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## CSA N285.0 & ASME SECTION III CLASS 1 REQUIREMENTS AS APPLIED TO DESIGN REPORT/STRESS ANALYSIS REPORT

**OBJECTIVE:**

This course will introduce basic concepts of and practices of ASME Code Section III Sub-sections NB, NF; and Standards CSA N285.0 and CSA N289.3 requirements pertinent to the analysis for the preparation of Design Report/Analysis Report. Background and basic requirements will be discussed in the class and the participants will have the opportunity to discuss the basic elements of various Clauses associated with the stress analysis of pressure boundary components. The course will cover the basics concepts and requirements for the analysis of components. An overview of the analysis process will be provided and relationship between the analysis results and meeting the Standard or the code will be discussed.

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

<p><b>DAY 1:</b></p> <ul style="list-style-type: none"> <li>• Brief Introduction to CSA Standard N285.0 requirements.</li> <li>• ASME Section III, Subsection NB Vessel and Components Applied to Stress Analysis:             <ul style="list-style-type: none"> <li>(a) Background, Class 1 requirements and various operating conditions.</li> <li>(b) Basic concepts of limiting stresses for various service conditions</li> </ul> </li> <li>• Seismic Analysis – CSA Standard 289.3 Seismic requirements and Brief Introduction to Appendix N (Dynamic Analysis Methods)</li> </ul>	<p><b>DAY 2:</b></p> <ul style="list-style-type: none"> <li>• Supports; CSA N285.0 and ASME Section III, NF requirements</li> <li>• Introduction to ASME Section III Mandatory and Non Mandatory Appendices: Appendix 1, Appendix III, Appendix XXIII, Appendix A, Appendix F,</li> <li>• Bolting Requirements</li> <li>• Requirements and concepts for performing design analysis and its applicability in meeting CSA Standard N285.0 and ASME Code Section III, Class I components and requirements.</li> </ul>
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**WHO SHOULD ATTEND:**

This course touches important aspects of CSA Standard N285.0, N289.3 and ASME Code Section III, Subsection NB as applicable to analysis requirements in the preparation of Design Report/Stress Report. This course is a valuable resource for new employees and designers, who would like to understand how the codes and standards are applied to meet the CSA/ASME code requirements. Attendance at this course is considered as meeting part of the requirement for updating their qualifications in accordance with Appendix XXIII.

**EXPECTATIONS:**

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

1. An understanding of the importance of the CSA N285 Series of Standards as applicable to stress analysis requirements.
2. An understanding of the fundamental concepts underlying the Codes and Standards for Pressure Boundary in a Nuclear Power Plant as they are applied in the preparation of Design Report or Stress Report.
3. An understanding of the relationship between N285 and the ASME Code, Section III, Div.1, and how the Canadian requirements are integrated into the analysis of components in meeting Standard/Code requirements.

**PRE-REQUISITE:**

Participants are expected to have completed the **CSA N285 (Series)** and **ASME Section III – An Overview** courses.