

PART 1 - GENERAL

1.1 General

1. Due to the changes that will be made in the operating system and controls, the Contractor shall illustrate the operation of the bridge to the Parks Canada staff in a training session not to exceed six hours and one follow-up visit not to exceed four hours.
2. The Contractor shall submit video of training sessions edit for content or prepare a video illustrating all information that should be in a training session.

1.2 Related Sections

1. Section 01 33 00 - Submittal Procedures.

1.3 Measurement and Payment

1. No measurement for payment will be made for this section. The cost of all Work associated with the preparation and submittals and the training of Parks Canada staff will be included in the lump sum price "Commissioning/Decommissioning the Bridge" and shall include all costs for labour, materials and equipment necessary to do the work of this item.

1.4 Trainees

1. Trainees: personnel selected for operating includes managers, operators and maintenance staff.
2. Trainees will be available for training after the Contractor has tuned the bridge and it is balanced and operating well.

1.5 Instructors

1. Contractor will provide:
 1. Descriptions of systems.
 2. Instruction operation.
 3. Instruction regarding normal maintenance and adjustment.
2. Contractor to provide instruction on the following:
 1. Start-up, operation and shut-down of equipment, components and systems.
 2. Emergency stop and return to operation.
 3. Operation with a generator. (generator to be provided by Parks Canada).
 4. The control features and results of the control features, the implications on associated systems of each control feature and the adjustment of set points of control and safety devices.

5. Instructions on servicing, maintenance and adjustment of systems, equipment and components.

1.6 Training Objectives

1. Training to be detailed and of sufficient duration to ensure:
 1. Safe, reliable operation of systems in normal and emergency modes under all conditions.
 2. Proper preventative maintenance, diagnosis and trouble-shooting.
 3. Ability to update documentation.
 4. Ability to operate equipment and systems under emergency conditions until appropriate qualified assistance arrives.

1.7 Training Materials

1. Instructors to be responsible for content and quality.
2. Training materials to include:
 1. "As-Built" Contract Documents.
 2. Operating Manual.
 3. Maintenance Manual.
 4. Management Manual.
3. Submit manuals three weeks prior to training. Project Manager, Commissioning Manager and Facility Property Manager will review training manuals.
4. Training materials to be in format that permits future training procedures to same degree of detail.

1.8 Scheduling

1. Include in Commissioning Schedule time for training.
2. Deliver training during regular working hours; training sessions to be maximum six hours in length.
3. Training to be completed prior to acceptance of facility.

1.9 Responsibilities

1. Be responsible for:
 1. Implementation of training activities,
 2. Coordination among Instructors,
 3. Quality of training and training materials,
2. Departmental Representative will evaluate training and materials.
3. Upon completion of training, provide written report signed by Instructors, witnessed by Departmental Representative.

1.10 Training Content

1. Training to include demonstrations by Instructors using the installed equipment and systems.
2. Content includes:
 1. Review of system layout, equipment, components and controls.
 2. Equipment and system start-up, operation, monitoring, servicing and maintenance and shut-down procedures.
 3. System operating sequences, including step-by-step directions for starting-up, shut-down, switches, adjustment of control settings and emergency procedures.
 4. Maintenance and servicing.
 5. Emergency shutdown and starting up after shutdown.
 6. Trouble-shooting diagnosis.
 7. Interaction among systems during integrated operation.
 8. Review of Operation and Maintenance documentation.

1.11 Video-Based Training

1. Manufacturer's training videos to be used as training tool with Departmental Representative's review and written approval one month prior to commence of scheduled training.
2. Onsite training services:
 1. Training sessions to be video recorded for use during future training.
 2. To be performed after systems are fully commissioned.
 3. Organize into several short modules to permit incorporation of changes.
3. Production methods to be of a professional nature and high quality.

PART 2 - PRODUCTS

2.1 Not Used

1. Not Used.

PART 3 - EXECUTION

3.1 Not Used

1. Not Used.



***** END OF SECTION *****