# ZM1

## Labor shall be based on the following:

#### Construction

- Install pole top pin and insulator in accordance to Construction Specification Drawing
- Tie in Overhead Ground Wire
- Attach pole ground with appropriate connector

#### Removal

- Detach pole ground from Overhead Ground Wire
- Untie Overhead Ground Wire from insulator
- Remove pole top pin and insulator
- All Removed Material shall be returned to the District Storeroom in which the project is located

- Remove pole ground from the Overhead Ground Wire and reattach with appropriate connector
- Untie Overhead Ground Wire, remove pole top pin and insulator, install new pole top pin and insulator, retie Overhead Ground Wire
- Labor and Temporary Material needed to support conductors during replacement to keep existing line energized
- All Removed Material shall be returned to the District Storeroom in which the project is located

# ZM1-1

## Labor shall be based on the following:

#### Construction

- Install pole top pins and insulators in accordance to Construction Specification Drawing
- Tie in Overhead Ground Wire
- Attach pole ground with appropriate connector

#### Removal

- Detach pole ground from Overhead Ground Wire
- Untie Overhead Ground Wire from insulators
- Remove pole top pins and insulators
- All Removed Material shall be returned to the District Storeroom in which the project is located

- Remove pole ground from the Overhead Ground Wire and reattach with appropriate connector
- Untie Overhead Ground Wire, remove pole top pins and insulators, install new pole top pins and insulators, retie Overhead Ground Wire
- Labor and Temporary Material needed to support conductors during replacement to keep existing line energized
- All Removed Material shall be returned to the District Storeroom in which the project is located

# ZM2-16

### Labor shall be based on the following:

#### Construction

- Framing is a double circuit line with 34.5KV circuit on top and bottom circuit is 24.9KV
- Assemble in accordance to Construction Specification Drawing and Items #10 and #14 of the Specifications for Construction
- Tie ground wire to the spool insulator associated with the 24.9kv circuit
- Pole ground wire continues up to top circuit and attaches to the overhead ground wire with the appropriate connector, see Item #10 of the Specifications for Construction
- Note and follow all soil enhancement Precautions

#### Removal

- Complete removal of this ground assembly can only be done with total structure removal
- Remove existing connector and spool insulator wire tie
- Remove ground wire and pole ground plate
- Disassemble remaining framing hardware
- All Removed Material shall be returned to the District Storeroom in which the project is located

- Framing is a double circuit line with 34.5KV circuit on top and bottom circuit is 24.9KV
- Remove existing connector and spool insulator wire tie associated with the 24.9kv circuit
- Removal existing unit and install new unit in accordance to Construction Specification Drawing and Items #10 and #14 of the Specifications for Construction – When replacement of ground plate is impractical a driven ground rod will be acceptable
- Note and follow all soil enhancement Precautions when applicable
- Reconnect both circuit connections, neutral and overhead ground wire, to the pole ground wire
  in accordance to the Construction Specification Drawing and Items #10 and #14 of the
  Specifications for Construction
- All Removed Material shall be returned to the District Storeroom in which the project is located

# ZM5

## Labor shall be based on the following:

#### Construction

- Assemble in accordance to the Construction Specification Drawing
- Ground Wire is secured with an Automatic Guy Deadend Connector

## Removal

- Remove Automatic Guy Deadend Connector and related hardware
- All Removed Material shall be returned to the District Storeroom in which the project is located

- Removal of existing unit and Installation of new unit in accordance to the Construction Specification Drawing
- New unit secures Ground Wire with an Automatic Guy Deadend Connector
- Labor and Temporary Material needed to support/cover conductors during assembly to keep the existing line energized. (i.e. cover ups, "buddy arms", etc)
- All Removed Material shall be returned to the District Storeroom in which the project is located

# ZM5-2

## Labor shall be based on the following:

### Construction

- Assemble in accordance to assembly specification drawing
- Install assembly on structure and includes tying in conductor

## Removal

- Untie conductor
- Remove and Disassemble Assembly
- All Removed Material shall be returned to the District Storeroom in which the project is located

- Untying and Retying of conductor
- Remove Existing Assembly and Installation of New Assembly Unit in accordance to assembly specification drawing
- Labor and Temporary Material needed to support/cover conductors during assembly to keep the existing line energized. (i.e. "line Hoses", "buddy arms", etc)
- All Removed Material shall be returned to the District Storeroom in which the project is located

# ZM5-6

# Labor shall be based on the following:

### Construction

- Install assembly in accordance to the Construction Specification Drawing to the appropriate mounting point
- Complete connection of phase and ground jumpers

### Removal

- Remove all jumpers
- Remove Lightning Arrester

- Disconnection and Reconnection of all jumpers
- Remove Existing Assembly and Installation of New Assembly Unit in accordance to the Construction Specification Drawing to the appropriate mounting point
- Labor and Temporary Material as needed during replacement to keep the existing line energized. (i.e. cover ups, etc)
- All Removed Material shall be returned to the District Storeroom in which the project is located

# ZM5-15B

# Labor shall be based on the following:

### Construction

- Assemble in accordance to assembly specification drawing
  - o Top mounting hole uses machine bolt, washer, nut and locknut
  - o Lower hole use Lag Screw

#### Removal

- Remove bracket by removing bolt and lag screw
  - o Equipment mounted on bracket will be removed on separate spec
- All Removed Material shall be returned to the District Storeroom in which the project is located

- Remove equipment from existing bracket and then remove bracket
- Install new bracket and reattach equipment in accordance to the assembly specification drawing
- Labor and Temporary Material needed to support/cover conductors during assembly to keep the existing line energized. (i.e. "line Hoses", "buddy arms", etc)
- All Removed Material shall be returned to the District Storeroom in which the project is located

# ZM5-16B

# Labor shall be based on the following:

#### Construction

- Assemble in accordance to assembly specification drawing
  - Three phase bracket is mounted with machine bolts, washers, nuts and locknuts

### Removal

- Remove bracket by removing bolts
  - o Equipment mounted on bracket will be removed on separate spec
- All Removed Material shall be returned to the District Storeroom in which the project is located

- Remove equipment from existing bracket and then remove bracket
- Install new bracket and reattach equipment in accordance to the assembly specification drawing
- Labor and Temporary Material needed to support/cover conductors during assembly to keep the existing line energized. (i.e. "line Hoses", "buddy arms", etc)
- All Removed Material shall be returned to the District Storeroom in which the project is located

# ZM6

## Labor shall be based on the following:

#### Construction

- Assemble in accordance to the Construction Specification Drawing
- Ground Wires are secured with an Automatic Guy Deadend Connector

## Removal

- Remove Automatic Guy Deadend Connectors and related hardware
- All Removed Material shall be returned to the District Storeroom in which the project is located

- Removal of existing unit and Installation of new unit in accordance to the Construction
   Specification Drawing
- New unit secures Ground Wires with an Automatic Guy Deadend Connector
- Labor and Temporary Material needed to support/cover conductors during assembly to keep the existing line energized. (i.e. cover ups, "buddy arms", etc)
- All Removed Material shall be returned to the District Storeroom in which the project is located