Appendix F

PSCo Project Summary (2020 through 2032)

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Ault-Cloverly 230/115 kV Transmission Project

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: Build approximately 20 miles of new 230/115 kV transmission and

three new substations.

Voltage Class: 230/115 kV Facility Rating: 220 MVA

Point of Origin/Location: Ault Substation
Point of Termination: Cloverly Substation

Intermediate Points: Husky Substation and Graham Creek substation

Length of Line (in Miles): 20.0

Type of Project: Transmission Line and Substation

Development Status: Planned

Routing:

Subregional Planning Group: CCPG

Purpose of Project: To increase reliability, load-serving capability and resource

interconnection in northeast Greeley.

Project Driver (Primary): Reliability

Project Driver (Secondary): Load-serving capability and resource interconnection

Estimated Cost: \$84,700,000

Schedule:

Construction Date: TBD Planned In-Service Date: 2024

Regulatory Info: CPUC: CPUC Granted in Dec. Nos. R18-0153 and C19-0080,

Proceeding No. 17A-0146E

Regulatory Date:

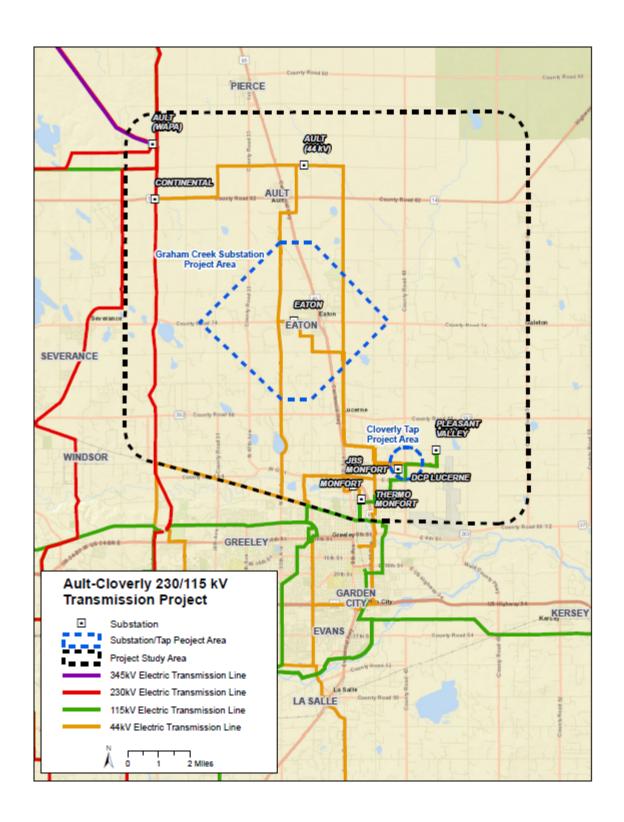
Permitting Info: Ongoing
Permitting Date: Ongoing

Contact Information:

Email PSCoPlanning@xcelenergy.com

Phone

Website Information http://www.transmission.xcelenergy.com/Projects/Colorado



Avery Substation

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: New distribution substation located in Weld County. The new

substation will tap Platte River Power Authority (PRPA) Timberline -

Carey 230kV transmission line.

Voltage Class: 230 kV Facility Rating: N/A

Point of Origin/Location: Avery Substation
Point of Termination: Avery Substation

Intermediate

Points: N/A

Length of Line (in Miles):

Type of Project: Substation
Development Status: Planned

Routing:

Subregional Planning Group: CCPG

Purpose of Project: Serve load growth in the Timnath area

Project Driver (Primary): Reliability

Project Driver (Secondary):

Estimated Cost: \$12,100,000

Schedule:

Construction Date: 2020 Planned In-Service Date: 2022

Regulatory Info: CPUC: CPCN granted in Decision No. C15-0461, Proceeding No. 15A-

