

## INTRODUCTION TO JURISDICTIONAL REQUIREMENTS FOR PRESSURE BOUNDARIES

**LECTURER:** Mr. Geoff Cairns,  
**DATE(S):** See website for Delivery Dates  
**ON-LINE Delivery through** ANRIC Enterprises Inc.

**FEE:** Register & PAY three (3) weeks before the start: **\$720.00** (pp/plus HST).  
Register within three (3) weeks of the start: **\$850.00** (pp/plus HST).  
Group pricing available; please contact [training@anric.com](mailto:training@anric.com) or  
Call (416) 253-9459. \*\* Payment can be made by Credit Card or Purchase Order.

### OBJECTIVE:

This course is a basic course designed to introduce participants to the Canadian Federal Laws and Regulations as they apply to the Pressure Boundary of Nuclear Power Plants. It provides an understanding of these laws and their relationship to the concept and role of Code Classification. The course covers the structure and content of the Canadian Standards and their relationship to the ASME Codes on Pressure Boundary.

### CONTENTS:

This course is delivered in a one full-day session (8:30 am – 4:00 pm) and covers the following content:

- Why Codes and Standards are required in the nuclear industry.
- The Nuclear Safety Control Act and the role of the Canadian Nuclear Safety Commission (CNSC).
- Third party inspection and the role of the Technical Standards and Safety Authority (TSSA).
- The CSA N285 Series of Standards on the CANDU Pressure Boundary.
- Relationship between Canadian Standards for Nuclear Power Plants and the ASME Codes and Standards.
- Basic structure of the ASME Code on Nuclear Power, Section III.
- Basic structure of other Pressure Boundary Standards, CSA B51, ASME Section VIII and ASME B31.1.
- Role of Quality Assurance and the programs associated with Pressure Boundary components.

### WHO SHOULD ATTEND?

This course will be of interest to personnel in the many roles and disciplines of the Nuclear Power Plant industry. It is particularly useful as introductory training for personnel at most levels who are entering the nuclear industry. This course provides an introductory understanding of the relationships between the Codes and Standards and the legal requirements to be met. Personnel who interact in various ways with the Pressure Boundary of a CANDU Nuclear Power Plant and who require an understanding of the importance of the different Code classes have found this course to be especially helpful. The course has been offered many times at the Canadian Nuclear Utilities to introduce participants to the above concepts.

### EXPECTATION:

At the completion of this training session the participants will have attained the skills to:

1. Have a working knowledge of the Codes and Standards associated with the construction, installation and operation of Pressure Boundary systems and items for use at the Nuclear Power Plant.
2. Define and understand the term Pressure Boundary.
3. Define the role of the Regulator and the Authorized Nuclear Inspector.
4. Define the term Department as it is used in the CSA Standard.
5. Identify the key documents required by the Department for the purpose of Design.
6. Explain how the various books of ASME Section III are complied.
7. Identify and explain the relationship of the various Codes and Standards used in CANDU Pressure

Boundary application (ASME and CSA).

## LECTURER:

**Mr. Geoff Cairns** has over 39 years of experience in manufacturing, production processes, product standards application and the implementation of various quality programs for a broad base of custom and non-custom engineered products.

Mr. Cairns began his career in 1964 with Harland & Wolff a large ship building company in Belfast Northern Ireland. On coming to Canada in 1975 he worked for Howden & Parsons and then SKF Canada. In 1978 joined Ontario Hydro (OH), now Ontario Power Generation (OPG). His career in OH/OPG spanned 27 years. He spent 23 years with the Nuclear Supply Chain in Supplier Quality Assurance for the CANDU Nuclear Power Plants. He held various positions including performing source surveillance inspections and has audited and evaluated suppliers for compliance to various quality program standards such as ASME, N286., CSA N285, 10CFR50, NQA-1, ISO9000, CSA Z299 including, Peer to Peer assessments. He has extensive experience with a number of regulatory and jurisdictional codes, standards and specifications.

In 2003 he was appointed Manager, Supply Chain Quality Services – Nuclear supply Chain with accountability for the management and maintenance of the Approved Supplier List, Qualification of external suppliers, Source surveillance inspection with up to 600 external Source surveillance and completion of more than 200 audits per year.

In 2006 he joined the Owners Group as the Program Manager - CANDU Procurement Audit Committee. He managed the CANPAC Operating Program for the performance of supplier audits and maintenance of the CANPAC Supplier List.

**ANRIC Enterprises Inc. specializes in courses of calibre to industry by providing lecturers who have recognized expertise and who are usually involved with the development and application of Codes and Standards.**

## IMPORTANT INFORMATION:

**PAYMENT:** Full payment is due at time of registration. Payment can be made via credit card (VISA, MasterCard or American Express) or purchase order. **PLEASE NOTE:** Payment is non-refundable within 3 weeks prior to the start of the course.

**CANCELLATION POLICY:** Cancellation must be received in writing 7 days prior to course start date. You may send a substitute. Notification of a substitute must be received at least **72 hours prior to the commencement of the course to allow time for delivery of course material.** If a substitute is not available, the fee for the course may be used towards another ANRIC course at a later date.

**\*\* ANRIC Enterprises Inc. reserves the right to cancel any course and/or change lecturers. Courses that fail to register a "MINIMUM" of 6 participants will be cancelled. Personnel who require this course to meet qualification requirements should contact the office at [training@anric.com](mailto:training@anric.com) to discuss/arrange other options.**

## INFORMATION ASSOCIATED WITH ON-LINE COURSES FOLLOWS:

**The course is delivered on-line.**

**The maximum number of people per course is 16 people. This limitation is set because the courses are run with Workshops using Breakout Rooms to provide for maximum interaction and learning experience. This provides an excellent learning opportunity.**

**All rights, title and content of the course manuals and all other instructional material shall remain the property of ANRIC Enterprises Inc.**

**The manuals will be delivered to course participants by courier.**

**The course is run online in one full day. If desired, it can be split into 2 half-day sessions.**

**REQUIREMENT: This course requires participants to have video and audio capability.**

**There will be an examination/checkout at the end of each course. ANRIC Enterprises Inc. will only provide certificates of successful completion for participants that achieve an examination result of 80% or higher and video access is required for the checkout.**