

APPENDIX E

TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC. 10-YEAR TRANSMISSION PROJECTS

Tri-State's 2026 10-Year Transmission Plan Projects

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Tri-State Generation and Transmission Association

2026-2036 Transmission Plan

Big Sandy-Badger Ck 230 kV Line

Project Sponsor: Tri-State Generation and Transmission Association

Additional Project Participants:

Project Description: Construct a 230 kV transmission line from Big Sandy Substation to a new Badger Ck Substation

The proposed Big Sandy-Badger Ck 230 kV line is intended to increase reliability in the project area, improve load-serving capability, reduce curtailment of eastern Colorado network resources under prior outage conditions, and allow the potential development of new renewable generation resources in the area. This will be accomplished by adding a new 230 kV line from the existing Big Sandy substation to a new Badger Ck switching station in eastern Colorado. Badger Ck switching station will sectionalize the existing Henry Lake-Story 230 kV line near Hoyt, CO

Voltage Class:	230 kV
Facility Rating:	642 MVA
Point of Origin/Location:	Big Sandy
Point of Termination:	Badger Creek
Intermediate Points:	
Length of Line (in Miles):	80.0
Type of Project:	Transmission Line
Development Status:	Planned
Routing:	
Subregional Planning Group:	CCPG

Purpose of Project: Improve load-serving capability, reduce generation curtailments, and support renewable resource development in eastern Colorado

Project Driver (Primary):	Generation
Project Driver (Secondary):	Reliability

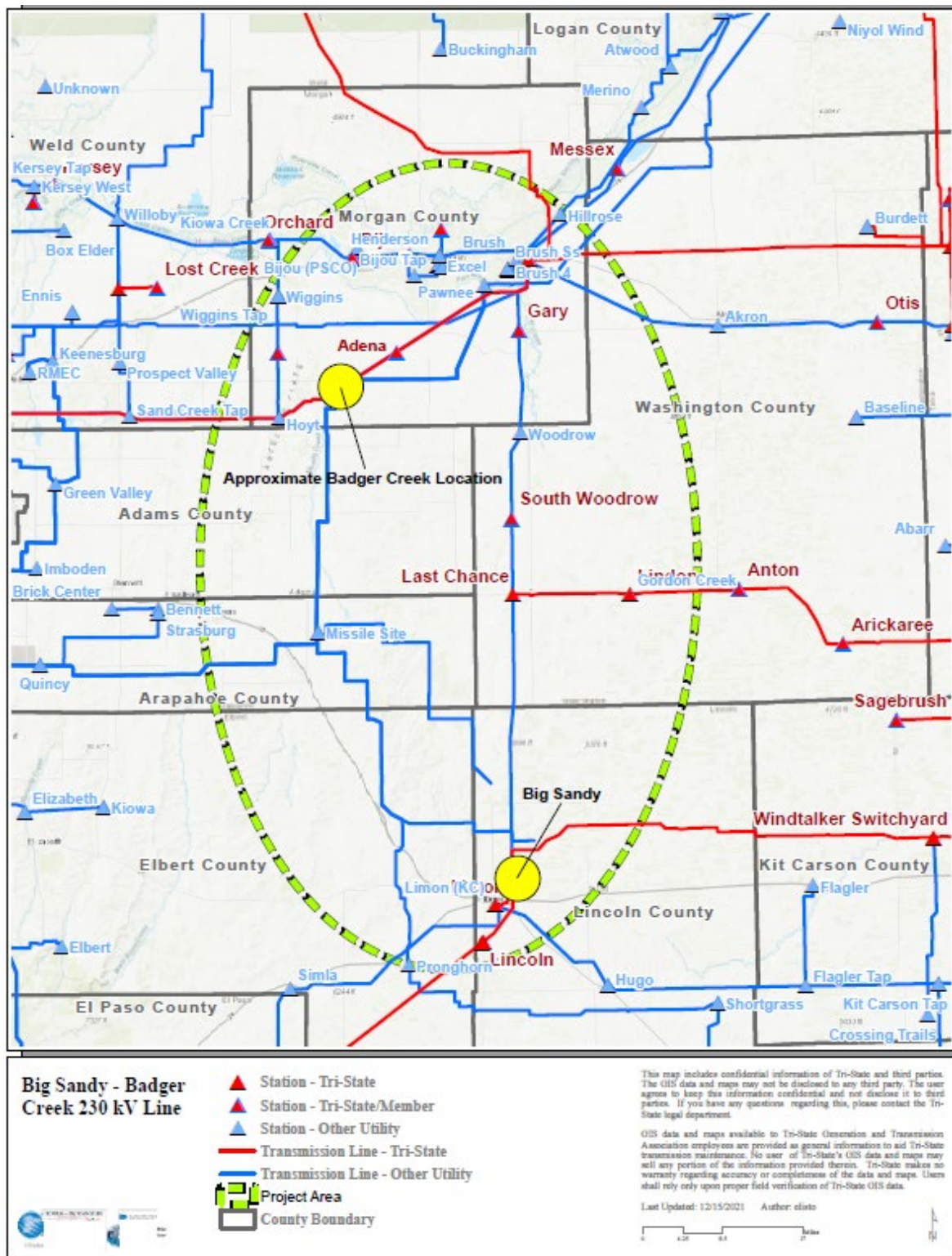
Estimated Cost (in 2021 Dollars): \$81,237,000

Schedule:

Construction Date:	2026
Planned In-Service Date:	2028
Regulatory Info:	CPCN Granted
Regulatory Date:	September 9, 2022 (Decision No. R22-0533)
Permitting Info:	
Permitting Date:	

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Tri-State Generation and Transmission Association
2026-2036 Transmission Plan
Big Sandy-Burlington 230 kV Line Uprate

Project Sponsor: Tri-State Generation and Transmission Association
Additional Project Participants:
Project Description: Structure replacements along the existing Big Sandy-Windtalker-Landsman Ck-Burlington 230 kV line

The 81-mile long Burlington-Windtalker-Landsman Ck-Burlington 230 kV line is old and undersized based on modern design standards. To ensure continued reliability of the eastern Colorado transmission system, Tri-State is uprating the existing Burlington-Burlington 230 kV line through structure modifications/replacements to allow at least 75 deg operation. This project will improve reliability of the eastern Colorado transmission system and allow the potential development of new renewable generation resources in the area

Voltage Class:	230 kV
Facility Rating:	445 MVA
Point of Origin/Location:	Big Sandy
Point of Termination:	Burlington
Intermediate Points:	Windtalker, Landsman Ck
Length of Line (in Miles):	81.0
Type of Project:	Transmission Line
Development Status:	Planned
Routing:	
Subregional Planning Group:	CCPG

Purpose of Project: Reduce generation curtailments and support renewable resource development in eastern Colorado

