

An aerial photograph showing a large industrial facility, likely a power plant, situated on a green, hilly coastline. The facility features several large white buildings and structures. To the left of the facility is a vast expanse of blue water. The foreground is dominated by lush green trees and grassy fields, with a winding road or path cutting through them. The sky is a clear, bright blue.

Canadian Fusion Services

Herminia Roman | June 24, 2019

Engineering Strategy

Ontario Power Generation

ONTARIO **POWER**
GENERATION

Canada-ITER Relationship





Canadian Capability

Canadian Nuclear Expertise

- Recognized as a world leader in the removal, safe handling and transportation of tritium.
- Strong research capability in Nuclear Fusion technologies.
- Experienced in the use of robotics in nuclear processes.
- Considerable expertise in hydrogen mitigation processes.
- Expertise in nuclear codes and licensing processes.





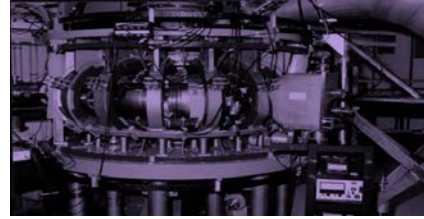
Tritium Management

- Specialized technology designed for Tritium processing and management.
- Expertise and proven techniques for safe handling of Tritium.
- Advanced Tritium research capabilities & facilities.
- Best practices & training for Tritium waste management and monitoring.



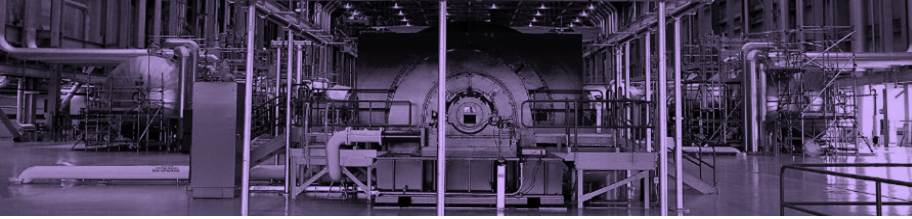
Technological Innovation

- Inspection tooling solutions and custom components.
- Robotic solutions for safety-critical systems, real-time controls and operations support.
- Supply chain management expertise.
- Simulation and 3D modeling capability and analysis.



Nuclear Research & Analysis Capabilities

- Advanced theoretical and experimental contributions to fusion research
- Research and development capabilities in nuclear component aging management, fuels etc.
- Materials & safety analysis expertise including testing and forensics



Nuclear Design & Construction Expertise

- Reactor Refurbishment Capability
- Original Equipment Manufacturers (OEMs) specialized in refurbishment, new build, and decommissioning
- Inspection & testing capabilities
- Capabilities and experience in radiological waste retrieval, transportation, processing, packaging, and storage



Canadian Delegation to ITER

Canadian Fusion Services

Vision

Canada is recognized as a key collaborator by the ITER Organization.

Mission

Provide the Canadian nuclear community with streamlined access to commercial, technical, scientific, and administrative opportunities for collaboration with the ITER Organization.

Strategy

Bring revenue to Canada's nuclear community over the next 5 years by administering the ITER Cooperation Agreement with a focus on strong technical oversight, promoting Canadian capabilities, and fostering key partnerships between new and existing members of the Canadian nuclear community.



Canadian Fusion Service Offerings

Coordination

Provide convenient, transparent, revenue-neutral, and prompt coordination services in order to streamline access to ITER collaboration opportunities for signatories to the ITER Cooperation Agreement.

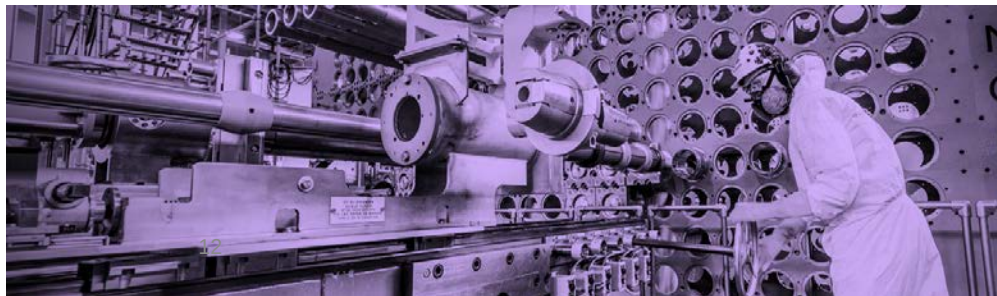
Reporting

Provide technically sound, oversight & reporting of the Cooperation Agreement implementation activities.

Promotion

Foster a growing community of Canadian commercial and research organizations that are interested in learning about fusion collaboration and the ITER Project.

Canadian Fusion Services



Next Steps

Global Affairs Canada is negotiating a Nuclear Cooperation Agreement with ITER in relation to non-proliferation obligations.

ITER staff will be visiting various Ontario facilities to learn more about the unique nuclear skills and capabilities available in Canada.

Ontario Power Generation will continue to work with the Province of Ontario and the Government of Canada to support industry involvement in the ITER Project.

Getting Involved...

Get in touch with OPG or OCNl if your organization has capabilities in Tritium Management, Technology & Advanced Robotics, Nuclear Design & Analysis, or Nuclear Scientific Research and is interested in participating.

Stay updated on ITER Project progress at <https://www.iter.org/>.



Thank you!

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