

AGENDA September 28, 2023

08:30 - 09:00	Registration and poster session
09:00 - 09:10	Welcome, Karen Huynh, Director Strategic Programs and Partnerships, Atomic Energy of Canada Ltd
09:10 - 09:20	Remarks from Amy Gottschling, Vice President, Science and Technology and Commercial Oversight, Atomic Energy of Canada Ltd,
09:20 - 09:30	Remarks from co-chair of sub-committee, Daniel Brady, Deputy Director Nuclear Science and Technology, Natural Resources Canada

SESSION 1: Reactor Fleet Sustainability		
09:30 - 10:00	Conventional Nuclear New Build	Carl Marcotte, Senior Vice President, Marketing and Business Development, SNC-Lavalin Inc. / Candu Energy Inc.
10:00 - 10:30	Research and Development to Support Aging Management of the Current Fleet	Sebastien Teyseyre, Technical Manager, Canadian Nuclear Laboratories
10:45 - 11:15	Break and Poster Session	

SESSION 2: Reactor Fleet Sustainability (continue)		
11:15 - 11:45	Reactor Sustainability from the Regulator's Perspective	Melanie Rickard, Director General, Canadian Nuclear Safety Commission
11:45 - 12:15	CNSC Oversight of Extended Operation of CANDU Pressure Tubes	Blair Carroll, Technical Specialist, Canadian Nuclear Safety Commission
12:15 - 12:45	Reactor Safety Modelling and Experiments to Support the Current Fleet	Andrew Morreale, Acting Technical Manager - Reactor Safety, Canadian Nuclear Laboratories
12:30 - 1:30	Lunch and Poster Session	

SESSION 3: Hydrogen and Tritium Technologies		
1:30 - 2:00	Canadian Coast Guards experience with fuel switching, hydrogen and alternative fuels	Nicholas La Monaca - National Manager, Fleet Foresight and Integration, Canadian Coast Guard
2:00 - 2:30	Hydrogen Program Overview and Question Period	Adrian Vega, Acting Manager - Hydrogen Technologies Branch, Canadian Nuclear Laboratories
2:30 - 3:00	Break and Poster Session	

SESSION 4: Hydrogen and Tritium Technologies (continue)		
3:00 - 3:30	Fusion, and tritium in Canada, a perspective	Antoine de la Chevrotière, Deputy Director, Natural Resources Canada
3:30 - 4:00	Tritium Program Overview and Question Period	Don Ryland, Manager, Deuterium and Tritium Technologies, Canadian Nuclear Laboratories
4:35 - 4:40	Closing Remarks and Adjourn	

POSTER SESSION

Reactor Fleet Sustainability

Poster Title	Lead Presenter
Develop Probabilistic Methodologies to Enhance the Safety Analysis for Aging Reactors	YANG, Jun
Late Phase Severe Accident	MORREALE, Andrew
ZED-2 Experimental and Computational Studies of Plutonium-Bearing Fuels in Support of CANDU Physics	YARASKAVITCH, Luke
Irradiated Fuel Bay Accident Analysis	MORREALE, Andrew
Corium Phenomena and Related Severe Accident Issues	SPENCER, Justin
Addressing BDBA Gaps in Containment Thermalhydraulics for Existing CANDU Fleet and New SMRs	HUMMEL, Dave
Aging of Electrical Cables - Environmental Stressors and Condition Assessment Studies	GUEROUT, Fabrice
Technologies for Management of Nuclear Power Plant Concrete	SIMOVA, Eli
Portable, High-Precision Modular Manipulator Cell for Nuclear Applications	READ, Scott
Application of Modern Manufacturing Processes for Repairing/Refurbishing Reactor Materials	ST LAWRENCE, Sterling
Development and Demonstration of Hydrogen Removal Techniques	DIAZ GOMEZ MAQUEO, Pablo
Develop state-of-the-art online monitoring networks for the surveillance of aging infrastructure	LULOFF, Mark
Reactor Decontamination Capability Maintenance	SEMMLER, Jaleh
Effects of Iodine Speciation and Ruthenium Behaviour on Severe Accident Source Terms	MORREALE, Andrew
Fukushima Daiichi Accident Analysis and Development of Debris Analysis Capabilities	MORREALE, Andrew

Study of Header-Feeder Behaviour with Emergency Makeup Flows and Improvement of 3D Header Modelling in Analysis Code	YANG, Jun
Influence of the Evolution of the Microstructure of Calandria Tube Materials in Accident Scenario	SONG, Carol
Investigate the susceptibility of irradiated components to crack initiation and failure and develop predictive models	MATTUCCI, Mitchell
Fundamental understanding of hydrogen ingress, accumulation and transport in Zirconium alloys	NORDIN, Heidi
Developing artificial intelligence tools for signal validation to support online monitoring and inspection	EL BOUZIDI, Salim

Hydrogen and Tritium Technologies

Poster Title	Lead Presenter
Long-term Effects of Tritium Exposure in Advanced Reactor Materials	WHITEHORNE, Todd
Advanced Understanding of Hydrogen Behavior and Risk Management	LIANG, Rita
Use of the Thermal Cycling Absorption (TCA) Process for Tritium Separation and Enrichment	PUPKEVICH, Victor
Scale-up of identified promising hydrogen storage materials and definition of suitable geologic formations for large scale hydrogen storage	FRITZSCHE, Helmut
Maintaining Catalyst Capabilities for Heavy Water Production and Purification	LI, Hong Qiang
Enhancing Canada's tritium infrastructure and exploring fusion applications for future collaborations and exploitation	ABRAHAM, Kathrin
Strategies to improve the economics of high temperature electrolyzer technology coupled with nuclear and renewable energy sources	VEGA ZUNIGA, Adrian
Assessment of nuclear-based clean fuel production methods	OUELLETTE, David
Field applications of betavoltaic power sources	PATEL, Jayesh
National Hydrogen Infrastructure Requirements for Large-Scale Deployment in Canada	GNANAPRAGASAM, Nirmal