Project Driver (Primary):	Generation
Project Driver (Secondary):	Reliability

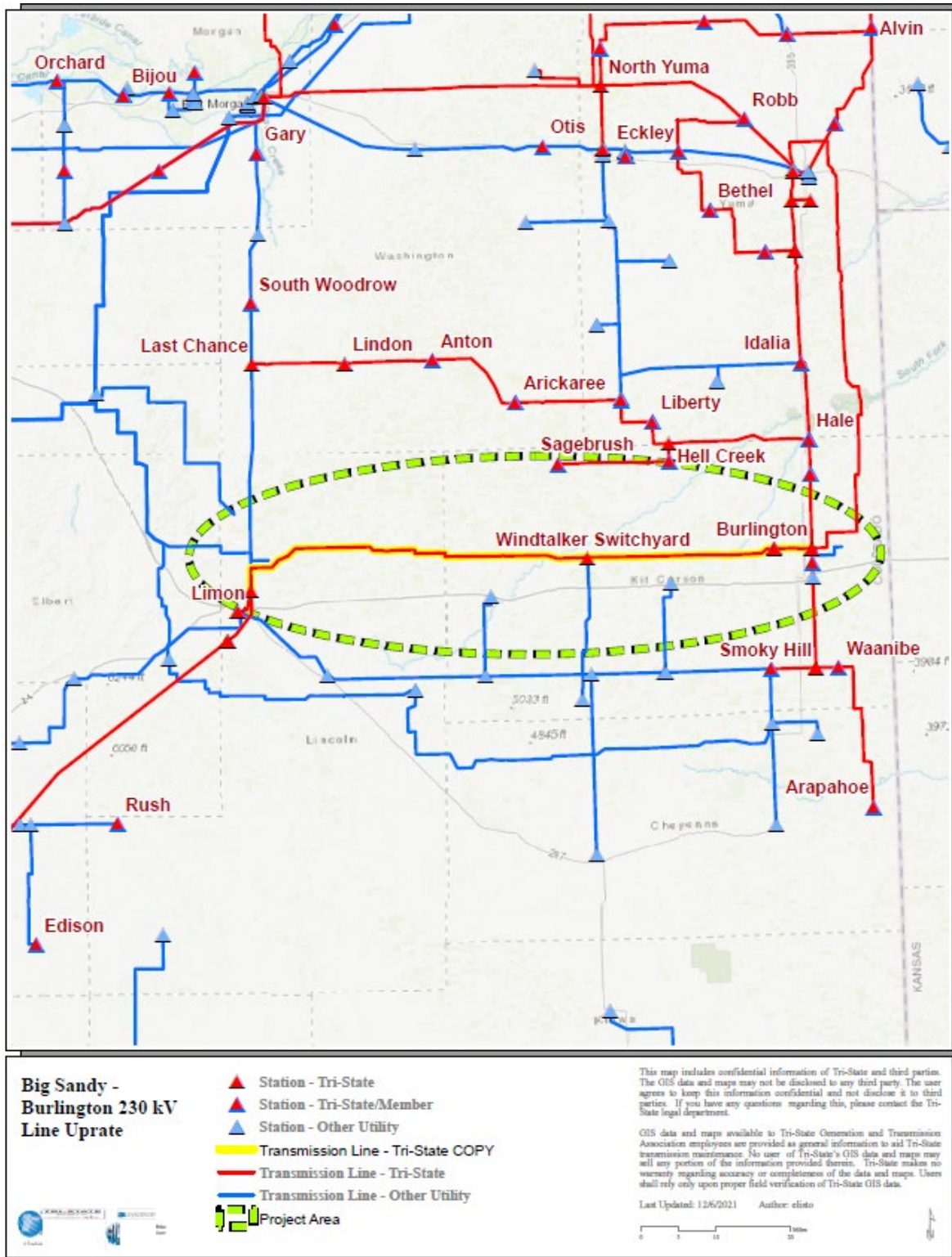
Estimated Cost (in 2021 Dollars): \$9,216,000

Schedule:

Construction Date:	2027
Planned In-Service Date:	2028
Regulatory Info:	CPCN Not Required (Decision No. C23-0810)
Regulatory Date:	
Permitting Info:	
Permitting Date:	

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Tri-State Generation and Transmission Association
2026-2036 Transmission Plan
Boone-Huckleberry 230 kV Line

Project Sponsor: Tri-State Generation and Transmission Association
Additional Project Participants:
Project Description: Construct a 230 kV transmission line from Boone Substation to a new Huckleberry Substation

The proposed Boone-Huckleberry 230 kV line is intended to provide connectivity across Tri-State's four-state transmission system, which currently is not connected in southeast Colorado. The connection will allow geographically diverse generation resources to be moved across Tri-State's four-state service area. This will be accomplished by adding a new 230 kV line from the existing Boone substation to a new Huckleberry substation in southeast Colorado. Huckleberry substation will sectionalize the existing Comanche-Walsenburg 230 kV line south of Pueblo, Colo

Voltage Class:	230 kV
Facility Rating:	642 MVA
Point of Origin/Location:	Boone
Point of Termination:	Huckleberry
Intermediate Points:	
Length of Line (in Miles):	30.0
Type of Project:	Transmission Line
Development Status:	Planned
Routing:	
Subregional Planning Group:	CCPG

Purpose of Project: Provide ability to move geographically diversion resources across Tri-State four-state service area

Project Driver (Primary):	Generation
Project Driver (Secondary):	

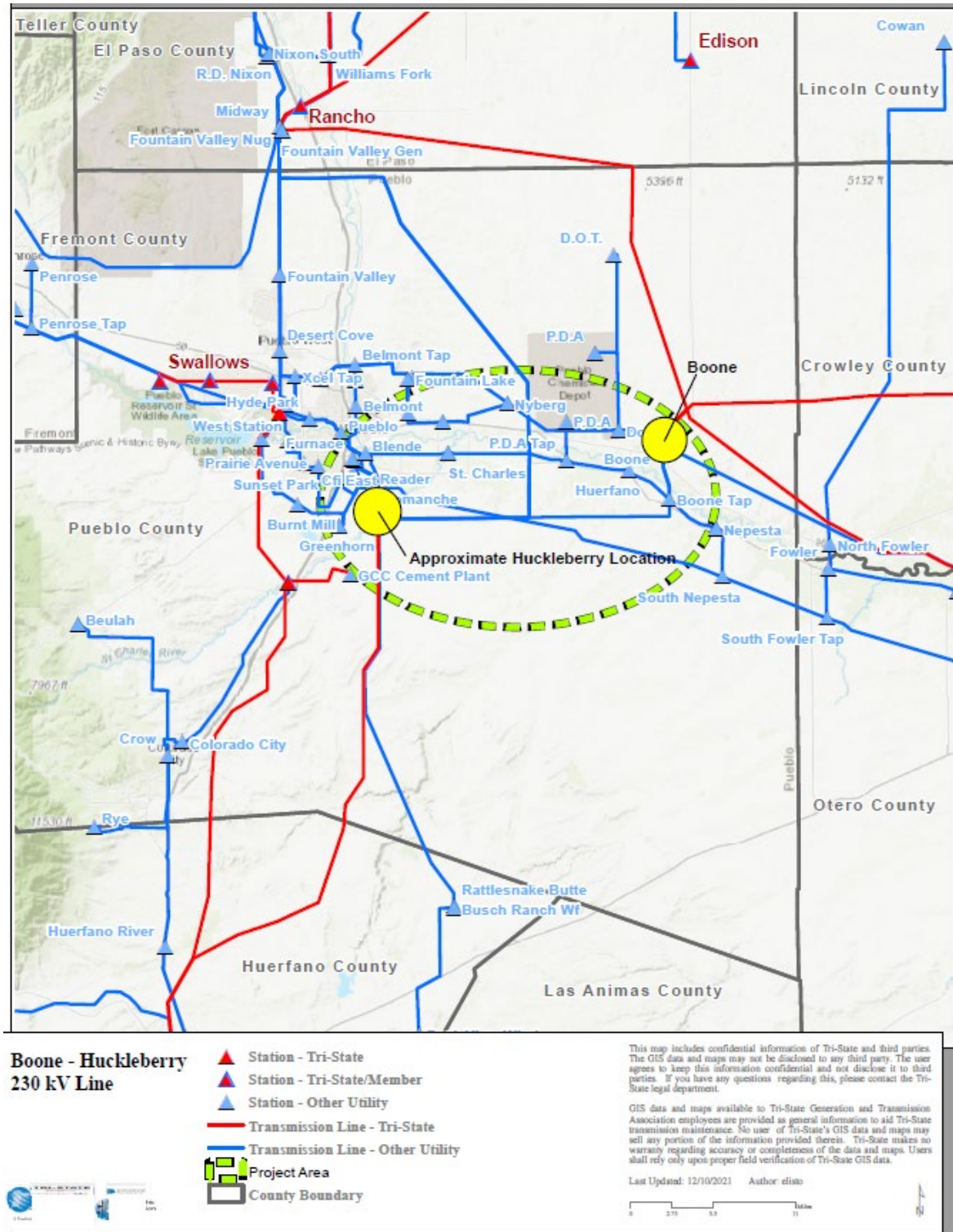
Estimated Cost (in 2021 Dollars): \$48,160,000

