

## ASME SECTION III QA REQUIREMENTS: NCA-4000/NQA-1

### OBJECTIVE:

This two-day course provides an in-depth review of the Quality Assurance (QA) requirements of Section III of the ASME Boiler and Pressure Vessel Code, for the design and manufacture of components used in the Pressure Boundary of Nuclear Power Plants. It will review and discuss the requirements for planning, managing and conducting QA programs for controlling the activities performed under the jurisdiction of Section III. It will examine the rules governing the evaluation of such programs prior to the issuance of Certificates of Authorization for construction of Pressure Boundary components.

Section III has adopted the NQA-1 Standard with some additions and caveats as appropriate. The course will provide an understanding of the basic requirements of the ASME NQA-1a - 2009 Standard referenced in Section III, including the modification to these requirements in NCA-4000 as they apply to N-type Certificate holders.

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

DAY 1:	DAY 2:
<ul style="list-style-type: none"> <li>BACKGROUND AND INTRODUCTION TO NCA-4000, including scope and applicability, definitions, establishment and implementation and the NQA-1 structure</li> <li>THE QUALITY ASSURANCE ORGANIZATION and the QUALITY ASSURANCE PROGRAM, including the Quality Assurance Manual.</li> <li>DESIGN CONTROL, INSTRUCTIONS, PROCEDURES, and DOCUMENT CONTROL.</li> <li>RELATIONSHIP BETWEEN ASME AND CANADIAN QUALITY STANDARDS AND THEIR APPLICATION - N285, N286, 10 CFR 50 Appendix B, and ASME.</li> </ul>	<ul style="list-style-type: none"> <li>PROCUREMENT DOCUMENT CONTROL, CONTROL OF PURCHASED ITEMS AND SERVICES.</li> <li>IDENTIFICATION AND CONTROL OF ITEMS, CONTROL OF SPECIAL PROCESSES, INSPECTIONS, TEST CONTROL, CONTROL OF MEASURING &amp; TEST EQUIPMENT, HANDLING, STORAGE &amp; SHIPPING, INSPECTION, TEST &amp; OPERATING STATUS</li> <li>CONTROL OF NON-CONFORMING ITEMS, CORRECTIVE ACTIONS, QA RECORDS, AUDITS.</li> <li>NCA-3800, NCA-3900, INQUIRIES, including a question and answer period.</li> </ul>

### WHO SHOULD ATTEND?

This course will provide excellent training for persons whose work activity requires them to apply these Codes and Standards. It will enhance their understanding of why QA is fundamental to the nuclear program. The course will be useful to the many disciplines that are required to understand and/or implement Code QA requirements. These include design, inspection, purchasing, manufacturing, regulation, operations and maintenance.

### EXPECTATIONS:

At the end of the course participants should understand the approach to quality adopted by Section III, as well as the relationship between the elements of the quality program used in Section III of the ASME Boiler and Pressure Vessel Code.