



Laurentis Energy Partners Overview

Updated Nov. 2021



Who is Laurentis Energy Partners

- Subsidiary of Ontario Power Generation since 2012
- Originally formed to provide people and services to New Brunswick Power – then added inspections
- Now growing rapidly into wider range of services
 - Isotopes – Mo-99, He-3, Deuterium
 - Engineering services – including Owner’s Engineer
 - Project Management
 - Radiation protection
 - Waste handling and processing
- Currently about 120 staff and growing
 - Offices in Toronto, Pickering, Hamilton, Port Elgin, New Brunswick, Romania (Bucharest & Cernavoda)





Laurentis in New Brunswick

- In 2012, Laurentis was a key partner in bringing New Brunswick's Point Lepreau back online during their refurbishment
- In 2018, signed a 10-Year, \$21.5 million Reactor Maintenance Contract with New Brunswick (NB) Power
- Opened Laurentis Saint John NB office in 2019
- Partner in Atlantica Centre for Energy
- Future work and opportunities on the horizon



Laurentis in Romania

- Laurentis operates as Canadian Nuclear Partners SA (CNPSA) in Romania
- Awarded 4 contracts from Societatea Nationala Nuclearelectrica (SNN), to support the refurbishment of SNN's Cernavoda Unit 1 reactor and for preliminary efforts to support Cernavoda Unit 3 and 4 (new build)
- Most significant contracts are:
 - **Feb 2021:** \$4.8M contract for Conservation Program, to maintain the integrity, performance of systems and components during SNN's Unit 1 refurbishment
 - **July 2021:** Owner's Engineer contract to provide refurbishment technical assistance during SNN's Unit 1 refurbishment





Experts in Nuclear Sorting & Recycling

- In 2020, Laurentis entered a two-year exploration and research project, in collaboration with McMaster University
- Exploring new ways to manage and sort low-level materials from nuclear stations
 - To maximize processing for volume reduction
 - To maximize free release and recycling of clean materials
 - To minimize volumes in storage
 - To reduce costs and lessen environmental impact
- Good results so far: about 60% of material volume-reduced
- Opportunity to be experts in waste sorting and handling, in Canada and possibly internationally
- Pending regulatory approvals, Laurentis plans to develop a new nuclear-materials sorting facility in Kincardine, Ontario, near the Bruce nuclear station for Ontario Power Generation.





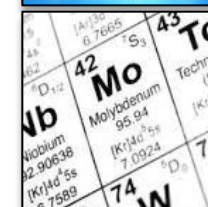
Isotope Production

Laurentis is a vital partner in the production of various isotopes for Ontario and the world, including:

- **Helium-3 (He-3)**, used in border security, medical imaging, quantum computing and neutron research
- **Molybdenum-99 (Mo-99)**, which decays to Technetium-99m (Tc-99m), used in 80% of all nuclear medicine imaging scans worldwide
- **Heavy Water (D2O)**, used in pharmaceuticals, medical diagnostics and next-generation electronics



Helium-3 Extraction Tool (main process loop)



Field Services

- LEP provides many inspection and reactor maintenance services, in collaboration with OPG, for various clients and utilities. Some work includes:
 - Inspections
 - Project Management
 - Spacer Location and Repositioning (SLAR)
 - Single Fuel Channel Replacement (SFCR)
 - Flask Rentals
 - Monitoring and Diagnostics
 - CANDU Refurbishment Support – owners engineer, feasibility studies, radiation protection and contract management services





Design Engineering

- Laurentis has the ability to utilize OPG's decades of engineering knowledge and capability to support projects and client needs; however, Laurentis is also supplementing OPG's skill base by building its own design-engineering capability and division
- The Laurentis design engineering division provides nuclear design and engineering services, from improvements to plant performance, to drawings and equipment design, to engineered deliverables



Thank you.

For more information, visit www.laurentisenergy.com

