



## Canadian Nuclear Society / Société Nucléaire Canadienne

Chalk River Branch, c/o Ragnar Dworschak AECL-Chalk River Laboratories, Chalk River, ON K0J 1J0

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*“Supporting nuclear science and technology for over 25 years”  
“plus de 25 ans de promotion de la science et de la technologie nucléaires”*

**Brent Williams, NA-YGN President,  
will talk about**

### **The Bruce B Reactor Training Simulators Models and Technology**

The Chalk River Branch of the Canadian Nuclear Society is pleased to welcome Brent Williams, the Responsible System Engineer for the Bruce B Training Simulators. A graduate of Western University (2002, Mechanical Engineering), Brent is currently president of the **North American Young Generation in Nuclear Society (NA-YGN)**.

During his time on the NA-YGN Executive, he has presented on NA-YGN issues at a dozen safety, public, nuclear industry and NA-YGN events, engaged in letter writing campaigns, organized contests, discussed energy policy with a member of the Sierra Club, judged science fairs and been yelled at by the Executive Director of Greenpeace Canada.

Bruce Power operates two training simulators in support of its Operator and Shift Manager Certification activities. The current model technologies were originally commissioned in 1983 (Bruce A) and 1986 (Bruce B), and were designed to deliver a limited number of severe design basis accidents and power maneuvers over a short period of time. These models have performed well over the last 20+ years; however, they have been challenged by ever-increasing regulatory requirements on ongoing station design changes. Several of these challenged the basic modeling technology of the original simulator.

In order to meet these challenges, Bruce Power has commissioned a project to port the simulator to a Windows XP environment, and a model technology upgrade to key systems including the: reactor, primary heat transport, boiler, feed and bleed, and moderator. Brent will discuss and demonstrate the simulator models and technology. During his presentation he will also talk about the core motivations of the NA-YGN, and discuss several of its challenges and victories as it moves into its eleventh year.



**Brent Williams**  
NA-YGN President and  
Responsible System Engineer for the  
Bruce B Training Simulators

**Free Pizza:** 7:00 pm  
Talk : 7:30 pm, Thursday April 23, 2009

Bennett / Mackenzie Room, J.L. Gray Centre  
(Entry via rear security entrance)

*Further information: Ragnar Dworschak at 584-8811 Ext. 44342, or Geoff Edwards at Ext. 43247*