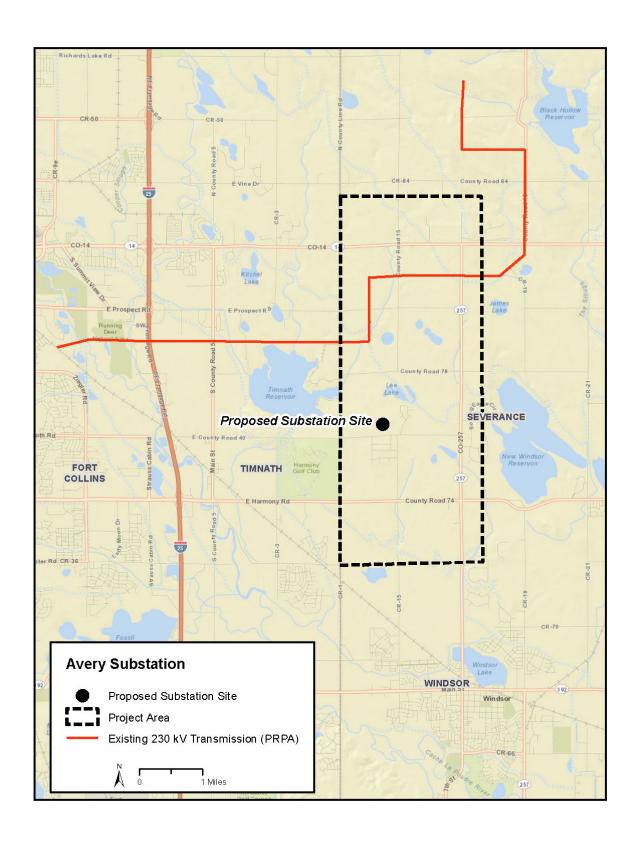
0159E

Regulatory Date: Permitting Info: Permitting Date:

Contact Information:

Email Phone

Website Information http://www.transmission.xcelenergy.com/Projects/Colorado



Avon - Gilman 115 kV Transmission Line

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: New 115 kV line between Avon and Gilman substations. Also

includes a new capacitor bank installation at Vail Substation. Line would be operated normally open, but used for emergency backup.

Voltage Class: 115 kV Facility Rating: 159 MVA

Point of Origin/Location: Gilman Substation
Point of Termination: Avon Substation

Intermediate Points:

Length of Line (in Miles): 10.0

Type of Project: Transmission line

Development Status: Planned

Routing:

Subregional Planning Group: CCPG

Purpose of Project: Improve reliability of the HCEA system

Project Driver (Primary): Reliability

Project Driver (Secondary):

Estimated Cost: \$11,400,000

Schedule:

Construction Date:

Planned In-Service Date: 2024

Regulatory Info: CPUC: No CPCN required for this project pursuant to Decision No.

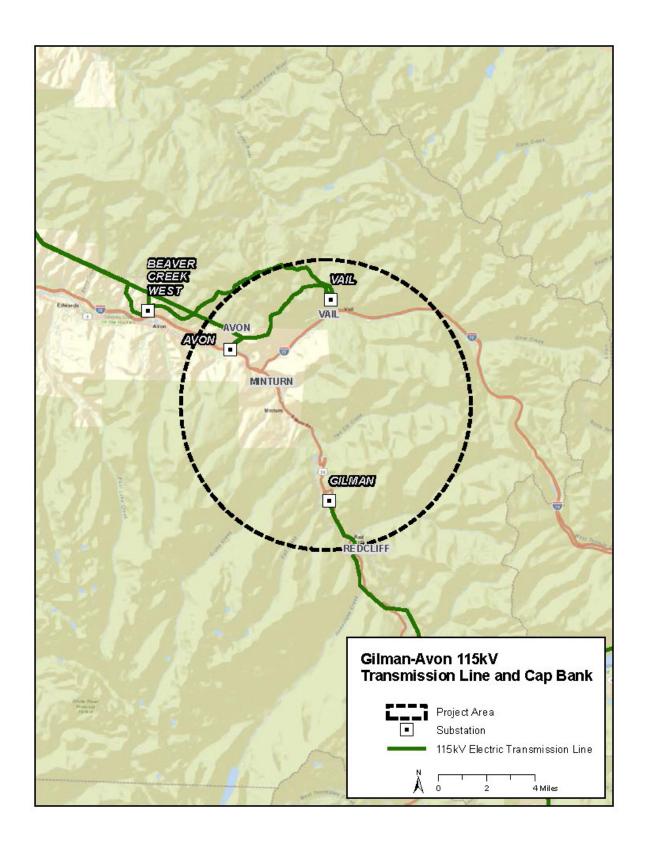
C15-0590, Proceeding No. 15M-0043E

Regulatory Date: Permitting Info: Permitting Date:

Contact Information:

Email <u>PSCoPlanning@xcelenergy.com</u>

Phone



Bluestone Substation

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: Phase- I: Bluestone Valley 69 kV Switching station tapping the

DeBeque - Cameo 69 kV line.

