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Oral Presentation

Submission from ATS Automation Tooling Systems Inc.

In the Matter of

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

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

Commission Public Hearing – Part 2

May 28-31, 2018

Exposé oral

Mémoire de ATS Automation Tooling Systems Inc.

À l'égard de

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

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

Audience publique de la Commission – Partie 2

28-31 mai 2018

Canada

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April 13, 2018

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

Subject: Renewal of Bruce Power's Reactor Operating License for the Bruce Nuclear Generating Stations A & B

Dear Commission Members,

ATS Automation supports the application for Bruce Power Inc. to renew its Nuclear Power Reactor Operating License for the Bruce Nuclear Generating Stations (NGS) A and B for a period of 10 years (CNSC Ref. 2018-H-02). Providing Bruce Power a 10 year license will allow them to proceed with their Life Extension Program, which will see major investment into the site, allowing it to potentially operate through to year 2064.

ATS has been involved in providing manufacturing automation for a variety of customers and our track record of innovation and passion for excellence sets us apart as a world leader in automation. This comes from years of experience in helping many of the world's most successful companies with their new product launches, capacity expansions, and productivity improvement initiatives.

ATS's technology applications have been instrumental in providing Bruce Power with problem solving solutions for their production challenges. We believe that leveraging insights and best practices between all the markets we serve creates a unique multi-industry synergy. We apply the knowledge gained from other sectors to projects in the nuclear industry. Bruce Power is undertaking to refurbish six of eight reactors (Units 3-8) over the next twenty plus years. During each of the Major Component Replacement (MCR) outages, all 480 fuel channel assemblies and Calandria tubes will be removed and replaced. Unit 6 is the first unit scheduled for refurbishment, with planned breaker-open date of January 01, 2020.

ATS is a key supplier of engineering, assembly and testing of the critical reactor component removal tools for the MCR program. These tools are highly automated and ensure that the irradiated components are removed safely with minimal dose to all workers.

The MCR project will involve a significant amount of equipment and tooling to be transported into and out of the vault and interface with other tools, existing structures and system components.

ATS has constructed a replica of the Bruce vault at our Cambridge site for the tooling integration and testing. This integration facility will be used for the pre-outage testing, verification and optimization of various removal, inspection and installation execution series. This facility will ensure that workers are thoroughly trained and the tools tested in a safe, realistic and controlled environment with all the obstacles, constraints and potential challenges they may face in the station.

Bruce Power's number 1 value is 'safety first'. ATS shares this value and together as an integrated team, and with full engagement and collaboration, we have developed the most optimized tools to the highest quality and safety standards.

The MCR tools went through multiple design reviews including failure mode and effects analysis (FMEA) and as a result the requirement for redundancy of key components was identified and implemented.

These MCR tools are now undergoing Factory Acceptance Testing at the ATS campus, followed by Post Acceptance Testing on representative fuel channel mock-ups on our shop floor. We will then conduct a full scale mock-up system testing on the Bruce vault in the integration facility at ATS. This commitment by Bruce Power to comprehensive early testing will ensure that the tools will be reliable, predictable and safe.

Aside from producing safe, clean and reliable energy, the Bruce nuclear site has produced Cobalt-60 since the 1980s and is currently the world's largest supplier and extension of its operating license will guarantee health care providers will have a stable, secure Cobalt-60 supply they can count on for potentially the next half century.

ATS also supports Bruce Power's commitment to the local communities through its Sponsorship Programs, high school and post-secondary scholarships, Aboriginal and Physician Recruitment Programs and their safety and environment initiatives.

ATS has embraced this commitment by qualifying local suppliers in the Bruce County and adding them to our approved vendor list and our participation in the Indigenous Relations Supplier Network.

Together with Bruce Power, ATS has worked on many important programs at the Bruce site and at ATS. Bruce Power has worked hard to build strong roots in Ontario and are committed to protecting the environment and supporting local communities. They have demonstrated absolute commitment to safety.

ATS fully supports the renewal of Bruce Power's Nuclear Power Plant Operating License. Such renewal, together with the Life-Extension Program, will ensure Bruce Power nuclear continues to provide low-cost, clean and reliable electricity through 2064. The operation of the Bruce site through 2064 will create and sustain 22,000 direct and indirect jobs annually. The program will have significant impacts on our local community by creating and sustaining highly skilled engineers, trades and service professionals in the workforce.

Narinder Bains

General Manager Nuclear

ATS Automation