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CSA N285 - REFURBISHMENT/MAINTENANCE A WORKSHOP ON REPAIRS, REPLACEMENTS, MODIFICATIONS AND TESTING

INTRODUCTION:

One of the more difficult exercises is the application of pressure boundary Codes and Standards to the issues that arise during refurbishment and maintenance. This course directly addresses the issues that arise and provides an understanding of the concepts on which the Codes and Standards are based and how these concepts can be used to apply the requirements in the code or standard to resolve the issue.

OBJECTIVE:

To introduce participants to the applicable Codes and Standards and regulatory requirements for replacement, repair, refurbishment, maintenance and modification of systems and components in pressurized systems as specified in the station's Operating License and in the referenced Codes and Standards.

CONTENTS: A two day course consisting of the following:

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| <p>DAY 1:</p> <p>Review of basic concepts, principles, regulatory requirements and code requirements that govern in a repair, replacement, and refurbishment and modification activity. This includes:</p> <ul style="list-style-type: none"> • License requirements, definition of repair, replacement and modifications; code classification, effective date; design registration, overpressure protection. • Documentation requirements, design documents, system classification list, design specification, system flowsheets, design reports, instrumentation requirements. • Material reconciliation; Quality Assurance requirements; • Review of CSA N285.0 requirements for, replacements, repairs, refurbishment, modifications and testing. • Question Period. | <p>DAY 2:</p> <p>WORKSHOP</p> <p>A series of class exercises have been developed based on actual experiences of projects. PARTICIPANTS ARE ALSO INVITED TO PRESENT THEIR OWN CASE STUDIES FOR DISCUSSION IN LIEU OF CLASS EXERCISES</p> <ol style="list-style-type: none"> 1. The methodology consists of establishing discussion groups to discuss and develop resolution to the issues raised. 2. The solutions are then discussed in class and the proposed resolution examined for correctness and completeness. 3. Checkout to establish understanding of the principles discussed during the course. |
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WHO SHOULD ATTEND?

This course will be of interest to personnel working in the maintenance and refurbishment of CANDU nuclear industries. This includes personnel involved in:

- The design and preparation of documentation for repairs, replacements, refurbishment, maintenance and modification
- Maintenance personnel at nuclear power plants including maintenance engineers, maintenance supervisors, procurement personnel.
- Personnel involved in the refurbishment of Nuclear Power Plants
- Manufacturers of pressure vessels and heat exchangers used in nuclear power plants.
- Manufacturers/installers of piping components such as pipe connection, flanges, valves, expansion or flexible joints (bellow and hose), filters, strainers and trap, relief valves or rupture discs for use in the nuclear power plants.

PRE-REQUISITE:

Participants are expected to have completed the **CSA N285 (Series)** and **ASME Section III – An Overview** courses, **OR at the very least** have a solid understanding of the basics concepts covered in these two course.

EXPECTATIONS:

Course participants should attain the skills to:

1. Identify when an activity is a replacement, repair, refurbishment or modification.
2. Identify approaches to resolving issues based on the Code requirements.
3. How to apply the requirements of CSA N285.0
4. Identify when registration is required for an alteration the scope of the registration requirements.
5. Determine the scope and need for testing.