Phase- II: The 230kV portion of the Bluestone Valley Substation project will include tapping the Rifle – Parachute 230 kV line and installing a 230/69 kV transformer to interconnect the 230 kV and 69

kV voltages.

Voltage Class: Phase-I: 69 kV, Phase-II: 230 kV

Facility Rating: N/A

Point of Origin/Location: Phase-I: Bluestone Valley Substation

Phase-II: Bluestone Valley Substation

Point of Termination: Phase-I: Bluestone Valley Substation

Phase-II: Bluestone Valley Substation

Intermediate Points:

Length of Line (in Miles):

Type of Project: Substation

Development Status: Phase – I: Completed 2019, Phase – II Conceptual

Routing:

Subregional Planning Group: CCPG

Purpose of Project: Phase – I: improve reliability of the 69 kV system.

Phase – II: Provide load service for PSCo and improve reliability of

Grand Valley Power (GVP) customers in the area.

Project Driver (Primary): Phase-I: Reliability

Project Driver (Secondary): Phase-II: Load service and reliability

Estimated Cost: Phase-I: \$12,000,000 Phase-2: \$16,100,000

Schedule:

Construction Date:

Planned In-Service Date: Phase-I: 2019, Phase-II: 2023

Regulatory Info: CPUC: No CPCN required, Decision No.C09-0681, Proceeding

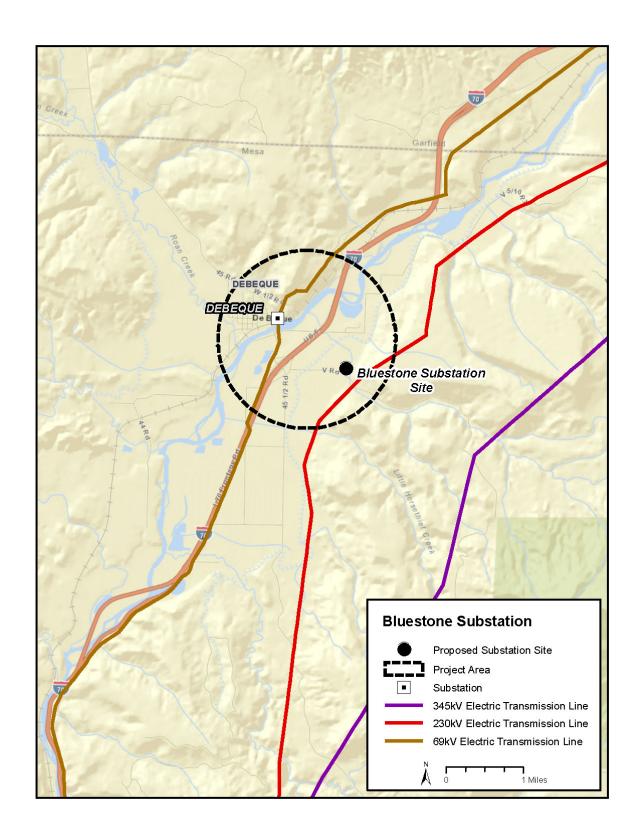
No.09M-392E

Regulatory Date: Permitting Info:

Permitting Date: Contact Information:

Email PSCoPlanning@xcelenergy.com

Phone



Carbondale – Crystal Transmission

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants: Holy Cross Energy

Project Description: New 115 kV transmission line between Carbondale and Crystal

substations.