Schedule:

Construction Date:	2024
Planned In-Service Date:	2026
Regulatory Info:	CPCN Granted (Decision No. R22-0533)
Regulatory Date:	September 9, 2022
Permitting Info:	
Permitting Date:	

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Tri-State Generation and Transmission Association
2026-2036 Transmission Plan
Crosspoint 230/69kV Delivery Point

Project Sponsor: Tri-State Generation and Transmission Association

Additional Project Participants:

Project Description: Construct a new 230/69 kV Cross Point substation

This project will build a new 230/69kV substation that will interconnect to and sectionalize Tri-State's existing Lincoln-Midway 230kV line near Yoder, CO. This substation will tie into existing Tri-State Member owned 69kV sub-transmission that serves high growth communities to the east of Colorado Springs, CO. The existing Delivery Points that serve this 69kV system are reaching their capacities under contingency and would need significant upgrades to increase load serving. Additionally, it was becoming difficult to maintain adequate voltages at the ends of the 69kV system. Crosspoint will provide an additional Delivery Point to the area, which will substantially increase load serving and reliability. Note that this project has replaced Tri-State's previously planned Falcon-Paddock-Calhan 115kV project as it provides better performance at a reduced cost and without the need to construct additional transmission lines.

Voltage Class:	230/69 kV
Facility Rating:	
Point of Origin/Location:	Yoder, CO
Point of Termination:	
Intermediate Points:	
Length of Line (in Miles):	
Type of Project:	Substation
Development Status:	Under Construction
Routing:	
Subregional Planning Group:	

Purpose of Project: Improve load-serving capability

Project Driver (Primary):	Load Serving
Project Driver (Secondary):	Reliability

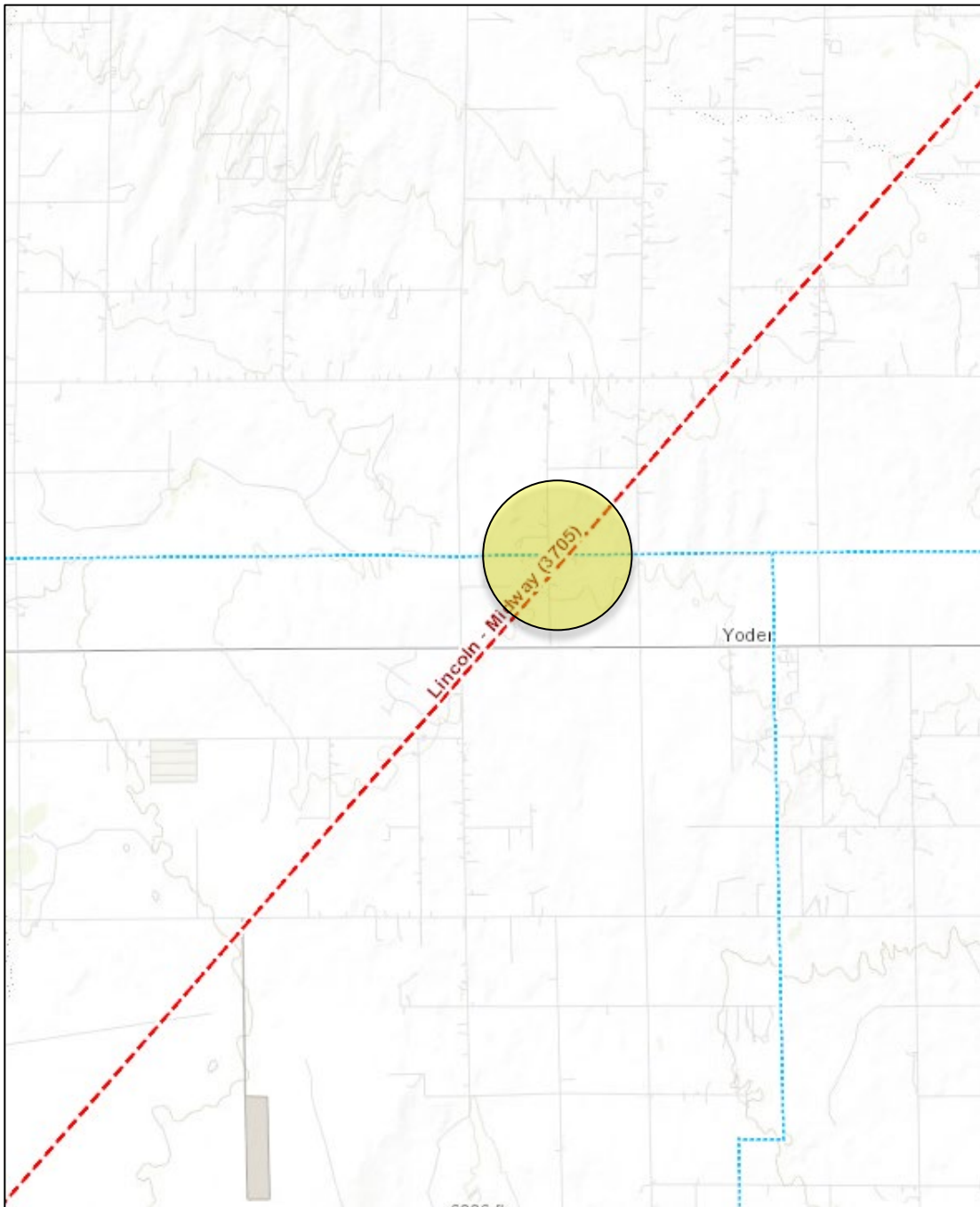
Estimated Cost (in 2021 Dollars): \$22,417,000

Schedule:

Construction Date:	2027
Planned In-Service Date:	2027
Regulatory Info:	CPCN Granted (Decision No. C24-0428)
Regulatory Date:	
Permitting Info:	
Permitting Date:	

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Tri-State Generation and Transmission Association
2026-2036 Transmission Plan
Rolling Meadows 115 kV Delivery Point

Project Sponsor: Tri-State Generation and Transmission Association

Additional Project Participants:

Project Description: Construct a 115 kV Delivery Point for MVEA

This project consists of a newly constructed 115/12.47kV substation interconnecting to Tri-State's existing Geesen-Lorson Ranch 115kV line near Colorado Springs, CO. This substation is needed to serve a new housing development and associated infrastructure.

Voltage Class: 115 kV
 Facility Rating:
 Point of Origin/Location: El Paso County, CO
 Point of Termination:
 Intermediate Points:
 Length of Line (in Miles):
 Type of Project: Substation
 Development Status: Under Construction
 Routing:
 Subregional Planning Group: CCPG

Purpose of Project: Improve load-serving capability

Project Driver (Primary): Load Serving
 Project Driver (Secondary):

