



**Canadian Nuclear Society /
Société Nucléaire
Canadienne**

Chalk River Branch, c/o Dr. Blair P. Bromley,
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Algonquin Chapter

ACR-1000 – the Advanced CANDU Reactor for Canada

The Chalk River Branch of the Canadian Nuclear Society and the Algonquin Chapter of the Professional Engineers of Ontario are pleased to welcome Stephen Yu, AECL, at the next Canadian Nuclear Society seminar on Wednesday, May 21, 2008, at 7:30 pm in the Bennett/Mackenzie Room, J.L. Gray Building, Deep River. Stephen Yu is currently General Manager, Product Engineering in the New Build CANDU Project, responsible for the basic engineering and safety analyses of the ACR-1000 design in Atomic Energy of Canada Limited (AECL).

To meet upcoming electricity demands in Canada and other countries around the world, AECL has now designed a Generation III+ plant—the ACR-1000—which is one of newer, safer, more economically competitive designs being considered. ACR-1000 has adapted the successful features of the CANDU reactor and incorporated innovations to address the evolving regulatory requirements and demanding customer needs. The basic design is complete and the ACR-1000 is already in full project mode. This presentation will provide an overview of the ACR-1000 nuclear power plant design including the descriptions of the innovative features, the supporting technologies and an explanation on the improvement drivers. The ACR-1000 is a light-water-cooled, heavy-water-moderated pressure-tube reactor, which has evolved from the well-established CANDU line. Many of the innovations were developed using experience and feedback gained in the design, construction and operation of top-performing CANDU 6 reactors operated by utilities around the world.

Stephen Yu obtained his M.Sc. from the University of Manchester, Institute of Science and Technology, England in 1971, specializing in thermodynamics and heat transfer. He is a registered Professional Engineer in the Province of Ontario and a Chartered Engineer in U.K. During his 30+ years' career in AECL, Stephen has held many engineering and development project management positions including CANDU 3 Program Director, CANDU Development Director in the Office of the Chief Engineer, CANDU 9 Program Director, and Director of Engineering & Procurement for CANDU Services. Stephen received the AECL President's Award for exceptional practical engineering in 1998.



Figure 2-2 Reactor Building

Stephen Yu
General Manager, New Build CANDU
AECL

7:30 PM, Wednesday, May 21, 2008

Bennett/Mackenzie Room, J.L. Gray Centre
(On the right after entry via rear security entrance)

Refreshments will be served – free admission - ALL ARE WELCOME
Further information: Blair Bromley at 584-8811 Ext. 3676, or 613-584-1518