

April 17, 2024

Distributed Energy Resource (DER) System Impact Study Results

Customer Legal Name: Engie

Service Address: 40.191, -104.500, Keenesburg, Colorado.

This document provides both power flow and protection study results for the Distributed Energy Resource application listed below. The information contained within document shall be considered confidential. Customer may not publish or disclose this report or its contents without Xcel Energy consent.

Feeder	Application#	Garden Name	Requested Capacity (MW AC)
ENNI1259	5586739	Banquet Solar	7.2

The Engie Banquet Solar project, located at 40.191, -104.500, Keenesburg, CO, 80643, is 1st in feeder queue and 1st in substation queue. There are 0 MWs ahead of this project in the feeder queue and 0MWs ahead of this project in substation queue. The maximum generation possible at this location is 7.2MW at 0.98 power factor absorbing vars. Interconnecting this DER at the allowed capacity, with all of the aforementioned upgrades results in 6.73MW of reverse flow on the feeder and 6.71MW of reverse flow on the transformer.

Required System Upgrades for (7.2 MW)

Distribution:

- ~100ft extension of 3Ø, 336 ACSR with 2/0 neutral, from PCC to POI
- Install standard site metering and protection equipment, including a new POI recloser

Substation:

- Install VSR Feeder Protection

Next step in process: TRANSMISSION SYSTEM IMPACT STUDY THEN FACILITY STUDY

DER System Impact Study (SIS) Summary			
Disclaimer: this is a non-binding good faith desk top estimate based on unit costs and assumes standard Xcel Energy single circuit construction			
Summary of Cost Estimate			
Construction Type			Subtotal
Distribution			\$ 110,711
Substation			\$ -
Transmission			\$ -
Cost Estimate Total			\$ 110,711
Estimated Design and Construction Time			7-12 Months