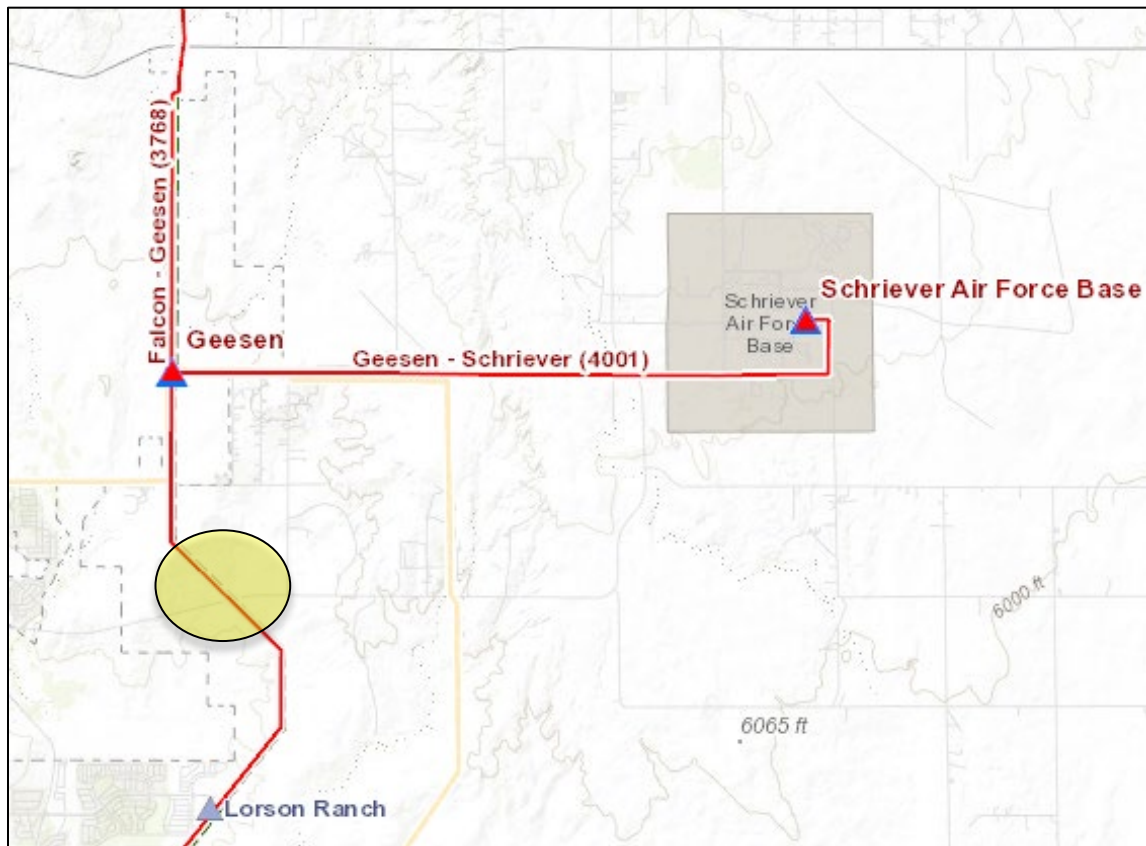
Estimated Cost (in 2021 Dollars): \$8,911,000

Schedule:

Construction Date: 2023
 Planned In-Service Date: 2027
 Regulatory Info: CPCN Not Required (Decision No. C23-0810)
 Regulatory Date:
 Permitting Info:
 Permitting Date:

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Tri-State Generation and Transmission Association
2026-2036 Transmission Plan
San Luis Valley-Poncha 230 kV Line #2

Project Sponsor: Tri-State Generation and Transmission Association
Additional Project Participants: Xcel Energy
Project Description: Construct a second 230 kV transmission line from San Luis Valley to Poncha.

New high-voltage transmission must be built in the San Luis Valley (SLV) region of south-central Colorado to restore electric system reliability and customer load-serving capability, and to accommodate development of potential generation resources. Tri-State Generation and Transmission (Tri-State) and Public Service Company of Colorado (Public Service) facilitated a study effort through the Colorado Coordinated Planning Group (CCPG) to perform an evaluation of the transmission system immediately in and around the SLV and develop system alternatives that would improve the transmission system between the SLV and Poncha Springs (Poncha), Colo. Both Tri-State and Public Service have electric customer loads in the SLV region that are served radially from transmission that originates at or near Poncha. The study concluded that, at a minimum, an additional 230 kV line is needed to increase system reliability. Studies show that this could be accomplished by either adding a new 230 kV line or rebuilding an existing lower voltage line to and operating it at 230 kV. This conceptual project is being reevaluated in the CCPG San Luis Valley Subcommittee to explore alternatives to 230 kV transmission development.

Voltage Class:	230 kV
Facility Rating:	631 MVA
Point of Origin/Location:	San Luis Valley
Point of Termination:	Poncha
Intermediate Points:	
Length of Line (in Miles):	62
Type of Project:	Transmission Line
Development Status:	Re-development
Routing:	
Subregional Planning Group:	CCPG

Purpose of Project: Provide reliable and adequate load support to San Luis Valley

Project Driver (Primary): Reliability
 Project Driver (Secondary):

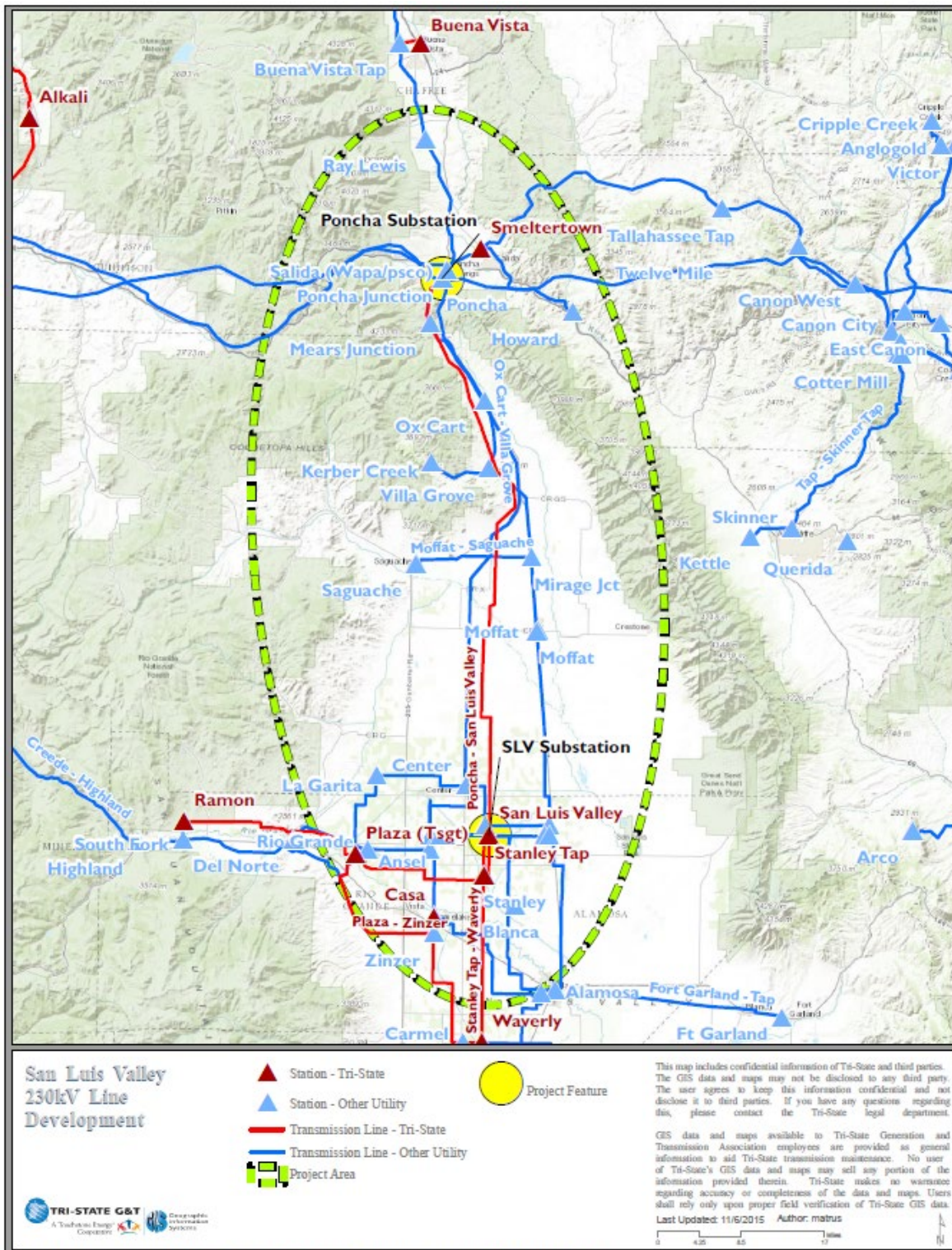
Estimated Cost: TBD

Schedule:

Construction Date:	
Planned In-Service Date:	TBD
Regulatory Info:	
Regulatory Date:	
Permitting Info:	
Permitting Date:	

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Tri-State Generation and Transmission Association 2026-2036 Transmission Plan Slater Double Circuit Conversion

Project Sponsor: Tri-State Generation and Transmission Association

Additional Project Participants:

Project Description: Rebuild the Del Camino Tap – Slater 115 kV line as a double circuit line, creating separate Slater-Meadow and Slater-Longs Peak 115 kV lines.

