

INTRODUCTION TO JURISDICTIONAL REQUIREMENTS FOR PRESSURE BOUNDARIES

LECTURER: Mr. Geoff Cairns,
LOCATION: ANRIC Enterprises Inc., 701 Evans Ave., Suite 202, Toronto
FEE: Register four weeks before and pay at time of registration:
\$495.00 (pp/plus HST)
Register within four weeks: \$645.00 (pp/plus HST)

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: A one day course consisting of the following:

- 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 is very useful for people requiring an introductory understanding of the relationships between the Codes and Standards and the legal requirements to meet the needs of their position. 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 very useful. 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 compiled
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. He progressed to Supervisor of the tool room which provided all of the measuring and test equipment and special tooling required by both the Engine Works and Shipyard. On coming to

Canada in 1975 he worked for Howden & Parsons and SKF Canada and in 1978 joined Ontario Hydro (OH) which is now known as Ontario Power Generation (OPG).

Throughout his 27-year career with OH/OPG, 23 years within the Nuclear Supply Chain, 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 e.g. AECB / MCCR requirements, B&PV Act, A.S.M.E./ASTM/ANSI, C.S.A.N285 / N286, C.S.A.B51, B31, NQA-1, AQUAP, N45.2-10CFR50 App B / 10CFR50 PART 21

In 2003 he was appointed to the position of 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. The supplier audits and Source Surveillance activities encompassed simple to complex engineered and non-engineered products and equipment supplied by small suppliers up to and including multi-national corporations. He also gained extensive experience in developing operating manuals and procedures for compliance with the various Quality Assurance Standards.

In 2006 he joined the Cog Owners Group as the Program Manager - CANDU Procurement Audit Committee with the accountability to administer and manage the CANPAC Operating Program for the performance of supplier audits and maintenance of the CANPAC Supplier List. During this he completely revised the CANPAC operating manual and procedures and was instrumental in Korea Nuclear Power, South Korea (KHNP) joining the CANPAC program.

IMPORTANT INFORMATION:

PAYMENT: Full payment is due at time of registration. Payment can be made via credit card (VISA, MasterCard or American Express), cheque or purchase order. PLEASE NOTE: Payment is non-refundable.

CANCELLATION POLICY: Cancellation must be received in writing 7 days prior to course start date. If cancellations are made after that date, the cancellation fee will be 50% of the course cost. You may send a substitute. Notification of a substitute must be received at least 48 hours prior to the commencement of the course or a cancellation fee will be charged. PLEASE NOTE: The cancellation fee can be discounted towards any future course taken at the ANRIC Learning Centre.

ACCOMMODATION: The Stay Inn, 560 Evans Ave (2 minute drive to 701 Evans Ave), has provided a quote of \$99.00 per night for 1 bed and \$109.00 for 2 beds, including a continental breakfast. The Stay Inn can be contacted at info@stayinn.ca or 416-259-7899/1-888-445-4473 for more information. Please refer to ANRIC Enterprises Inc. when speaking with reservations. This is a small hotel, so it is advisable to book early.

FOOD AND BEVERAGE: At the start of the day juice, fruit, pastries, coffee and tea will be provided before the course. Coffee and Tea will be provided at mid-morning break, including pop in the afternoon and lunch will be provided. Please indicate when you are enrolling for the course if you have any specific food requirements. Every effort will be made to accommodate your needs in this area.

COURSE TIMES: Registration begins at 8:00 a.m. The course will begin at 8:30 a.m. and conclude at 4:30 p.m.

DRESS: Please dress so that you will be comfortable. It is prudent to dress light and bring a light jacket in case you need it during the course. The tolerance to temperature varies for people and sometimes room temperature acceptable to the majority may not be right for an individual.

PARKING: There is parking available for a fee of \$5.00 per day. There is parking at 701 and 703 Evans Ave.

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

ANRIC Enterprises Inc. reserves the right to cancel any course and/or change lecturers.