Voltage Class: 115 kV Facility Rating: TBD

Point of Origin/Location: Carbondale Point of Termination: Crystal

Intermediate Points: Length of Line (in Miles):

Type of Project: Transmission line

Development Status: Conceptual

Routing:

Subregional Planning Group: CCPG

Purpose of Project:

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

Estimated Cost: TBD

Schedule:

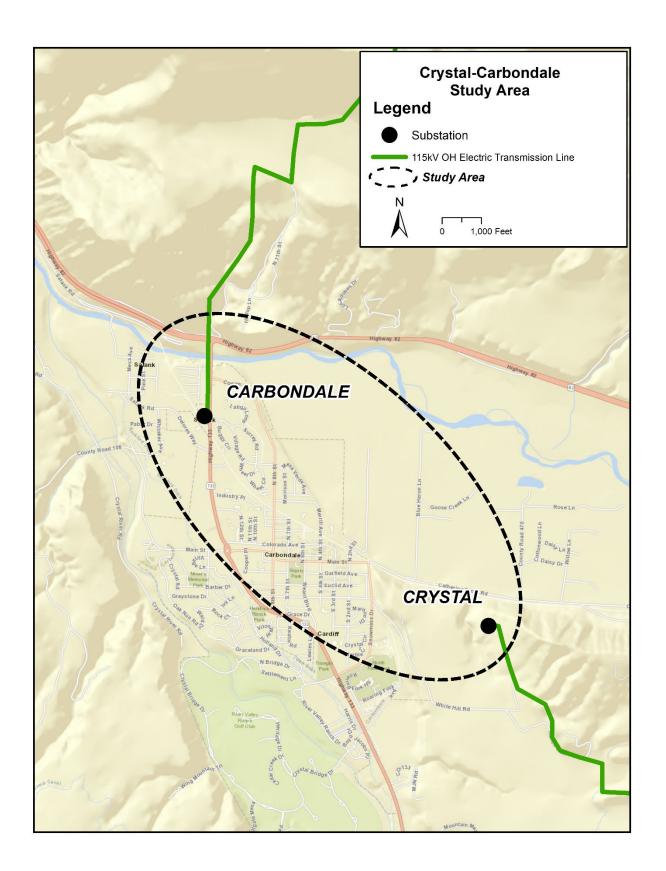
Construction Date: TBD Planned In-Service Date: TBD

Regulatory Info: Regulatory Date: Permitting Info: Permitting Date:

Contact Information:

Email <u>PSCoPlanning@xcelenergy.com</u>

Phone



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Tundra Switching Station (Formerly CEPP Switching Station Bid X645)

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: Construct new 345 kV switching station to integrate generation

Voltage Class: 345 kV

Facility Rating:

Point of Origin/Location: 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: Accommodate future interconnections of renewables.

Project Driver (Primary): Generation

Project Driver (Secondary):

Estimated Cost: \$22,900,000

Schedule:

Construction Date:

