



PROFESSIONAL DEVELOPMENT COURSE

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

LECTURER: Mr. Richard W. Barnes, P. Eng.
DATE: See the **WEBSITE** for dates
LOCATION: **ON-LINE Delivery** through ANRIC Enterprises Inc.
FEE: Register & PAY three (3) weeks before the start: \$1,750.00 (pp/plus HST)
 Register within three (3) weeks of the start: \$1,910.00 (pp/plus HST).
 Group pricing available; please contact <training@anric.com> or
 Call (416) 253-9459. **
 Payment can be made by Credit Card or Purchase Order.

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, (N299 & ISO), will be reviewed.

CONTENTS: Online delivery – Delivered over four (4) half-day segments. (12 noon – 4:00 pm)

COURSE CONTENT	COURSE CONTENT
<p>BASIC CONCEPTS</p> <ul style="list-style-type: none"> What is Quality Assurance(QA). What is Quality Control. Quality Management System(QMS). <p>N286-12 Standard</p> <ul style="list-style-type: none"> Organization. Basic Structure. Good Business Practices. Comparison with the N286 Series. <p>WORKSHOP</p> <ul style="list-style-type: none"> Principles versus Practises – Application of the Principles. <p>BASIC REQUIREMENTS</p> <ul style="list-style-type: none"> Key Elements – Review of the Basic Elements. – Their Interpretation and Application. <p>WORKSHOP</p> <ul style="list-style-type: none"> Application of the Elements in the Workplace. Presentation and discussion of the results of the application exercise. 	<p>SPECIFIC REQUIREMENTS</p> <ul style="list-style-type: none"> Review of the Specific Requirements. Review of the Mandatory Appendices. <p>WORKSHOP</p> <ul style="list-style-type: none"> Application of the Specific requirements in the Workplace. Presentation and discussion of the results of the application exercise. <p>RELATIONSHIP OF CSA N285.0 WITH N286</p> <ul style="list-style-type: none"> Owner. Design. Procurement. Fabrication. <p>RELATIONSHIP OF OTHER QUALITY PROGRAMS WITH N286</p> <ul style="list-style-type: none"> CSA Z/N299 and ISO. ISO 9001:2015.

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.

LECTURER:

Mr. Richard W. Barnes is the Principal 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 items and provides expert consultation on the application of the various pressure boundary codes.

Mr. Barnes sits on various code committees responsible for the development of Codes and Standards for quality assurance and requirements for the pressure boundary. He is:

- Past-chair and member of the ASME Standard Committee of the BPV III (Section III).
- Past Vice-Chair and member of N285A Technical Committee.
- Member of the B51 Technical Committee.
- Member of N286 Technical Committee; and
- Member of ASME B16 Standards Committee.

Mr. Barnes is a Fellow of ASME and has been recognized for contribution to the industry through the following awards:

- The ASME Dedicated Service Award.
- The Bernard F. Langer Nuclear Codes and Standards Award.
- The CNA Outstanding Contribution Award.
- The CSA Award of Merit; and
- The ASME Melvin R. Green Codes and Standards Medal.

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 10 participants will be cancelled. Personnel who require this course to meet qualification requirements should contact the office at 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 half day sessions (4 half-day), to accommodate the ergonomic issues of sitting at a small screen. An added benefit is that it allows people to cover off other work duties during the course. We have successfully done this for the nuclear power stations in Ontario over the past year and this system has proven to be excellent. This course if run in a classroom setting, is a two (2) full day course.

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.