

Topic: Chambers 230/115kV Transmission Intertie Project Delay

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Statement:

"The Chambers 230/115kV Transmission Intertie Project was granted a Certificate of Public Convenience and Necessity by the Colorado Public Utilities Commission in September 2003. The Project had an anticipated in service date of May 2005. Due to land rights issues, it is anticipated that the in-service date for the Project will be delayed up to two years."

Transmission Reliability Concerns

The project is required to accommodate 1000 MW (RMEC, Brighton and Blue Spruce) of 1999 IRP generation. A delay in project completion results in the following concerns:

1. The system between Spruce and Smoky Hill becomes heavily loaded when northeast metro generation is at full power output. There are potential system overloads for two contingencies.
 - a. Loss of one of the two Spruce – Smoky Hill 230kV lines can overload the parallel circuit to 120% in 2006 and 124% in 2008. The expected method to alleviate the overload is to reduce up to 240 MW of generation at Spruce. This is a redispatch scenario and no load will be lost assuming that generating units are available.
 - b. Loss of one of the two Smoky Hill 230/115kV autotransformers can overload the parallel unit to 119% in 2006 and 121% in 2008. The expected method to alleviate the overload is to perform transmission line switching, with no loss of customer load. Preliminary studies have investigated a second Sulphur 230/115kV autotransformer to serve IREA loads in the area (planned for 2005). A second Sulphur transformer could reduce the contingency loading by approximately 10%.
2. The Project was designed to add a third source to the 115kV load-serving path between Cherokee and Smoky Hill. Studies have shown this path to be at risk of potential contingency overloads for a few years now.
 - a. Previous studies showed that loss of a Cherokee – East 115kV line could overload the parallel circuit to 115-120%. Studies modeling 2006 and 2008 conditions show the overloads to be lower, in the 107% range. The reduction is due to the recently installed Sulphur 230/115kV autotransformer, which effectively helps unload the Cherokee – Smoky Hill 115kV path. There are already operating procedures in place to mitigate contingency overloads on that path that do not involve load shedding.