Lighthipe Substation

Phase 1 Scope: Replace (4) 220 kV disconnects.

220 kV Switchrack Pos. 16:

1. Remove (4) existing sets of disconnect switches.
2. Install (4) new sets of group operated disconnect switches, rated 4000 amps. One set shall have a grounding switch attachment.
3. Reconductor the entire position.
4. Replace existing disconnect switch foundations.
5. Install (1) CB Operator Interface Cabinet (OIC) and run new homerun cables to the future location of the Pos. 16 Line Protection Relay Rack.
6. Install additional switchrack lighting.

Phase 1 Construction Information:

Duration: 4 weeks
Maximum 20 vehicle trips per day (100 trips per week). Total of 400 vehicle trips.

Please Note: There will be no disturbances associated with the proposed upgrades to protection relays and telecomm equipment.

Phase 2 Scope: Upgrade line protection for the 220 kV Mesa Line.

220 kV Switchrack Pos. 16:

1. Remove the existing wave trap, line tuner, and associated accessories on the C phase. Reconfigure the line riser.
2. Run new homerun cables from the CCVT pull boxes going to the MEER. Connect homerun cables from the OIC to the Pos. 16 Line Protection Relay Rack.

MEER:

1. Remove the existing SHPM-101 line protection relay.
2. For the Mesa Line, install (1) new 19" rack with (1) SEL-311L relay and all associated switches and accessories.

RTU/PLC

1. Provide control and monitoring points for the new relay.
2. Project System Controls Group to revise/add control and status points per PLC point list.
3. Remove old points.

Annunciator

Revise existing alarm points for the new relay.

DFR

Revise existing alarm points for the new relay.

Telecomm

Add (1) C37.94 to Mesa for the SEL-311L. Install lightwave and channel equipment.

Phase 2 Construction Information:

Duration: 3 weeks
Maximum 5 vehicle trips per day (25 trips per week). Total of 75 vehicle trips.

Please Note: There will be no disturbances associated with the proposed upgrades to protection relays and telecomm equipment.