



# **Interconnection Facilities Study**

**Costs associated with  
ERAS-2025-006**

**April 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 ERAS-2025-001 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):

<b>Upgrade Type</b>	<b>UID</b>	<b>Upgrade Name</b>	<b>DISIS Cost Estimate</b>	<b>DISIS Lead Time</b>
Interconnection	170815	Reno County 345 kV Substation #1443 ERAS-2025-006 Interconnection (TOIF) (Evergy)	\$ 2,118,099.00	48 months
Interconnection	170816	Reno County 345 kV Substation #1443 ERAS-2025-006 Interconnection (Non- shared NU) (Evergy)	\$ 9,918,207.00	48 months

### **Reno County 345 kV Substation ERAS-2025-006 Interconnection (TOIF) (Evergy)**

#### **345kV Substation**

TOIF for accommodating Evergy ERAS-2025-006 (717.8MW/Thermal) at Reno County 345 kV Substation. This estimate is the cost associated with the Transmission Owner Interconnection Facilities for a terminal at the Reno County 345 kV substation for ERAS-2025-006. UID 170815

#### **Total Cost**

The total cost estimate for this Network Upgrade is:

\$	0	Transmission Line
\$	1,857,825	Substation
\$	5,282	AFUDC
\$	254,992	Contingency
\$	2,118,099	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	48	Months
Procurement Time	48	Months
Construction Time	48	Months
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Total Project Length	48	Months

**Reno County 345 kV Substation ERAS-2025-006 Interconnection (Non-Shared NU) (Evergy)**

345kV Substation

Network Upgrades required at Reno County 345kV substation to accommodate ERAS-2025-006 (717.8MW/Thermal). This estimate includes converting Reno County 345kV to BAAH to allow for a new terminal to accommodate the new McNew Generation Facility. UID 170816

Total Cost

The total cost estimate for this Network Upgrade is:

\$	0	Transmission Line
\$	8,714,524	Substation
\$	29,665	AFUDC
\$	1,174,017	Contingency
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\$	9,918,207	Total

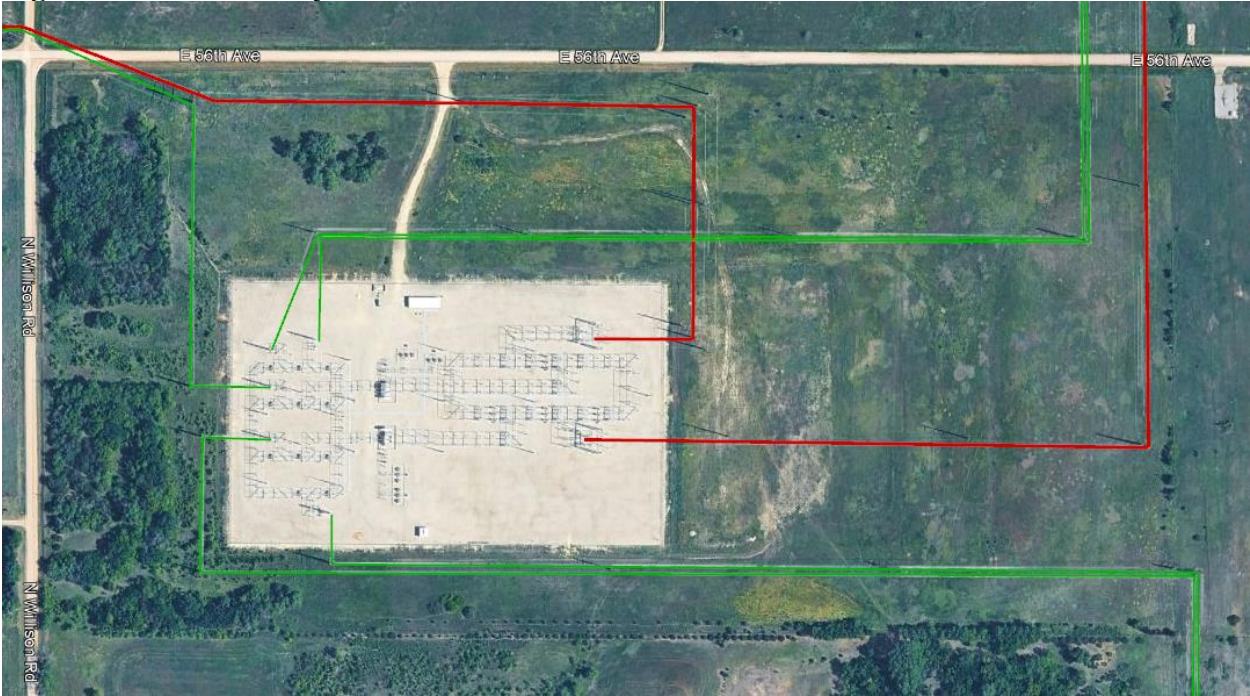
This estimate is accurate to +/- twenty (20) percent, based on current prices, in accordance with Attachment A of Appendix 4 of the Interconnection Facilities Study Agreement. However, recent cost fluctuations in materials are very significant and the accuracy of this estimate at the time of actual settings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

