

your success is our goal

## INTRODUCTION TO THE CSA STANDARDS USED IN THE CANADIAN NUCLEAR PROGRAM

**LECTURER:** Mr. Richard W. Barnes, P. Eng.  
**DATE:** December 5, 2014  
**LOCATION:** ANRIC Enterprises Inc., 701 Evans Ave., Suite 202, Toronto  
**FEE:** **Register before November 21, 2014: \$550.00** (pp/plus HST)  
**Registrations received after November 21, 2014: \$600.00** (pp/plus HST)

**OBJECTIVE:**

This one day course is a preliminary introduction to the CSA Standards that have been jointly developed by industry and the regulatory authorities to provide for a safe Nuclear Power Program in Canada. There are approximately 50 standards with requirements to be met in the areas of pressure boundary, seismic design, concrete containment, instrumentation, and quality assurance. The course introduces the participants to these standards. A manual is provided that can be used by the participants after the course to refresh their knowledge of the contents of each of the standards and refresh their understanding of the concepts and principles upon which the Standards are based.

**CONTENTS:** A one-day course that will cover the following series of Standards:

<ul style="list-style-type: none"> <li>• CSA N285 Series</li> <li>• CSA N286 Series</li> <li>• CSA N287 Series</li> <li>• CSA B51</li> <li>• CSA N288 Series</li> <li>• CSA N289 Series</li> <li>• CSA N293 Series</li> </ul>	<ul style="list-style-type: none"> <li>• CSA N290 Series</li> <li>• CSA Z299 Series</li> <li>• ISO-9000 Series</li> <li>• CSA Q396 Series</li> <li>• CSA S-16</li> <li>• NFPA Standards</li> <li>• Building Codes</li> </ul>
---	--

**WHO SHOULD ATTEND?**

The course will be useful to the many disciplines that are required to understand and implement code requirements. These disciplines include designers, inspectors, purchasing agents, and maintenance and operation personnel.

**LECTURERS:**

**Mr. Richard W. Barnes** is the Principle Engineer at ANRIC Enterprises Inc. and has been actively involved for over 30 years in the development of the ASME and CSA Codes and Standards associated with Pressure Boundary for both nuclear and non-nuclear power plants. Mr. Barnes leads the team at ANRIC Enterprises Inc that offers technical assistance for companies registering Pressure Boundary products, and provides expert consultation on the application of the various pressure boundary codes. The ANRIC team also develops and delivers training on both the CSA and ASME Codes and Standards for delivery on-site at the ANRIC Learning Centre and off-site at the clients' premises. Mr. Barnes sits on various code committees responsible for the development of Codes and Standards. He is the past-chair and member of the ASME Standard Committee of the BPV III, which is responsible for the development of Section III of the ASME BPV Code; past Vice-Chair and member of N285A Technical Committee on CANDU Nuclear Power Plant Systems and Components, member of the B51 Technical Committee on Boilers and Pressure Vessels, and member of N286 Technical Committee on Overall Quality Assurance for Nuclear Power Plants of the CSA Standards Committee; and member of ASME B16 Standards Committee of Standardization of Valves, Flanges, Fittings and Gaskets and member of the Subcommittee responsible for development of the B16:34 Standard . Mr. Barnes has received the ASME Dedicated Service Award and the highest ASME Nuclear award, the Bernard F. Langer Nuclear Codes and Standards Award in recognition for his contributions to the nuclear industry. In 2007, was elected to the ASME Grade of Fellow. In 2009, Mr. Barnes received the CNA Outstanding Contribution Award and in 2011 the CSA Award of Merit.

**IMPORTANT INFORMATION:**

**PAYMENT:** For registrations received before November 21, 2014, full payment is due by November 21, 2014. For registrations received after November 21, 2014, full payment is due upon registration. Payment can be made via credit card (VISA, MasterCard or American Express) or cheque. **PLEASE NOTE:** Payment is non-refundable after November 21, 2014.

**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 \$94.00 per night for 1 bed and \$104.00 for 2 beds, including a continental breakfast. The Stay Inn can be contacted at [info@stayinn.ca](mailto: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 caliber 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.