Planned In-Service Date: 2022

Regulatory Info: CPUC: CPCN required, Decision No. C18-0761, Proceeding No. 16A-

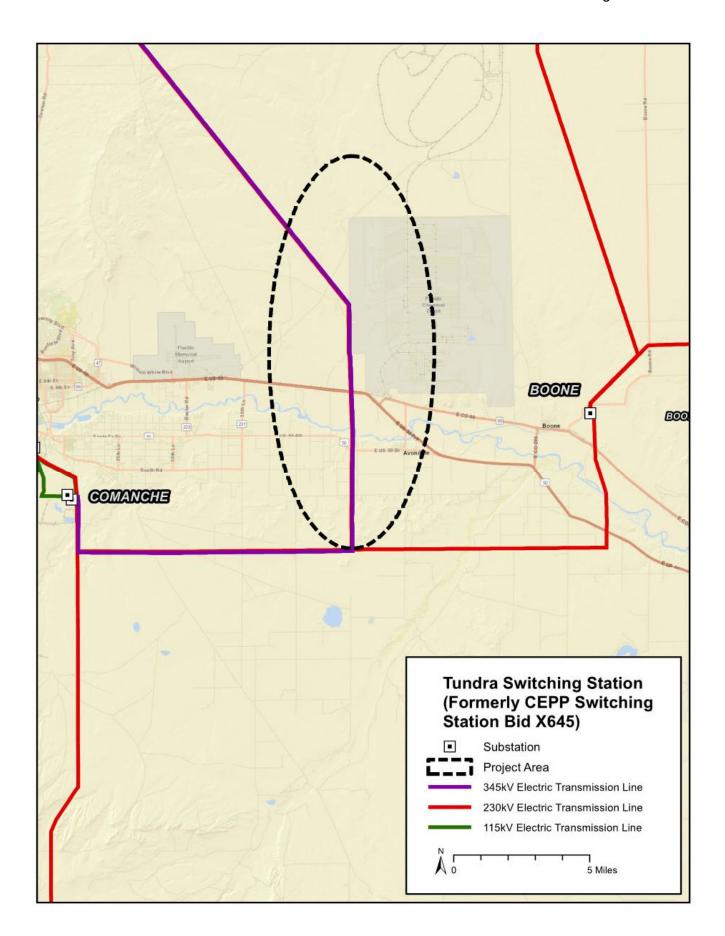
0396E

Regulatory Date:
Permitting Info:
Permitting Date:

Contact Information:

Email <u>PSCoPlanning@xcelenergy.com</u>

Phone



CEPP Transmission Service Network Upgrades

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: Network upgrades for the interconnection of CEPP bid 056,

including reconductoring the 230 kV Daniels Park - Prairie line and

upgrading the transformer at Midway.

Voltage Class: Various

Facility Rating:

Point of Origin/Location: Point of Termination: Intermediate Points: Length of Line (in Miles):

Type of Project:

Development Status: Planned

Routing:

Subregional Planning Group: CCPG

Purpose of Project: Accommodate CEP portfolio of generation.

Project Driver (Primary): Generation

Project Driver (Secondary):

Estimated Cost: \$15,700,000

Schedule:

Construction Date:

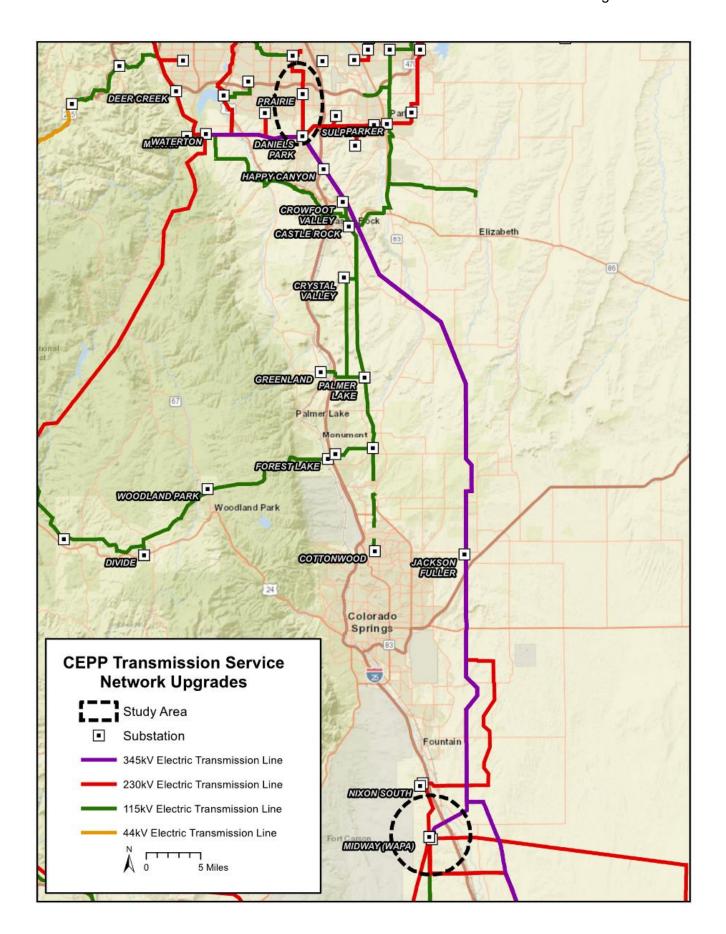
Planned In-Service Date: 2023

Regulatory Info: Regulatory Date: Permitting Info: Permitting Date:

Contact Information:

Email <u>PSCoPlanning@xcelenergy.com</u>

Phone



CEPP Voltage/Reactive Support

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: A series of voltage control devices required to accommodate the

Company's CEP portfolio of generation.

