

## 1.0 **GENERAL**

### 1.1 **Related UBC Guidelines**

- .1 Division 33, Section 33 10 00 Water Utilities - 2.4; Section 33 51 00 Natural Gas Distribution - 2.4; and Section 33 61 00 Hydronic Energy Distribution - 2.5; Division 27, Section 27 05 08 Description of System – 1.4; Division 25, Section 25 05 00 Building Management Systems (BMS); Division 01, Section 01 92 00 Monitoring Based Commissioning.

### 1.2 **Coordination Requirements**

- .1 UBCO Energy

### 1.3 **Description**

- .1 UBCO requirements for Metering.

## 2.0 **MATERIAL AND DESIGN REQUIREMENTS**

### 2.1 **General**

- .1 Division 26 contractor shall supply and install primary meter at the project's cost.

### 2.2 **Electrical Metering**

- .1 *Primary and secondary meters shall be provided by BMS vendor. Refer to Section 25 05 00, 4.3 for metering requirements.*
- .2 Approved Test Block Manufacturers:
  - .1 ABB type FT-1.
  - .2 Sangamo.
  - .3 Superior #1082F.

### 2.3 **Metering Transformers**

- .1 Metering transformers shall be provided by the Division 26 contractor.
- .2 Three current transformers (CT's) shall include revenue metering accuracy of 0.3B0.9, ratio XXX/5. Mount CT's on transformer secondary bus.

### 2.4 **Mechanical Meters**

- .1 Main building gas and water meters are to be integrated into the building BMS system and Siemens BMS. Pulse outputs from each of these meters are to be brought to a building automation controller for recording purposes.
- .2 The Division 26 contractor shall install all pathways and wiring between the mechanical meters and the electric meter. Coordinate with Division 20 contractor, Division 25 contractor and UBCO Energy Team.

- .3 District Energy meter shall be network connected directly to the building BMS system and Siemens BMS. Refer to Section 01 92 00 Monitoring Based Commissioning for applicable details.

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