This project will rebuild the Del Camino Tap – Slater 115 kV line as a double circuit line. This will result in the removal of the three-terminal line between Longs Peak, Meadow, and Slater substations, and the creation of separate Longs Peak – Slater and Meadow – Slater 115 kV lines. The project will increase reliability on the area transmission system and improve operational and maintenance challenges.

Voltage Class: 115 kV
 Facility Rating: 244 MVA
 Point of Origin/Location: Del Camino Tap
 Point of Termination: Slater
 Intermediate Points:
 Length of Line (in Miles): 1.6
 Type of Project: Transmission Line
 Development Status: Under Construction
 Routing:
 Subregional Planning Group: CCPG

Purpose of Project: Remove three-terminal line between Slater, Longs Peak, and Meadow.

Project Driver (Primary): Reliability
 Project Driver (Secondary): Load Serving

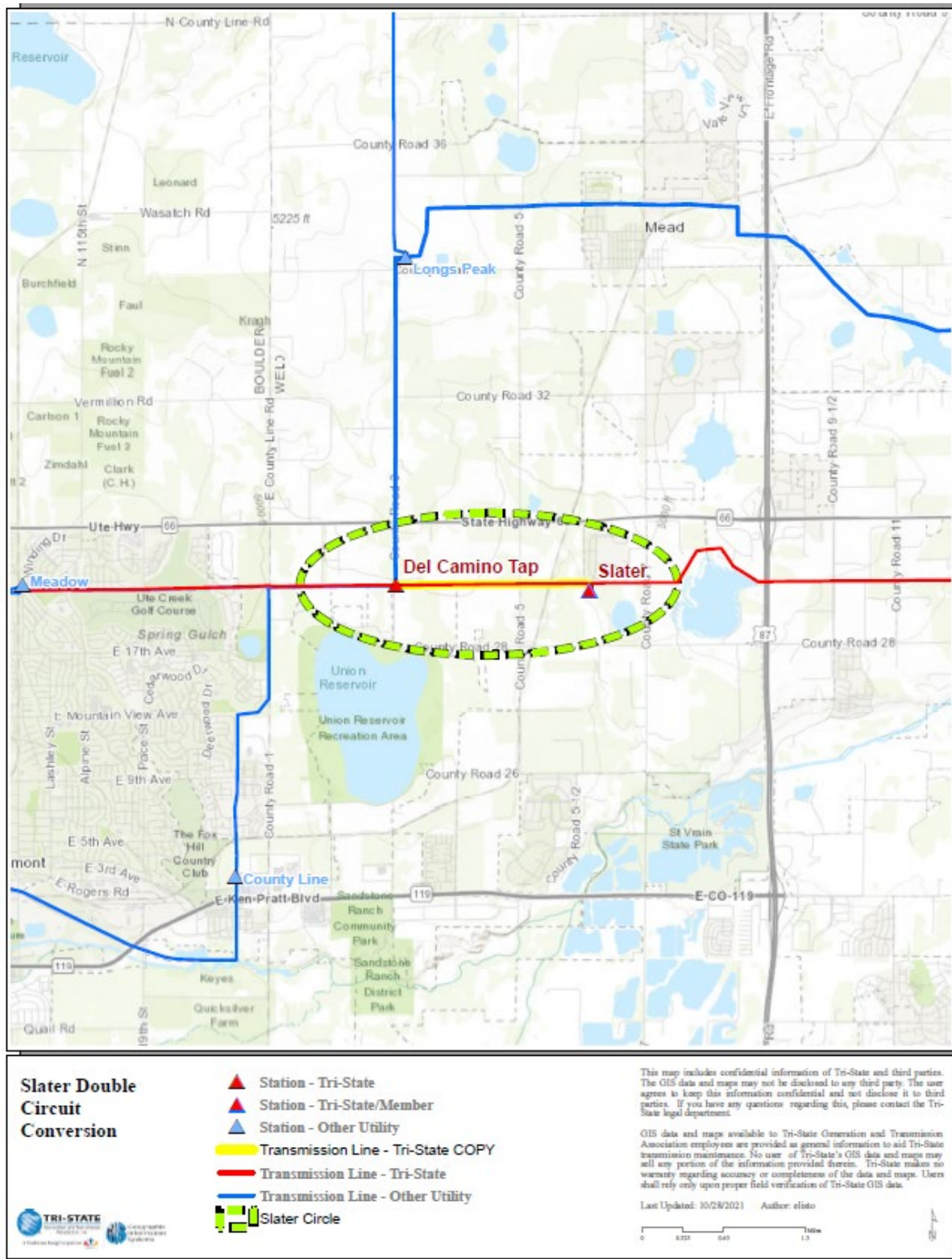
Estimated Cost (in 2021 Dollars): \$7,311,000

Schedule:

Construction Date: 2025
 Planned In-Service Date: 2026
 Regulatory Info: CPCN Not Required (Decision No. C21-0437)
 Regulatory Date:
 Permitting Info:
 Permitting Date:

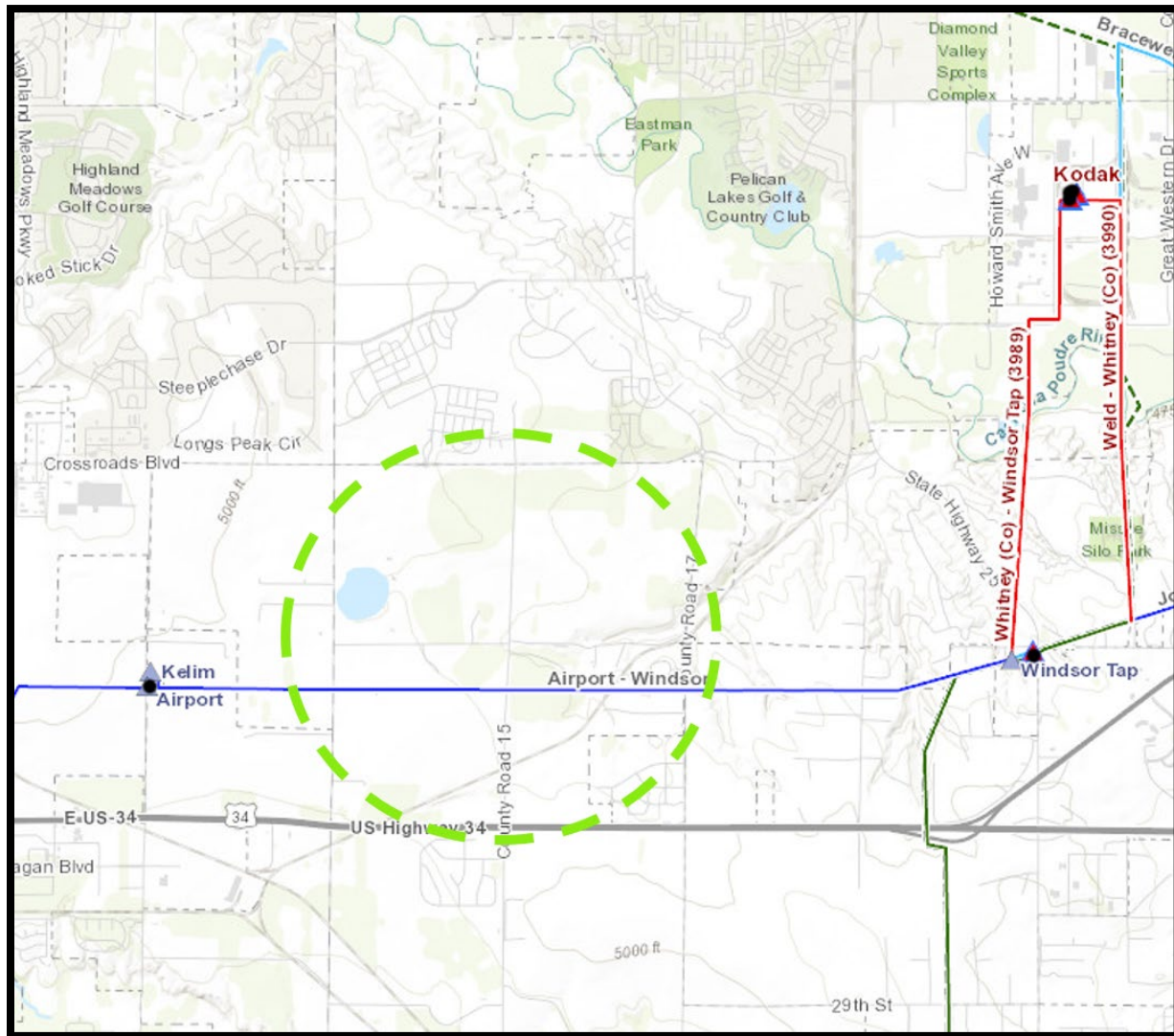
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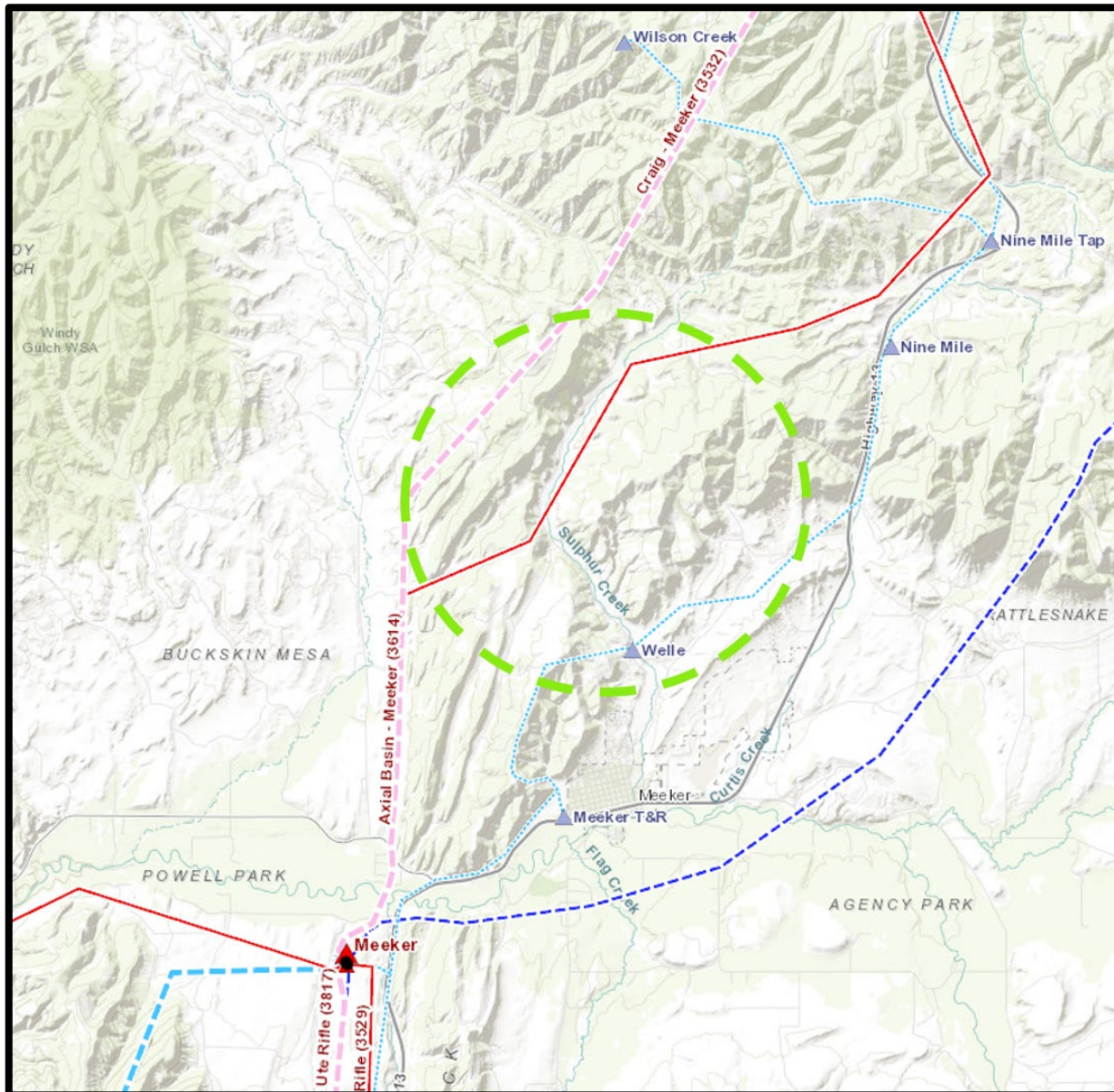
Tri-State Generation and Transmission Association
2026-2036 Transmission Plan
Iron Mountain 115 kV Delivery Point

Project Sponsor:	Tri-State Generation and Transmission Association
Additional Project Participants:	
Project Description:	New 115/12.47 kV DP located on WAPA’s Airport – Windsor Tap - Whitney 115 kV line. Project to include a four-breaker ring 115 kV bus design (three breakers initially installed) and a 115-12.47 kV, 24/32/40 MVA transformer.
Voltage Class:	115 kV
Facility Rating:	
Point of Origin/Location:	Weld County, CO
Point of Termination:	
Intermediate Points:	
Length of Line (in Miles):	
Type of Project:	Substation
Development Status:	Under Construction
Routing:	
Subregional Planning Group:	CCPG
Purpose of Project:	Rapid Area growth between Loveland and Windsor with additional proposed developments in the area include approximately 20 MVA of load to be added in the next 3-4 years. This project is intended to accommodate load growth and increase load serving reliability in the area.
Project Driver (Primary):	Load Serving
Project Driver (Secondary):	
Estimated Cost (in 2024 Dollars):	\$15,130,000
Schedule:	
Construction Date:	2025
Planned In-Service Date:	2026
Regulatory Info:	
Regulatory Date:	
Permitting Info:	
Permitting Date:	
Contact Information:	
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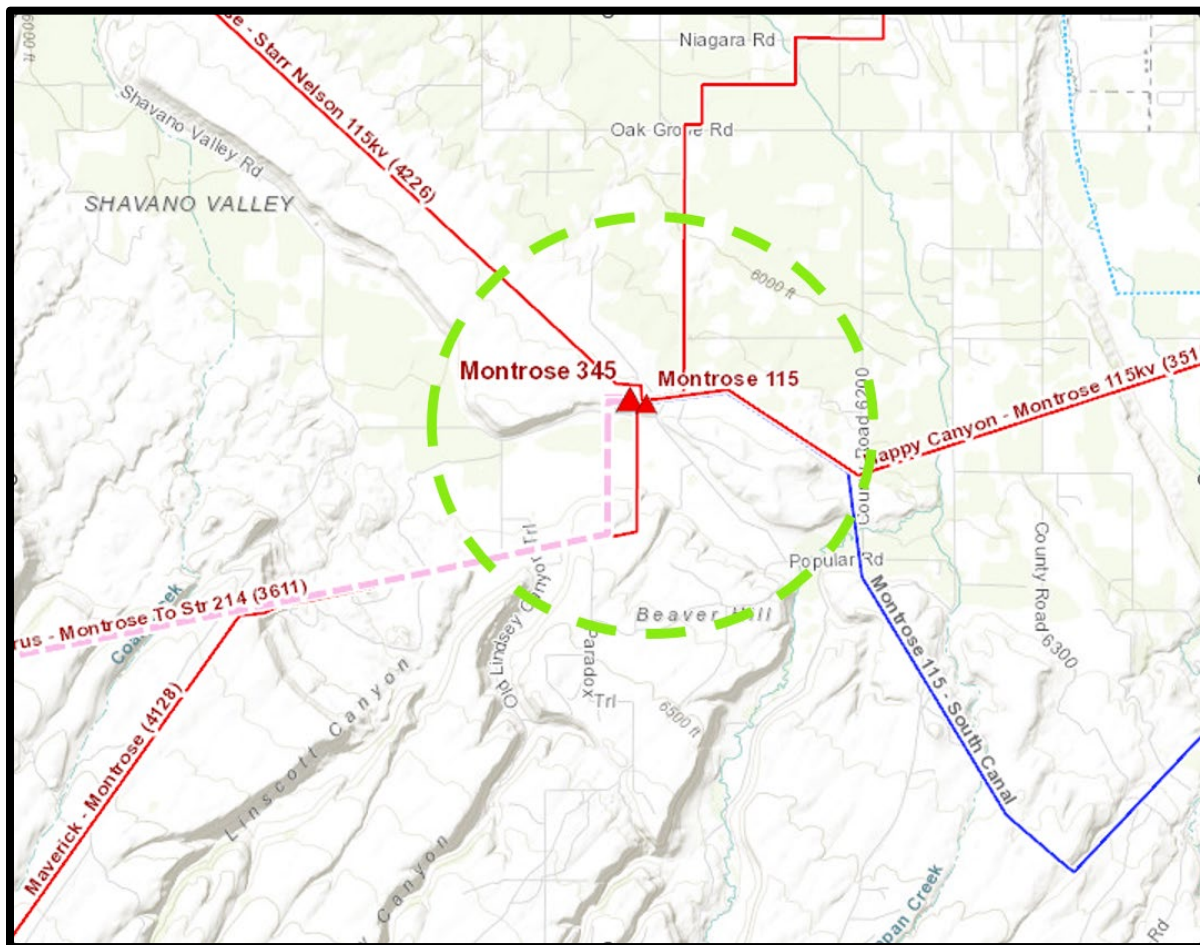
Tri-State Generation and Transmission Association
2026-2036 Transmission Plan
Sulfur Creek 138 kV Delivery Point

