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Tritium Processing Experience at Canadian Nuclear Laboratories (CNL)

Thursday, May 25, 2023 9:30 AM (30 minutes)

The presentation will provide a general overview of CNL, what we do and the recent major investments happening in the laboratories. An overview of the tritium and heavy water management, process and separation experience will follow, including an exciting description of the newly proposed Heavy Water Detritiation Facility. The HWDF is expected to be built in the next 2 to 3 years, using CNL hydrogen isotopes technology. A short description of new initiatives to separate deuterium and tritium gases using cryogenic distillation of thermal cycling absorption will also be given. Finally, the presentation will conclude with the newest program of work that incorporates tritium in the fusion fuel cycle and the opportunities that CNL is pursuing with its partners, showing its first-of-a-kind fully integrated fuel cycle demonstration facility.

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Session Classification: Tritium processing (experience and lessons learned)

Track Classification: Oral presentations