# Exhibit S

## Specifications

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1. GENERAL REQUIREMENTS

1.1. Furnish five (5) group operated 115 kV switches, and two (2) group operated 23 kV switches, complete and assembled with station post insulators, with operator as described in this Specification and all mounting hardware and material.

1.2. Proposed switches shall be constructed to meet all applicable NEMA and ANSI/IEEE standards.

2. DOCUMENTATION

2.1. Approval Drawings: The Contractor shall submit drawings for approval prior to manufacturing. Approval drawings are required to be supplied within 60 days after Contract execution.

2.2. The Contractor shall supply by mail to the Engineer two (2) copies of final drawings and technical manuals at time of shipment.

2.3. The Contractor shall supply one (1) copy of final drawings and technical manuals, shipped with each switch.

2.4. Drawings and manuals shall include:

   2.4.1. Operating manuals including installation, commissioning, operation, and maintenance instructions.
   2.4.2. Arrangement drawings.
   2.4.3. Bill of Material.
   2.4.4. Recommended spare parts list.

3. SWITCH REQUIREMENTS

3.1. ITEM A:

   Quantity: (2)

   Description:

   Air disconnect switch, group operated, vertical break, 3PST, aluminum, 115 kV nominal voltage, 1600 amp continuous current rating, 70 kA momentary current rating, 550 kV BIL, with full load break interrupter attachments, and 48 VDC motor operator. Motor operator shall include a minimum of four (4) spare auxiliary contacts for customer use, and 120 VAC light and heater.

   Furnish complete and assembled with station post insulators, TR 286, ANSI gray, 5” BC.

   7’ – 0” phase spacing, for vertical mounting at 19’ – 9” height on structure “DE1” as shown on Drawings 1056-25ST-0002, and 1056-25ST-0003.
3.2. **ITEM B:**

Quantity: (1)

Description:

Air disconnect switch, group operated, vertical break, 3PST, aluminum, 115 kV nominal voltage, 1600 amp continuous current rating, 70 kA momentary current rating, 550 kV BIL, with whip attachments, and 48 VDC motor operator. Motor operator shall include a minimum of four (4) spare auxiliary contacts for customer use, and 120 VAC light and heater.

Furnish complete and assembled with station post insulators, TR 286, ANSI gray, 5” BC.

7’ – 0” phase spacing, for horizontally upright mounting on structure “SS1” as shown on Drawings 1056-25ST-0011, and 1056-25ST-0012.

3.3. **ITEM C:**

Quantity: (1)

Description:

Air disconnect switch, group operated, vertical break, 3PST, aluminum, 115 kV nominal voltage, 1200 amp continuous current rating, 61 kA momentary current rating, 550 kV BIL, with standard arcing horns, and crank handle gear operator.

Furnish complete and assembled with station post insulators, TR 286, ANSI gray, 5” BC.

7’ – 0” phase spacing, for horizontally upright mounting on structure “SS1” as shown on Drawings 1056-25ST-0011, and 1056-25ST-0012.

3.4. **ITEM D:**

Quantity: (1)

Description:

Air disconnect switch, group operated, vertical break, 3PST, aluminum, 115 kV nominal voltage, 1200 amp continuous current rating, 61 kA momentary current rating, 550 kV BIL, with standard arcing horns, and crank handle gear operator.

Furnish complete and assembled with station post insulators, TR 286, ANSI gray, 5” BC.
7’ – 0” phase spacing, for horizontally upright mounting on structure “SS2” as shown on Drawings 1056-25ST-0013, and 1056-25ST-0014.

3.5. ITEM E:

Quantity: (2)

Description:

Air disconnect switch, group operated, vertical break, 3PST, aluminum, 23 kV nominal voltage, 2000 amp continuous current rating, 100 kA momentary current rating, 150 kV BIL, with full load break interrupter attachments, and 48 VDC motor operator. Motor operator shall include an adjustable time-delay control switch, a minimum of four (4) spare auxiliary contacts for customer use, and 120 VAC light and heater.

Furnish complete and assembled with station post insulators, TR 208, ANSI gray, 3” BC.

3’ – 0” phase spacing, for horizontally upright mounting on structure “SS3” as shown on Drawings 1056-25ST-0015, and 1056-25ST-0016.