Course Overview

Safety is of primary consideration in the design and operation of nuclear reactors. If nuclear power generation is to survive, it has to meet ever-increasing safety demands. To address the safety-training needs of the Canadian nuclear industry, the CNS is once again happy to offer the CANDU Reactor Safety course. Previous offerings of this course were very successful and enrollment has been constantly high. *This course is eligible for Continuing Education Units in the context of the* ***Engineering Institute of Canada*** *Continuing Education program.*

The course provides an introduction to CANDU reactor safety and licensing principles, at the same time offering an overview of the major systems in a CANDU plant. The course is ideally suited for beginning professionals, but also beneficial to experienced professionals who wish to broaden their knowledge beyond their own field of expertise.

Continental breakfast, buffet lunch, and coffee breaks are provided each day. There will also be a banquet on the second evening of the course. The after-dinner speech at the banquet will highlight a timely topic in the Canadian Nuclear industry.

Topics to be covered in the course include:

- Design and licensing fundamentals
- Core-physics safety analysis
- Thermalhydraulics
- Safety-related systems
- Deterministic and probabilistic safety analyses
- Severe core-damage assessment
- Safety R&D

Registration

Please register on-line via the link on the Reactor Safety Course web page, which you can reach directly at http://www.cns-snc.ca/events/2010_reactor_safety_course or via the CNS web site (http://www.cns-snc.ca).

The registration fees are shown below, and include GST (GST # 870488889RT)

- ☐ **CNS Member: $795.00 [Must be a CNS member in good standing]**
- ☐ **Non-CNS Member: $900.00**
- ☐ **Full-time student or CNS retiree member: $385.00**

For registration information, please communicate with:

CNS Office
480 University Avenue, Suite 200
Toronto, ON, Canada, M5G 1V2
Tel: 416-977-7620; Fax: 416-977-8131
e-mail: cns-snc@on.aibn.com

HOTEL ACCOMMODATION

A special room rate of $135 + $10 parking per night is available at the Toronto Airport Marriott Hotel. **To receive the special hotel rate, you must book by February 28. Call 1-800-905-2811 and request the Canadian Nuclear Society Course Group Booking.** You will also be able to reserve your room on-line via a link on the course webpage, at

CANDU REACTOR SAFETY COURSE

Organized by:
The Canadian Nuclear Society
Nuclear Science & Engineering Division

2010 March 22-24 (Mon-Wed)

Toronto Marriott Airport Hotel
901 Dixon Road
Toronto, ON
M9W 1J5

Course contact (not for registration):

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CANDU Reactor Safety Course
2010 March 22-24
Toronto Marriott Airport Hotel
901 Dixon Road
Toronto, ON
M9W 1J5
Tentative Schedule

Objectives of the course

- **To provide an introduction to CANDU reactor safety analysis principles**
- **To provide an overview of the major CANDU systems**
- **To foster nuclear safety culture**

Monday, March 22

07:30	Continental Breakfast
08:30	Welcome & Opening Remarks
08:45	CANDU Design Overview – D. Wren (AECL)
10:15	Break
10:30	CANDU Safety Analysis Fundamentals – A. Oliva (Candesco Corporation)
12:00	Lunch
13:00	Core Physics in Safety Analysis - E. Nichita (UOIT)
14:30	Break
15:00	Regional Overpower Protection - B. Rouben (12 & 1 Consulting)
16:30	End of Day-1 Lectures

Tuesday, March 23

07:30	Continental Breakfast
08:30	Thermalhydraulic Analysis – D. Novog (McMaster University)
10:00	Break
10:30	Power Reactor Licensing in Canada – D. Serghiuta (CNSC)
12:00	Lunch
13:00	Supporting Reactor Safety in a Nuclear Utility – J. Grava (Consultant)
14:30	Break
15:00	Fuel and Fuel Channel Safety Analysis – S. Girgis (AECL)
16:30	End of Day-2 Lectures
18:00	Host Bar
19:00	Banquet, with Guest Speaker

Wednesday, March 24

07:30	Continental Breakfast
08:30	Radiological Emissions and Impact – K. Aydogdu (AECL)
10:00	Break
10:30	Reactor Control – W. Fieguth (Consultant)
12:00	Lunch
13:00	Severe Core Damage – C. Blahnik (CBA Inc.)
14:30	Break
15:00	CANDU Reactor Safety Research – T. Nitheanandan (AECL)
16:30	End of Course