Voltage Class: Various

Facility Rating:

Point of Origin/Location: 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: Accommodate CEP portfolio of generation.

Project Driver (Primary):

Generation Project Driver (Secondary):

Estimated Cost: \$79,400,000

Schedule:

Construction Date:

Planned In-Service Date: 2024

CPUC: CPCN required, Decision No. C20-0648, Proceeding No. 19A-Regulatory Info:

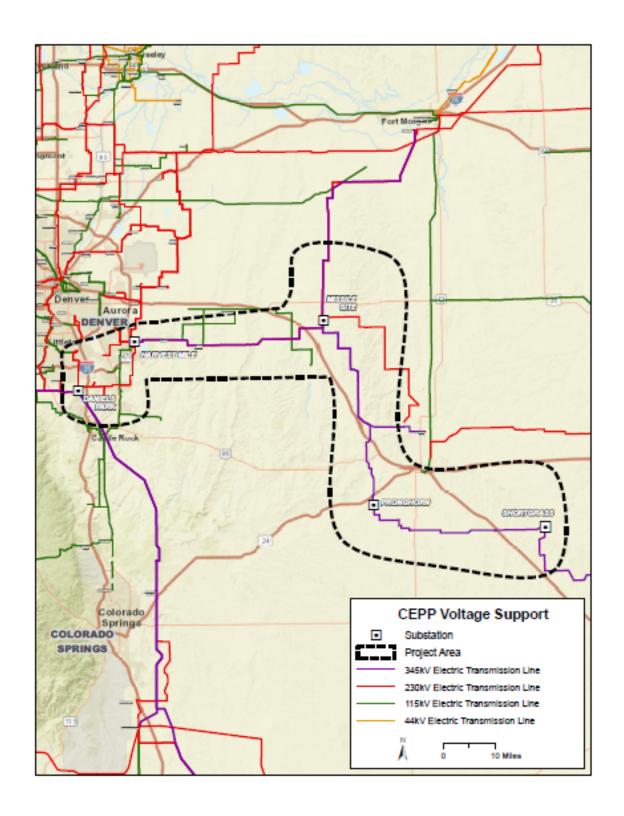
0728E

Regulatory Date: Permitting Info: Permitting Date:

Contact Information:

Email PSCoPlanning@xcelenergy.com

Phone



Colorado Power Pathway (with Optional Segment)

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: 345 kV transmission built out to Southeast Colorado to access

renewable energy in the region.

Voltage Class: 345 kV

Facility Rating: 3000-3500 MW

Point of Origin/Location: May Valley/Longhorn

Point of Termination: Harvest Mile, Fort St. Vrain

Intermediate Points: Tundra, Pawnee, Canal Crossing, Goose Creek

Length of Line (in Miles): 550

Type of Project: Transmission lines and substations

Development Status: Planned

Routing:

Subregional Planning Group: CCPG

Purpose of Project: Assist in reaching goal of 80% carbon emissions reduction from

2005 levels by 2030.

Project Driver (Primary): Generation

Project Driver (Secondary):

Estimated Cost: \$1,700,000,000 (\$2,100,000,000 with extension)

Schedule:

Construction Date:

Planned In-Service Date: 2027

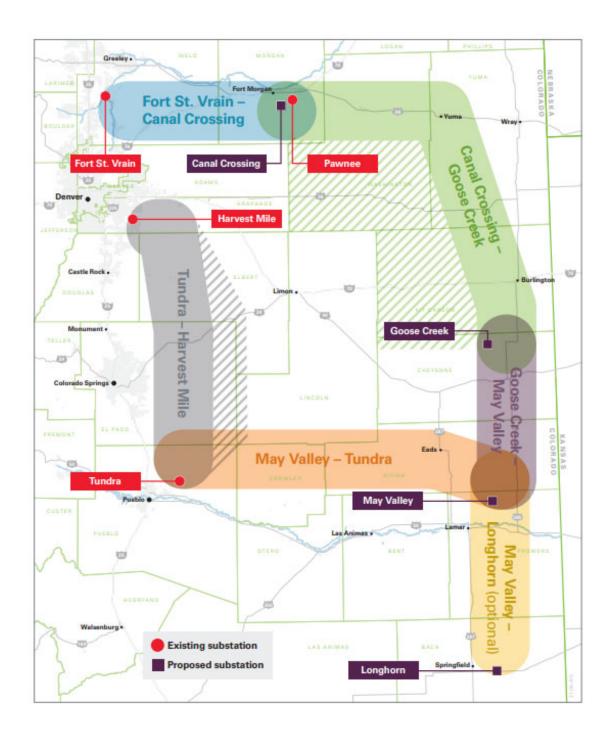
Regulatory Info: Proceeding No. 21A-0096E

