



***Facility Study
For
Generation Interconnection
Request
GEN-2006-033***

SPP Tariff Studies

(#GEN-2006-033)

February 2008

Summary

Pursuant to the tariff and at the request of the Southwest Power Pool (SPP), Westar Energy performed the following Facility Study to satisfy the Facility Study Agreement executed by the requesting customer and SPP for SPP Generation Interconnection request Gen-2006-033. 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.

Reactive Compensation

The Impact Study for this generation interconnection request analyzed the wind farm with GE wind turbines. The GE wind turbines will meet the FERC Order 661A requirements for low voltage ride through. If this Generation Interconnection request uses GE turbines, the wind farm will not be required to install the capacitor banks as specified in the Impact Study.



**Generation Interconnection Facilities
Study**

For

**Generation Interconnection Request
SPP-GEN-2006-033**

February 22, 2008

Introduction

This report summarizes the results of a Generation Interconnection Facilities Study performed for the Southwest Power Pool (SPP) by Westar Energy, Inc. (WR) to evaluate a generation interconnection request by CPV Wind Moyer Ranch LLC for 150 MW of wind-fired generation in Geary County, Kansas, to the transmission system of Westar Energy, Inc. The proposed interconnection is at the WR transmission system at the existing McDowell Creek 115 kV substation on the Topeka – Junction City 115 kV transmission line. Prior to this were completed both a Feasibility Study and a System Impact Study. The requested in-service date of the generating facility is December 2008. It is not possible for Westar Energy, Inc. to engineer, procure, and construct the required facilities by the requested in-service date under the Standard Option of the Standardized Large Generator Interconnection Agreement.

Project Location and Existing Facilities

The project is located near Junction City, Kansas, in Geary County approximately at the existing McDowell Creek 115 kV Substation on the Topeka – Junction City 115 kV transmission line. The McDowell Creek Substation occupies property adjacent to the proposed development. The interconnection will be effected at a new 115 kV breaker in the existing substation. The substation will connect to WR facilities at 115 kV. Figure 1 shows the Westar Energy regional transmission facilities and Figure 2 shows the Westar Energy transmission facilities in the local area as well as the service areas of other utilities at the point of interconnection. The proposed project is not within the Westar Energy service area.

Interconnection Facilities

Interconnection to the WR transmission system will be by way of a new 115 kV breaker installed at the existing McDowell Creek 115 kV substation.

115 kV Substation

The estimated cost is for the modifications at the existing McDowell Creek 115 kV substation required for interconnection request GEN-2006-033. The existing substation is a 115 kV six-breaker straight bus scheme. The substation addition will consist of: one (1) 115 kV breaker; three (3) 115 kV disconnect switches; one (1) 115 kV CCVT; one (1) 115 kV, new primary and backup relaying and associated panel; and all associated site, yard and conduit work. This estimate includes all equipment inside the substation fence up to the Point of Change of Ownership. Figure 3 shows the substation layout.

\$300,000

115 kV Interconnection Metering

The estimated cost is for interconnection metering at the connection point of the transmission line to the generating facility at the McDowell Creek 115 kV substation. The interconnection metering installation will consist of: three (3) 115 kV VTs; three (3) 115 kV CTs; and revenue interconnection metering; and all associated site, yard and conduit work.

\$ 100,000

115 kV Transmission Line Work

The estimated cost includes no work for 115 kV transmission lines which are part of the Customer's responsibility. It is assumed; however, that the new 115 kV line to the Customer's facility will have optical static wire so that fiber optic cable will be available for relaying purposes.

