

## NUCLEAR FAST FACTS

Nuclear Energy helps the environment and our health by avoiding the production of greenhouse gases, acid rain and mercury.

Nuclear Energy is clean, creating very little spent fuel. Almost all fuel used by the nuclear industry remains on nuclear sites, and would only fill five hockey rinks. Spent fuel can be recycled.

Nuclear Power protects valuable hydrocarbon resources, such as natural gas, by using uranium, which has no other significant use.

Nuclear Energy saves lives by avoiding the production of smog-creating emissions and creating products that treat cancer, diagnose heart disease, and alert us to fires in our homes.

Nuclear Energy is dependable, because it is not subject to variable environmental conditions or fuel supply.

[Source: [www.oci-aic.org](http://www.oci-aic.org)]

## NUCLEAR TECHNOLOGY FOR A SUSTAINABLE FUTURE

Every day, millions of people throughout the world benefit from the use of nuclear technology. From Africa to Asia and from Europe to the Americas, nuclear technologies are used daily to find and protect sustainable sources of fresh water, produce energy and food, while providing researchers the tools to study the ocean's past and predict its future.

Nuclear technology is contributing to "building the future we want" in several areas:

Population growth, accelerating economic development, and changing lifestyles demand ever more resources. Resource overuse has begun to compromise "natural services" such as biodiversity, clean air, fresh water and arable land; a trend that threatens the sustainability of development.

Increased access to sufficient, safe water is made possible through nuclear techniques that map groundwater resources more affordably and quickly than any other means. Nuclear techniques also improve the efficiency of irrigation systems, which uses 70% of all fresh water resources.

Health for millions of patients relies upon the safe and effective diagnosis and treatment of disease. Nuclear techniques provide precise diagnostic information that is of vital importance in detecting and curing both infectious and non-communicable diseases such as cancer. Radiopharmaceuticals are used to treat disease and to enable diagnostic imaging. Radiotherapy also employs focused radiation beams that are essential in curing diseases. In the developing world, infectious and non-communicable diseases, as well as malnutrition, create a socio-economic burden that threatens sustainability. The safe, well-coordinated use of nuclear techniques to detect, diagnose and treat disease and to combat malnutrition contributes to improved health and social stability throughout the world. [Source: [iaea.org](http://iaea.org)]

## INSIDE ANRIC

ANRIC specializes in providing professional development courses for engineers, managers and stakeholders in the nuclear industry. With a wide variety of product offering in the nuclear industry, ANRIC also offers engineering services to the non-nuclear industry:

- ANRIC helps companies with engineering calculations and preparation of engineering packages for CRN submission to regulators.
- ANRIC is the headquarters of the Canadian Boiler Society (CBS); Mr. Richard W. Barnes is the President and he recently presented an Overview of Section I of the Boiler and Pressure Vessel Code at the CBS Technology Fair and Educational Forum.
- As a member of the N286 Technical Committee, Mr. Richard Barnes presented a comparative study between the requirements of CSA N286-05 and CSA N286-12 Management System Requirements for Nuclear Power Plants to the CSA N288 Technical Committee.

[Source: A. Haseen]

## CNSC ISSUES LICENCE FOR OPG PLANT

The Joint Review Panel (JRP) of the Canadian Nuclear Safety Commission (CNSC) announced today its decision to issue a Nuclear Power Reactor Site Preparation Licence to Ontario Power Generation Inc. (OPG) for its new nuclear power plant project at the Darlington nuclear site for a period of 10 years.

The JRP is satisfied that the licensee meets the requirements of section 24 of the Nuclear Safety and Control Act, that OPG is qualified to carry out the activities that will be permitted under the licence, and that the health and safety of people and the environment will be protected.

This decision concludes the work of the Darlington Joint Review Panel. The next step in the regulatory process will be the CNSC licensing decision phase to construct a nuclear power plant, once OPG submits its application. The public will have an opportunity to comment on OPG's application to construct and subsequent application to operate at separate public hearings to be scheduled in the future.

[Source: [nuclearsafety.gc.ca](http://nuclearsafety.gc.ca)]

# RESUME!

call Anne  
416-642-0671

## TIME TO RENEW YOUR CRN!

contact ANRIC's  
Engineering Department  
416-253-9459 x 107

## UPCOMING COURSES



**October 2-3:**  
Codes & Jurisdictional Requirements

**October 9:**  
Intro to CANDU Reactor

**REGISTER TODAY!**

Call ANRIC at 416-253-9459 x 123