Interconnection Facilities Study

Costs associated with DISIS-2023-001 GEN-2023-034

January 2026

Introduction

This report summarizes the scope of the Interconnection Facilities Analysis for Network Upgrade(s) to determine costs related to the addition of the SPP-GI DISIS-2023-001 Interconnection Request(s). Evergy, as a TO, is receiving an unprecedented amount of GI interconnect requests. The cost estimates and interconnect information supplied are based on current system configuration. There are many cases of multiple GI's requesting POIs at the same substation. Ongoing changes in Evergy's transmission system configuration could affect the required system upgrades and costs necessary to meet any particular GI interconnect request in the future.

Southwest Power Pool Generation Interconnection Request:

Per the SPP Generator Interconnection Procedures (GIP), SPP has requested that Evergy perform an Interconnection Facilities Study (IFS) for Network Upgrade(s) in accordance with the Scope of Interconnection Facilities Study GIP Section 8.10 and the Interconnection Facilities Study Procedures in accordance with GIP Section 8.11 for the following Interconnection Request(s):

Upgrade Type	UID	Upgrade Name	DISIS Cost Estimate	DISIS Lead Time
Interconnection	158736	Clear Water - Waco 138 kV line GEN-2023-034 Interconnection (TOIF) (Evergy)	$ 928,797.00	36 months
Interconnection	158737	Clear Water - Waco 138 kV line GEN-2023-034 Interconnection (Non-Shared NU) (Evergy)	$ 15,091,410.00	36 months

Clear Water - Waco 138 kV line GEN-2023-034 Interconnection (TOIF) (Evergy)

138kV Substation

TOIF for accommodating TED Renewables GEN-2023-034 (130MW of Solar) at a greenfield 138kV Substation on Clearwater-Waco 138kV line. This estimate is the cost associated with the Transmission Owner Interconnection Facilities for a terminal at a new substation on the Clearwater-Waco 138kV line for GEN-2023-034. UID 158736

Total Cost

The total cost estimate for this Network Upgrade is:

$	0	Transmission Line
$	848,954	Substation
$	2,778	AFUDC
$	77,065	Contingency
$	928,797	Total

This estimate is accurate to +/- twenty (20) percent, based on current prices, in accordance with Attachment A of Appendix 4 of the Interconnection Facilities Study

Agreement. However, recent cost fluctuations in materials are very significant and the accuracy of this estimate at the time of actual settings cannot be assured.

Time Estimate

Time estimates are based on current version of the project schedule and some processes of each category run concurrently.

Engineering Time	36	Months
Procurement Time	36	Months
Construction Time	36	Months
Total Project Length	36	Months

Clear Water - Waco 138 kV line GEN-2023-034 Interconnection (Non-Shared NU) (Evergy)

138kV Substation

Network Upgrades to construct a greenfield 138kV ring bus substation on the Clearwater - Waco 138 kV line to accommodate TED Renewables GEN-2023-034 (130MW of Solar). The transmission line estimates assume that the new sub site is adjacent to the existing easement and that (2) single spans can complete the in/out to the new substation. UID 158737

Total Cost

The total cost estimate for this Network Upgrade is:

$	2,829,600	Transmission Line
$	10,379,646	Substation
$	45,138	AFUDC
$	1,837,025	Contingency
$	15,091,410	Total

This estimate is accurate to +/- twenty (20) percent, based on current prices, in accordance with Attachment A of Appendix 4 of the Interconnection Facilities Study Agreement. However, recent cost fluctuations in materials are very significant and the accuracy of this estimate at the time of actual settings cannot be assured.

Time Estimate

Time estimates are based on current version of the project schedule and some processes of each category run concurrently.

Engineering Time	36	Months
Procurement Time	36	Months
Construction Time	36	Months
Total Project Length	36	Months

Figure 1 – Clearwater-Weco 138kV Line