Project Sponsor:	Tri-State Generation and Transmission Association
Additional Project Participants:	
Project Description:	This project consists of tapping Tri-State’s 138kV Axial Basin – Meeker transmission line approximately 7.5 miles northeast of the Meeker Substation and installing a tap station to serve White River Electric Association’s new 138 kV feed out of the Welle Substation.
Voltage Class:	138 kV
Facility Rating:	
Point of Origin/Location:	Meeker, CO
Point of Termination:	
Intermediate Points:	
Length of Line (in Miles):	
Type of Project:	Substation
Development Status:	Planned
Routing:	
Subregional Planning Group:	CCPG
Purpose of Project:	This will improve reliability to the member, White River Electric Association, as it will be able to retire over 17 miles of aging transmission between Welle and Axial Basin.
Project Driver (Primary):	Load Serving
Project Driver (Secondary):	
Estimated Cost (in 2025 Dollars):	\$6,375,000
Schedule:	
Construction Date:	2027
Planned In-Service Date:	2027
Regulatory Info:	
Regulatory Date:	
Permitting Info:	
Permitting Date:	
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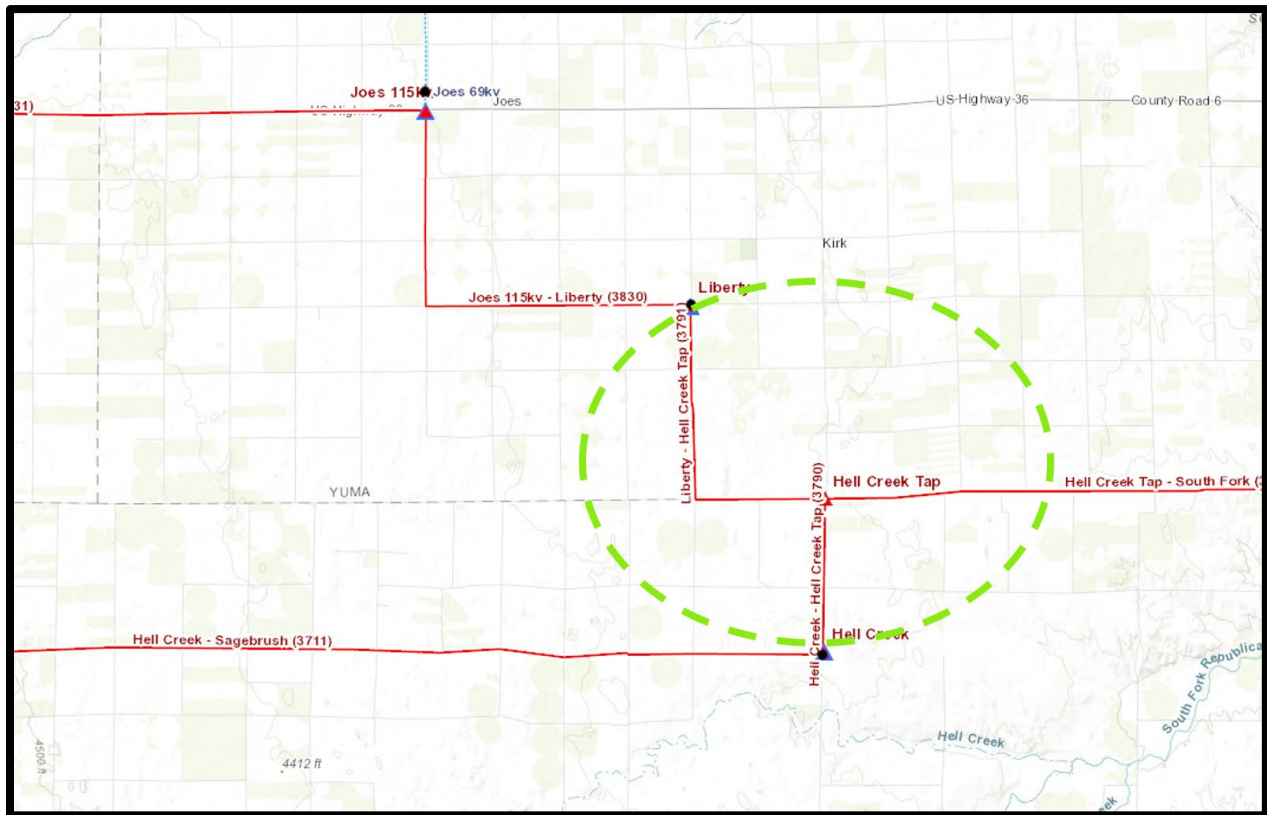
Tri-State Generation and Transmission Association
2026-2036 Transmission Plan
Montrose 115 kV Interconnect
 (High Country BESS Interconnect)