Time Estimate

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

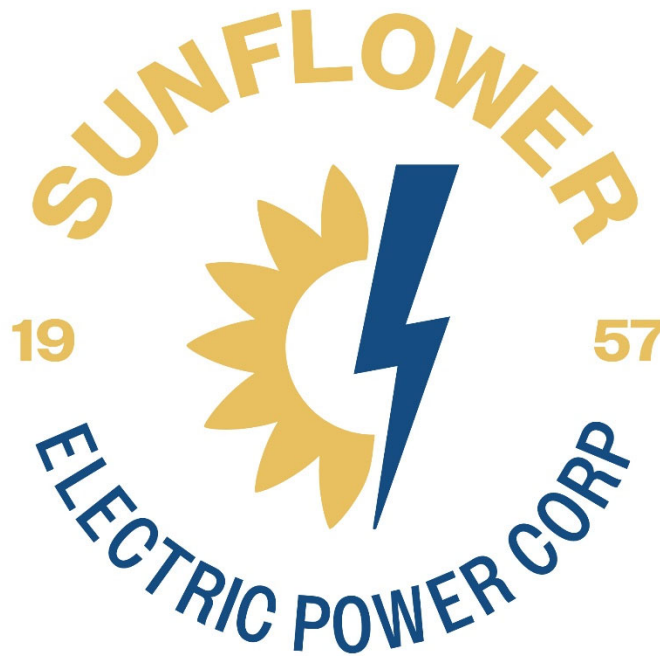
Engineering Time	48	Months
Procurement Time	48	Months
Construction Time	48	Months
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Total Project Length	48	Months

**Figure 1 – Reno County 345/115kV Substation**





**Interconnection Facilities Study  
for ERAS-2025-001 Network Upgrade:  
Build the HOLCOMB7 to HOLCOMB3 345 kV Transformer 2**



**April 20, 2026**

*Interconnection Facilities Study – Build the HOLCOMB7 to HOLCOMB3 345 kV  
Transformer 2*

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## ***Interconnection Facilities Study – Build the HOLCOMB7 to HOLCOMB3 345 kV Transformer 2***

### **STUDY OVERVIEW:**

The Southwest Power Pool has requested a Facility Study for a Network Upgrade from Sunflower Electric Power Corporation (Sunflower). The Network Upgrade identified includes a new 345/115 kV transformer at the existing Holcomb Substation.

The cost of Sunflower's portion of building a new 345/115 kV transformer at the existing Holcomb Substation and associated upgrades is estimated at \$26,301,311 (UID: 172046).

SPP's ERAS-2025-001 identified Network Upgrades included with this Facilities Study are associated with the following:

- ERAS-2025-015
  - \$13,150,655.50
- ERAS-2025-017
  - \$13,150,655.50

The purpose of this study is to provide estimated costs of facilities required for interconnection of the proposed generation to Sunflower's transmission system and to identify scope and estimated costs for network upgrades required on Sunflower's transmission system to allow the generation to run at the full requested capacity.

Additional network upgrades required for facilities of other transmission owners are not included in this study and will be identified by SPP.

