

El Paso Electric Company

To: Rio Grande Electric Cooperative
Attention: Gregg Gardner & Clinton Brown

Van Horn Power Outage on July 5, 2009

The fault on Sunday morning was located on the Farmer-21 feeder directly underneath the 69 kV transmission line. Indications are that the failure of this distribution structure caused the operation of the transmission line for a 3-phase fault. The breaker at Neely would have normally operated for this fault but due to a bad trip coil in the breaker at Neely, the relays at Alamo cleared the fault opening breaker 7301 at Alamo.

The dispatchers were unable to close the breaker at Alamo and substation crews were called out. When they arrived at Alamo, they were able to close the breaker from the control handle locally. This trouble was reported to communications. Substation, communications and relay crews were sent to Alamo this morning to bypass and test the operation of this breaker (the breaker had operated correctly and was closed remotely on 6/22/09). They found a contactor in the breaker not operating. The mechanism was worked several times after which the breaker was operated locally and remotely then returned to service.

At the time of the fault, transmission and substation crews, 5 folks total were called immediately and sent towards the area of the outage. Relays were polled and the fault was determined to be a 3 phase fault (normally indicating a structure down although this is not always the case) and located the fault 25 - 30 miles from Neely. According to the transmission person on site, this is very near the location of the distribution crossing and well within the tolerance of the locating abilities of the relay. We were unable to perform a double ended fault locate due to Farmer Substation having no station service. Severe lightning in the area at the time of the fault made single ended location extremely unreliable.

Substation inspection performed at Alamo 06/25/09
Relay testing at Alamo performed Jan 2009 on all relays
All equipment passed testing.

Transmission maintenance on the 6800 Line (Felipe - Alamo) was performed in August 2008, on the 7300 Line (Alamo - Neely) was performed in June 2008 and on the 9100 Line (Neely to Farmer) was performed in October 2008.

We regret any inconvenience this outage may have caused to your customers. We would like to be of any assistance and we look forward to working with you all to provide the best service possible for our customers. Please contact me, I will arrange for any information or other help that you may need to correct these problems.

Thanks,

Bill Massie
Manager System Control
El Paso Electric Company