



# PROFESSIONAL DEVELOPMENT COURSE

your success is our goal

## CSA STANDARD N286-12 - MANAGEMENT SYSTEM REQUIREMENTS FOR NUCLEAR FACILITIES

**LECTURER:** Mr. Richard W. Barnes, P. Eng.  
**LOCATION:** ANRIC Enterprises Inc., 701 Evans Ave., Suite 202, Toronto  
**FEE:** Register four weeks before and pay at time of registration:  
 \$1,465.00 (pp/plus HST)  
 Registrations received within four weeks: \$1,615.00 (pp/plus HST)

### OBJECTIVE:

The objective of this course on the CSA N286-12 Standard is to provide participants with an understanding of the concepts and the application of the Quality Management System. It will help participants to understand the basic elements addressed in the N286-12 Standard, including the additional specific requirements identified in the Standard as well as those associated with the different parts of the life-cycle. The course addresses the difference in philosophy between the earlier N286 Series of Standards and the new N286-12 Standard which now replaces the N286 Series. The workshop sessions provide participants with the opportunity to examine in detail the elements required in the implementation of the program, review approaches to implementation as well as providing an understanding of the process. Finally, the scope and relationship of the N286 Standard to the quality assurance requirements of the N285.0 Standard on Pressure Boundary and the other Quality Assurance Programs used in the nuclear industry, (Z299 & ISO), will be reviewed.

**CONTENTS:** A two-day course consisting of the following:

<p><b>DAY 1:</b></p> <p><b>BASIC CONCEPTS</b></p> <ul style="list-style-type: none"> <li>• What is Quality Assurance(QA)</li> <li>• What is Quality Control</li> <li>• Quality Management System(QMS)</li> </ul> <p><b>N286-12 Standard</b></p> <ul style="list-style-type: none"> <li>• Organization</li> <li>• Basic Structure</li> <li>• Good Business Practices</li> <li>• Comparison with the N286 Series</li> </ul> <p><b>WORKSHOP</b></p> <ul style="list-style-type: none"> <li>• Principles versus Practises       <ul style="list-style-type: none"> <li>– Application of the Principles</li> </ul> </li> </ul> <p><b>BASIC REQUIREMENTS</b></p> <ul style="list-style-type: none"> <li>• Key Elements       <ul style="list-style-type: none"> <li>– Review of the Basic Elements</li> <li>– Their Interpretation and Application</li> </ul> </li> </ul> <p><b>WORKSHOP</b></p> <ul style="list-style-type: none"> <li>• Application of the Elements in the Workplace</li> <li>• Presentation and discussion of the results of the application exercise.</li> </ul>	<p><b>DAY 2:</b></p> <p><b>SPECIFIC REQUIREMENTS</b></p> <ul style="list-style-type: none"> <li>• Review of the Specific Requirements</li> <li>• Review of the Mandatory Appendices</li> </ul> <p><b>WORKSHOP</b></p> <ul style="list-style-type: none"> <li>• Application of the Specific requirements in the Workplace</li> <li>• Presentation and discussion of the results of the application exercise.</li> </ul> <p><b>RELATIONSHIP OF CSA N285.0 WITH N286</b></p> <ul style="list-style-type: none"> <li>• Owner</li> <li>• Design</li> <li>• Procurement</li> <li>• Fabrication</li> </ul> <p><b>RELATIONSHIP OF OTHER QUALITY PROGRAMS WITH N286</b></p> <ul style="list-style-type: none"> <li>• CSA Z299 and ISO</li> <li>• ISO 9001:2008</li> </ul>
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### WHO SHOULD ATTEND?

This course is directed toward personnel from management, engineering, procurement, operations and quality assurance. Those organizations providing services to a utility operating within the scope of the N286-12 Standard would benefit from this course.

## EXPECTATIONS:

Course participants with adequate experience will have attained the following by the end of the course:

1. An understanding of the basis of the new N286-12 Standard and its implementation within the diverse levels of management.
2. To work effectively within a Quality Management System.
3. A working knowledge of the relationship between the various Standards.

## 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:** 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](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 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.