

SAFETY ALERT

Date: 07-27-10

Title: TECO MOTOR OPERATED SWITCH FAILURE

On July 26, 2010, a North Houston Pole Line (NHPL) crew had a near miss involving switching and a SCADA controlled TECO motor operated gang switch.

This crew is working on NHPL Job # 9417 in the Texas Panhandle near Spur, Texas.

The crew was scheduled to work on a 69kV line from the Swenson Switch to the Peacock Switch. Both of these switches are TECO motor operated gang switches, both with horizontal frames, SCADA controlled, and each about 20 feet off the ground. AEP Dispatch used SCADA to open both switches and two AEP Servicemen drove to each switch to verify the switches opened. The two Servicemen told AEP Dispatch that the switches were open and all three blades on each switch were in the open position.

The AEP TCR then gave the NHPL crew their clearance. The NHPL crew went up in their bucket with a AB Chance Voltage Tester to check for voltage before installing grounds. As they neared the phases, the alarm began to sound on the voltage tester.

The linemen boomed down and reported what they had found. An investigation verified the Peacock Switch was open with all three blades in the open position while the Swenson Switch was open with two blades open and the north phase blade still in a closed position.

The Swenson Switch was checked, and when given a command, the motor, motor shaft, and two blades would operate; but the north phase blade remained in the closed position. Everything was operable except the north phase switch blade.

This near miss reinforces the safe practice of always checking for the absence of voltage before installing grounds!

Both the Swenson Switch and Peacock Switch have been in service for about a year. It is NHPL's understanding that AEP has had similar malfunctions with these TECO switches in the past.

NHPL is scheduled to assist AEP with the removal and/or repair of the Swenson Switch sometime this week.