

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://cns-snc.ca/events/2013_reactor_safety_course/ or via the CNS web site (<http://www.cns-snc.ca>).

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

- CNS Member: \$870.00** [Must be a CNS member in good standing]
- Non-CNS Member: \$980.00**
- Full-time student or CNS retiree member: \$385.00**

For registration information, please communicate with:
CNS Office
655 Bay St., 17th Floor
Toronto, ON, Canada, M5G 2K4
Tel: 416-977-7620; Fax: 416-977-8131
e-mail: cns-snc@on.aibn.com

HOTEL ACCOMMODATION

A very special room rate per night of \$109 + Tax (+ Parking if required) is available at the Courtyard by Marriott Downtown Toronto. **To receive the special hotel rate, you must book by March 6; we suggest you book early to avoid disappointment. You can reserve your room on-line via a dedicated link on the course webpage. Or call 1-800-847-5075 and request the Canadian Nuclear Society Course Group Booking.**

CNS CANDU REACTOR SAFETY COURSE



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

**2013 March 25-27
(Mon-Wed)**

**Courtyard by Marriott Downtown
Toronto
475 Yonge St.
Toronto, ON
M4Y 1X7**

Course contact (not for registration):

B. Rouben
Tel: 416-977-7620
e-mail: roubenb@alum.mit.edu

CNS CANDU Reactor Safety Course
2013 March 25-27
Courtyard by Marriott Downtown
Toronto
475 Yonge St.
Toronto, ON
M4Y 1X7
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 25

07:30	Continental Breakfast
08:30	Welcome & Opening Remarks
08:45	CANDU Design Overview (B. Rouben, 12 & 1 Consulting)
10:15	Break
10:30	CANDU Safety Analysis Fundamentals (A. Oliva, Candesco)
12:00	Lunch
13:00	Thermalhydraulic Analysis (D. Novog, McMaster University)
14:30	Break
15:00	Reactor Core Physics in Safety Analysis (E. Nichita, UOIT)
16:30	End of Day-1 Lectures

Tuesday, March 26

07:30	Continental Breakfast
08:30	Fuel and Fuel Channel Safety Analysis (S. Girgis, formerly AECL)
10:00	Break
10:30	Power Reactor Licensing in Canada (P. Akhtar, formerly CNSC)
12:00	Lunch
13:00	Reactor Control (J. Harber, Candu Energy Inc.)
14:30	Break
15:00	Regulatory Safety Model and Examples of Current Safety Priorities (A. Viktorov, CNSC)
16:30	End of Day-2 Lectures
18:00	Host Bar
19:00	Banquet, with Guest Speaker

Wednesday, March 27

07:30	Continental Breakfast
08:30	Environmental Protection (K. Dormuth, formerly AECL)
10:00	Break
10:30	Radiological Emissions and Imp (K. Aydogdu, formerly AECL)
12:00	Lunch
13:00	Severe Core Damage (C. Blahn CBA Inc.)
14:30	Break
15:00	CANDU Reactor Safety Research (T. Nitheanandan, AECL)
16:30	End of Course