Project Sponsor:	Tri-State Generation and Transmission Association
Additional Project Participants:	
Project Description:	Construct a 115 kV line bay and bus sectionalizing breaker at the existing Montrose 115 kV Substation to accommodate Battery Energy Storage System (BESS), a 100 MW BESS project.
Voltage Class:	115 kV
Facility Rating:	
Point of Origin/Location:	Montrose, CO
Point of Termination:	
Intermediate Points:	
Length of Line (in Miles):	
Type of Project:	Substation Upgrade
Development Status:	Under Construction
Routing:	
Subregional Planning Group:	
Purpose of Project:	This project is required to connect the High Country BESS project to Tri-State's transmission system.
Project Driver (Primary):	Generation
Project Driver (Secondary):	
Estimated Cost (in 2025 Dollars):	\$5,340,206
Schedule:	
Construction Date:	2025
Planned In-Service Date:	2026
Regulatory Info:	
Regulatory Date:	
Permitting Info:	
Permitting Date:	
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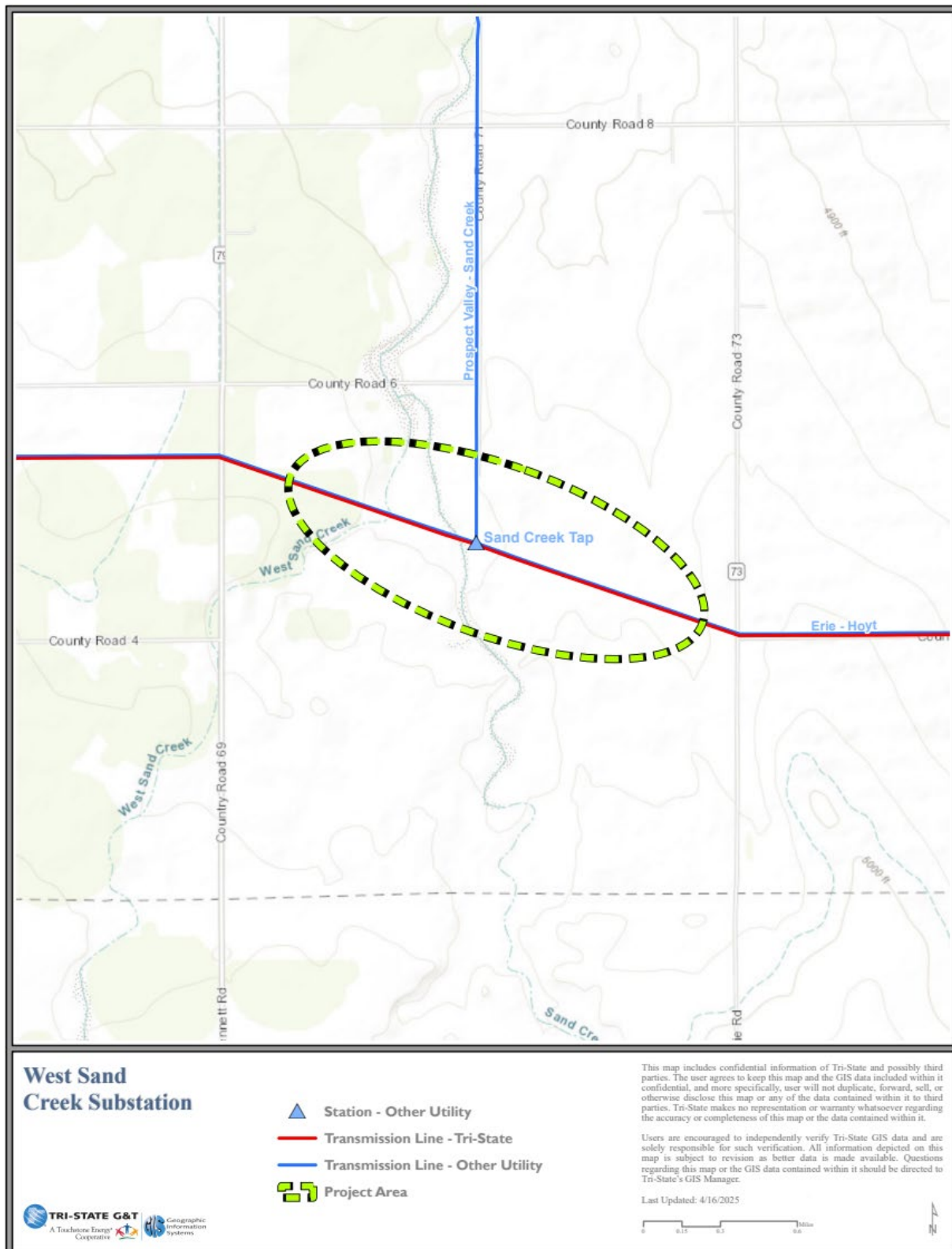
Tri-State Generation and Transmission Association
2026-2036 Transmission Plan
Eastern Colorado Energy Center Interconnect

Project Sponsor:	Tri-State Generation and Transmission Association
Additional Project Participants:	
Project Description:	The interconnection facilities will consist of rebuilding the existing Hell Creek Tap to a new 115 kV 4 breaker ring bus with associated switches.
Voltage Class:	115 kV
Facility Rating:	
Point of Origin/Location:	Kit Carson County, CO
Point of Termination:	
Intermediate Points:	
Length of Line (in Miles):	
Type of Project:	Generator Interconnection
Development Status:	Planned
Routing:	
Subregional Planning Group:	
Purpose of Project:	This project is required to connect the Eastern Colorado Energy Center Project, a 90 MW interconnection solar/storage project, to Tri-State's transmission system.
Project Driver (Primary):	Generator
Project Driver (Secondary):	
Estimated Cost (in 2025 Dollars):	\$16,500,000
Schedule:	
Construction Date:	2027
Planned In-Service Date:	2028
Regulatory Info:	
Regulatory Date:	
Permitting Info:	
Permitting Date:	
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Tri-State Generation and Transmission Association
2026-2036 Transmission Plan
West Sand Creek Interconnect

Project Sponsor:	Tri-State Generation and Transmission Association
Additional Project Participants:	
Project Description:	The interconnection facilities will consist of a new 230 kV three breaker ring substation.
Voltage Class:	230 kV
Facility Rating:	
Point of Origin/Location:	Weld County, CO
Point of Termination:	
Intermediate Points:	
Length of Line (in Miles):	
Type of Project:	Generator Interconnection
Development Status:	Planned
Routing:	
Subregional Planning Group:	
Purpose of Project:	This project is required to connect the Prospect Solar project, a 199 MW Solar and 100 MW BESS project, to Tri-State's transmission system.
Project Driver (Primary):	Generator
Project Driver (Secondary):	
Estimated Cost (in 2025 Dollars):	\$19,368,000
Schedule:	
Construction Date:	2028
Planned In-Service Date:	2030
Regulatory Info:	
Regulatory Date:	
Permitting Info:	
Permitting Date:	
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Tri-State Generation and Transmission Association
Southwest Power Pool 2024 ITP Project
Informational: Sidney – Holcomb 345 kV Line

Project Sponsor: Southwest Power Pool
Designated Transmission Owners: Tri-State Generation and Transmission Association, Sunflower Electric Power Corporation, Basin Electric Power Cooperative
Project Description: Build a new 345 kV single circuit line from Sidney, NE to Holcomb, KS and upgrade any necessary terminal equipment to achieve a summer normal rating of 1792 MVA.

Voltage Class: 345 kV
 Facility Rating: 1792 MVA
 Point of Origin/Location: Sidney, NE
 Point of Termination: Holcomb, KS
 Intermediate Points:
 Length of Line (in Miles): 360
 Type of Project: Transmission Line
 Development Status: Planned
 Routing:
 Subregional Planning Group: N/A

Purpose of Project: In the 2024 Southwest Power Pool (SPP) Integrated Transmission Plan (ITP), SPP identified a critical need to strengthen the regional transmission grid following severe winter storms such as Winter Storm Uri (2021) and Winter Storm Elliott (2022). These weather events highlighted vulnerabilities in the grid during prolonged cold weather conditions and underscored the importance of increased transmission capacity and resiliency.

To address these challenges, SPP directed Tri-State and partnering utilities to develop an approximately 360 mile long, new 345 kV transmission line extending from Holcomb, Kansas to Sidney, Nebraska.

Project Driver (Primary): Reliability
 Project Driver (Secondary): Economic

Estimated Project Cost (in 2025 Dollars): \$1,050,598,691
 Tri-State Project Share: \$515,000,000

Schedule:
 Construction Date: 2029
 Planned In-Service Date: 2030
 Regulatory Info:
 Regulatory Date:
 Permitting Info:
 Permitting Date:

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