Facility Study for Generation Interconnection Request GEN – 2004 – 010

SPP Coordinated Planning
(#GEN-2004-010)

September 2005

Summary

Westar Energy performed the following Study at the request of the Southwest Power Pool (SPP) for Generation Interconnection request Gen-2004-010. The request for interconnection was placed with SPP in accordance SPP's Open Access Transmission Tariff, which covers new generation interconnections on SPP's transmission system.

Pursuant to the tariff, Westar Energy was asked to perform a detailed Facility Study of the generation interconnection request to satisfy the Facility Study Agreement executed by the requesting customer and SPP.

Generation Interconnection Facilities Study

For

Elk River II, LLC

GEN-2004-010

August 30, 2005

Introduction

This report summarizes the results of a Generation Interconnection Facilities Study performed for the Southwest Power Pool (SPP) by Westar Energy to evaluate a generation interconnection request by Elk River II, LLC (Customer) for 300 MW of wind-powered generation on the Westar Energy (WR) transmission system near Glen Crouse, Kansas. The requested in-service date of the generating facility is June 2006. Prior to this were completed both a Feasibility Study and a System Impact Study. The proposed project will interconnect with the Westar Energy Neosho – Rose Hill 345 kV line at the Latham Switching Station.

Project Location and Existing Facilities

The project is located near Glen Crouse, Kansas, in Cowley County approximately 17 miles east-northeast of Winfield, Kansas. The WR Neosho – Rose Hill 345 kV transmission line is approximately 4 miles north of the proposed Customer facility substation. The interconnection will be effected at the Latham Switching Station 345 kV ring-bus substation approximately 32 miles southeast of the existing Rose Hill substation. The substation would connect to Customer facilities at 345 kV. Customer will own, operate, and maintain 345 kV transmission to the project substation, step down transformation, and the project substation. Figure 1 shows the WR transmission facilities in the area.

Interconnection Facilities

Interconnection to the WR transmission system will be by way of a new position at the Latham Switching Station 345 kV ring-bus substation on the existing Neosho – Rose Hill 345 kV transmission line. The new substation terminal will look south towards Customer's facilities. Construction of this new substation terminal does not require the purchase of any additional land adjacent to the existing transmission line right-of-way.

345 kV Ring Bus Substation Terminal

The estimated cost is for one (1) 345 kV breaker, two (2) 345 kV switches, one (1) 345 kV motor operated switch, three (3) 345 kV VT's, three (3) 345 kV CT's, three (3) 345 kV arresters, new redundant primary relaying, 345 kV metering, one (1) 345 kV full tension deadend structure, and all associated yard and conduit work.

$1,000,000 (345kV "ring bus" substation terminal).
$ 250,000 (345 kV interconnection metering).
$1,250,000

The following are the approximate time lines for the projects. These are based on WR's engineering time, average procurement time, and good weather during construction. The amount of time per task may change if consultants are hired to perform this work.

345 kV Ring Bus Substation Terminal:

8 weeks	Engineering Time
24 weeks	Procurement Time
8 weeks	Construction Time
40 weeks Total	

The design and material ordering will only commence following receipt of as-built drawings of the Latham 345 kV switching station and execution of the Southwest Power Pool Standardized Large Generation Interconnection Agreement.

Westar Energy also maintains its own Facility Connection Requirements, which may be found on our web-site (wr.com).

Figure 1 – Westar Energy Area Transmission

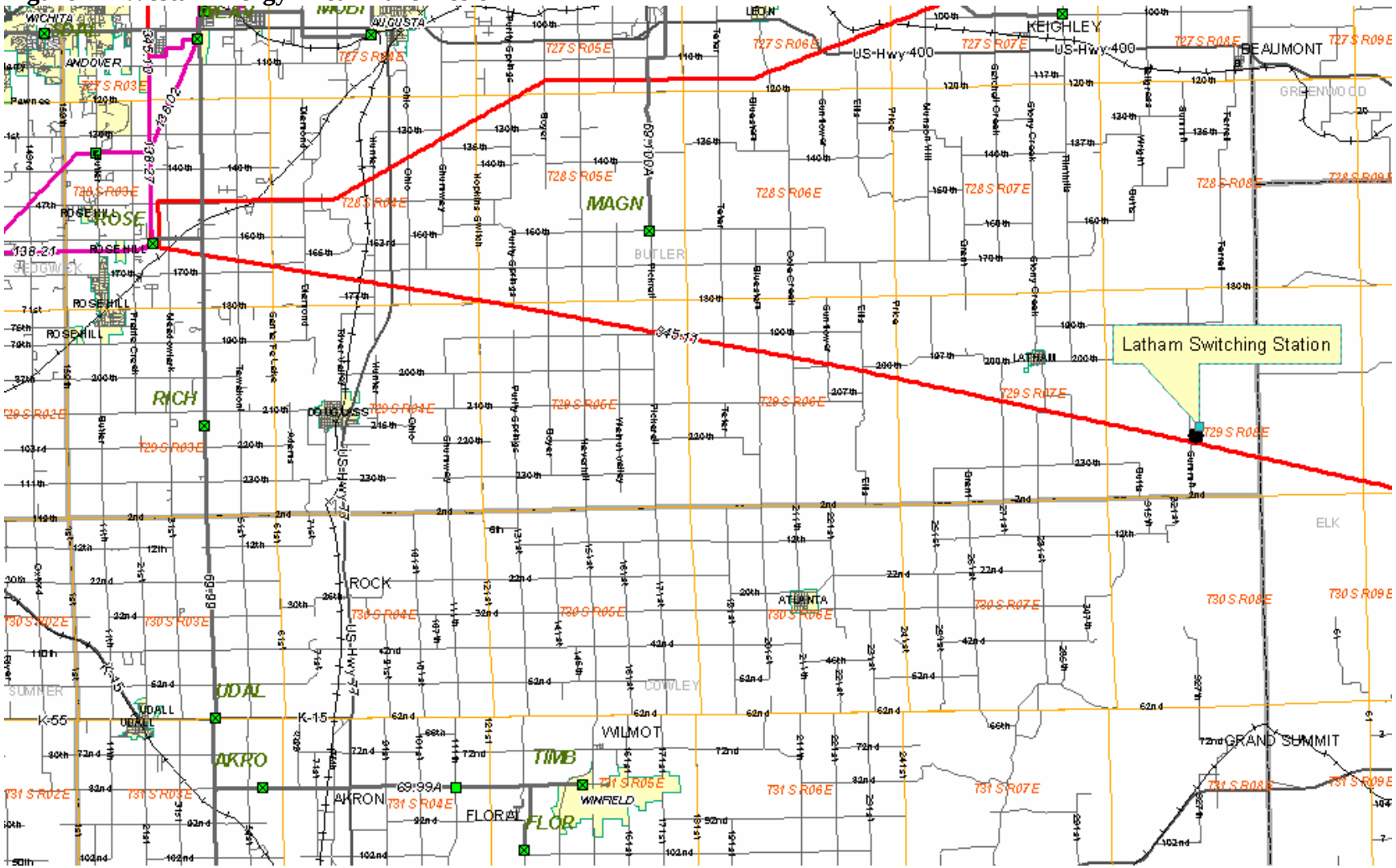

Figure 2 – Substation One-Line