\$0

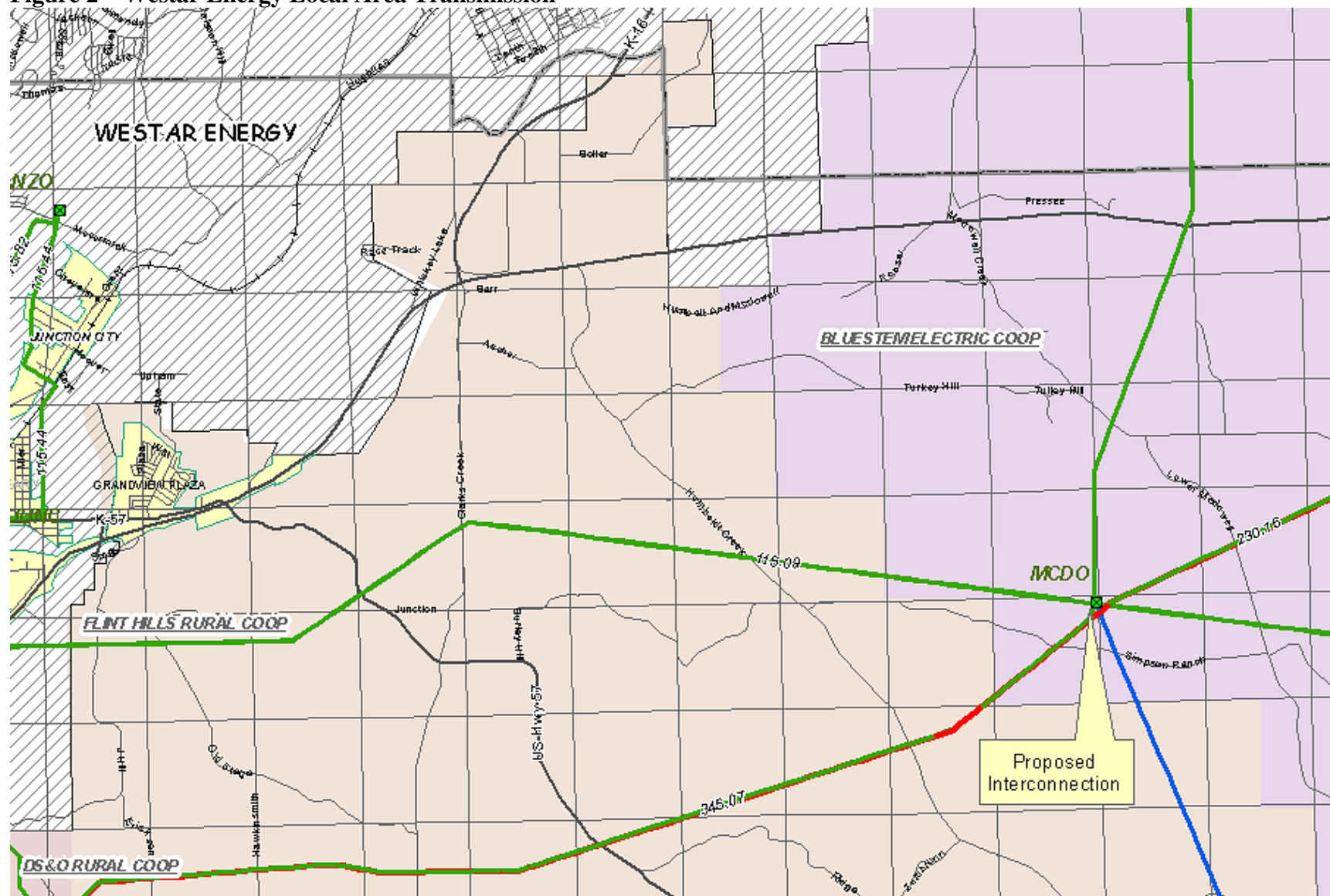
The total cost estimate for Transmission Owner Interconnection Facilities (Interconnection Metering) and Stand Alone Network Upgrades (115 kV Substation and Transmission Line Work) is:

\$ 300,000 115 kV Substation Terminal
\$ 100,000 115 kV Interconnection Metering
\$ 0 115 kV Transmission Line Work
\$ 400,000

This estimate is accurate to +/- ten (10) percent, based on current prices, in accordance with Attachment A of Appendix 4 of the Interconnection Facilities Study Agreement. However, recent cost escalations in materials are very significant and the accuracy of this estimate at the time of actual construction cannot be assured.

