

## *Technical Description*

Crane Nuclear offers to provide the services as described in this Technical Description subject to the pricing, terms and conditions delineated in the Commercial Description.

### **Comprehensive Control Valve Maintenance Training**

<b>Standard Class Size:</b>	6 Students per Instructor
<b>Maximum Class Size</b>	8 Students per Instructor
<b>Course Duration:</b>	5 days
<b>Prerequisite:</b>	Basic knowledge of control valves.
<b>Supplied Materials:</b>	A training manual for each student
<b>Training Aides:</b>	Various control valves, trim and packing
<b>Suggested Attendees:</b>	AOV diagnostic testers, mechanics, machinists, pipefitters, and mechanical foremen,

#### **Course Description:**

This course will introduce students to control valves and how to perform mechanical maintenance on both linear and rotary valves. This course can be structured to plant specific valves and will instruct students in the proper maintenance and repair techniques for control valves. Instruction will also include performing proper stack height measurements, packing configurations, consolidation and torquing techniques. Learning how to “read” the parts will be a critical part of the instruction.

#### **Terminal Objectives**

Each student will be required to pass a written exam with a minimum score of 80% in order to successfully complete this course. Upon successful completion of this training course, the student will:

- Properly assemble and disassemble various linear and rotary control valves.
- Identify valve components.
- Identify valve trim flow characteristics.
- Identify various styles of linear and rotary valves.
- Properly measure stack height.
- Identify various packing arrangements.
- Explain trouble-shooting techniques.

## **Enabling Objectives**

After the completion of this course, the student will:

- Explain the function of a control valve in relation to the control loop.
- Identify various types and styles of control valves.
- Identify various model numbers of control valves.
- Identify trim styles and components found in control valves.
- Perform proper disassembly and assembly of various control valves.
- Determine and measure stack height using various measuring devices.
- Explain various packing arrangements.
- Perform packing consolidation techniques.
- Identify various body and trim material codes / numbers.

## **Course Benefits:**

- Increase the plant's self-sufficiency in AOV maintenance.
- Increase the reliability of the plant's AOVs.
- Reduce the plant's cost of AOV maintenance.