

CAPRICORN RIDGE 345-138 kV SUBSTATION

GOAT MOUNTAIN WIND (DIV. OF FPL ENERGY)
JUNO BEACH, FLORIDA
MS. DANELL HERZIG

PROJECT COST: \$7.5M
COMPLETION DATE: AUG 2007
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Project Description

EPC Services was released on November 16, 2006 to begin engineering and procurement for one of the largest wind interconnect substations existing in the U.S., a 555 MVA facility located near Sterling City, Texas. It is estimated that the Goat Mountain 345-138 kV Substation (also known as Capricorn Ridge Substation), is a \$7.5M facility for which EPC Services furnished engineering, procurement of smaller materials & components, construction labor, site management and commissioning oversight. This substation included a 555 MVA HICO transformer, a unit having a gross weight of 792 lbs. fully assembled.

ECI was responsible for all electrical, civil and structural design associated with this substation. Since a facility of its type had not previously been designed by FPL Energy, the scope of services entrusted to ECI included development of new design standards and value engineering, as well as interface with Lower Colorado River Association (LCRA), the interconnect utility.



Site Under Construction

Site grading and foundations for the station began in February 2007; progress followed the anticipated schedule, with EPC Services completing work well ahead of the LCRA Interconnect Switchyard.

The Capricorn Ridge Substation was completed in August 2007, approximately 9 months following mobilization of the engineering and construction team. *It is our belief that the fully integrated and experienced design-construct team offered by EPC Services was instrumental in helping FPL Energy achieve their goals at Capricorn Ridge.* Such a response on this major project would not have been possible without the total in-house capability to take a project from concept through electrical testing *without need for a subcontract services.*



345 kV – 555 MVA Transformer

◆ Engineer - Procure - Construct ◆