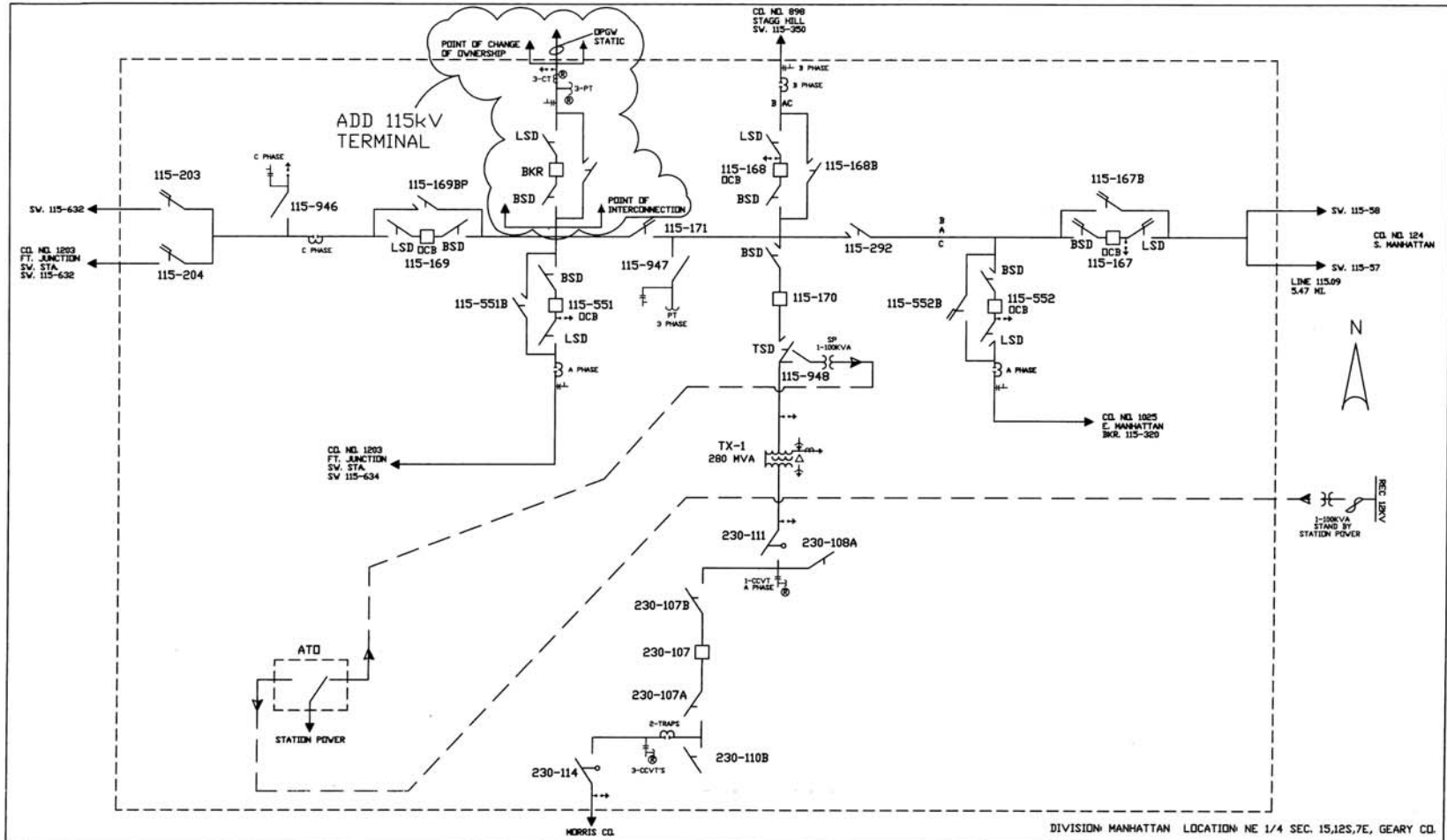
Westar Energy also maintains its own Facility Connection Requirements, which may be found at (westarenergy.com).

Figure 2 – Westar Energy Local Area Transmission



The shaded areas show the other utility service areas with their names

Figure 3 – Interconnection Substation Layout



REV.	DESCRIPTION	DATE	BY/CX	SCALE	WORK ORDER NO
4	AS-BUILT	9/06	MGD		
3	ADDED NEW TX-1 AND 230KV LINE	7/06	MGD		
2	FIELD CHECKED	11/05	MGD		
5	ADD 115KV MOYER RANCH TERMINAL	2-08	MSA		
				NONE	

DRAWN BY: MIKE DEGHAND	DATE: 2003
CHECKED BY:	DATE:
APPROVED BY:	DATE:

DWG. NO.	S00899
TITLE	MCDOWELL CREEK SUB ONE LINE DIAGRAM (MCDC)
SHEET NO.	1 OF 1
REV.	5

GROUP: 1 LINE 115KV MANHATTAN CAD FILE NO: MCDOWELL100502A - 500000.DWG