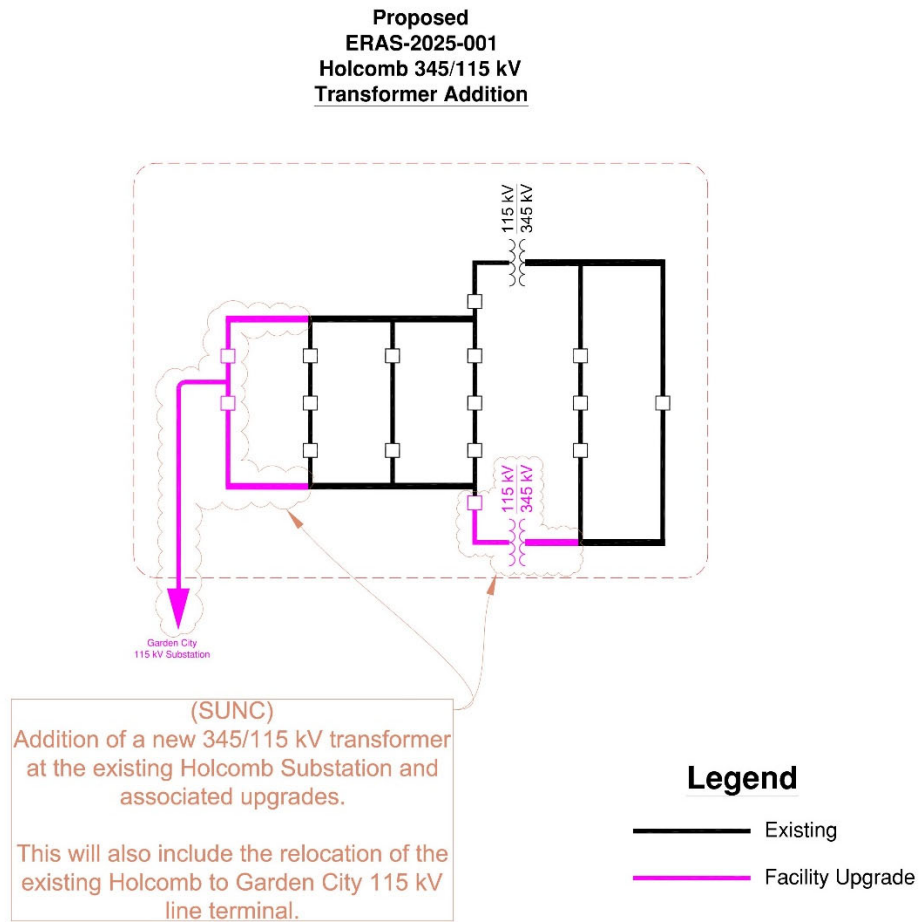
### **SHARED NETWORK UPGRADES:**

Network Upgrades included in this study consist of adding a new 345/115 kV transformer at the existing Holcomb Substation required by SPP. The new 345/115 kV transformer and associated upgrades shall be constructed and maintained by Sunflower.

The proposed arrangement for upgrades for ERAS-2025-001 is shown in Figure 1.

# Interconnection Facilities Study – Build the HOLCOMB7 to HOLCOMB3 345 kV Transformer 2

Figure 1: One-line Diagram Facilities for ERAS-2025-001



**Interconnection Facilities Study – Build the HOLCOMB7 to HOLCOMB3 345 kV Transformer 2**

**INTERCONNECTION COSTS:**

Summary of interconnection costs for both Interconnection Facilities and Sunflower identified Network Upgrades can be found in the following table.

<b>Upgrade Type</b>	<b>UID</b>	<b>Upgrade Name/Description</b>	<b>DISIS Cost Estimate</b>	<b>DISIS Lead Time</b>
Current Study	172046	<b>Build the HOLCOMB7 to HOLCOMB3 345 kV Transformer 2</b> Construct the addition of a new 345/115 kV transformer at the existing Holcomb Substation required for <b>ERAS-2025-015</b>	\$13,150,655.50	40
Current Study	172046	<b>Build the HOLCOMB7 to HOLCOMB3 345 kV Transformer 2</b> Construct the addition of a new 345/115 kV transformer at the existing Holcomb Substation required for <b>ERAS-2025-017</b>	\$13,150,655.50	40
<b>Total Interconnection Cost:</b>			<b>\$26,301,311</b>	

**PROJECT TIMELINE:**

Specific construction schedule and milestones will be determined during the Generator Interconnection Agreement negotiations. Sunflower is estimating an engineering and construction schedule for this project as approximately 40 months. Other factors associated with clearances; equipment procurement delays and work schedules could cause additional delays. This is applicable after all required agreements are signed and internal approvals are granted.