and, creating opportunities to improve relationship with the Indigenous people of Canada. All of these benefits are achieved while operating in an extraordinarily safe manner to produce reliable, clean, affordable energy to our citizens.

Hatch is proud to provide our services to Bruce Power and fully support the extension of their license.

Yours faithfully,



Jim Sarvinis

JJ:bb
Attachment(s)/Enclosure