Regulatory Date: Permitting Info: Permitting Date:

Contact Information:

Email <u>PSCoPlanning@xcelenergy.com</u>

Phone



Comanche Substation – Generation Interconnect (CEPP bid 077)

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: Upgrades to Comanche substation to accommodate the Company's

CEP portfolio of generation.

Voltage Class: Various

Facility Rating:

Point of Origin/Location: Point of Termination: Intermediate Points: Length of Line (in Miles):

Type of Project:

Development Status: Planned

Routing:

Subregional Planning Group: CCPG

Purpose of Project: Accommodate CEP portfolio of generation

Project Driver (Primary): Generation

Project Driver (Secondary):

Estimated Cost: \$1,800,000

Schedule:

Construction Date:

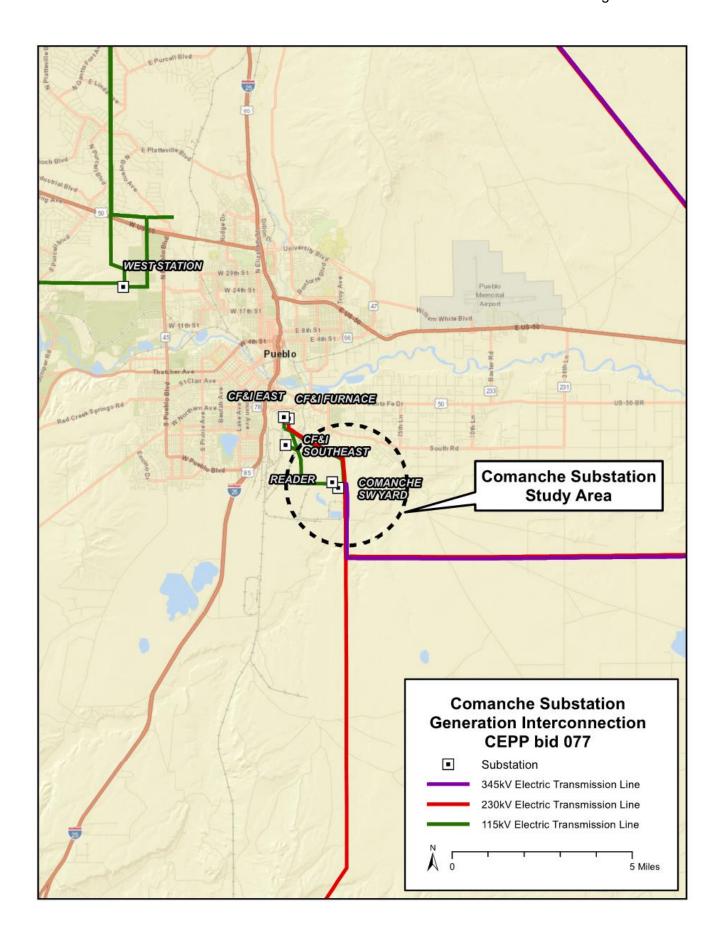
Planned In-Service Date: 2022

Regulatory Info: Regulatory Date: Permitting Info: Permitting Date:

Contact Information:

Email <u>PSCoPlanning@xcelenergy.com</u>

Phone



Denver Metro Area Upgrades

Project Sponsor:	Public Service	Company of C	olorado/ X	(cel Energy
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Additional Project Participants:

Project Description: A series of voltage control devices required to accommodate the

Company's CEP portfolio of generation.

Voltage Class: Various

Facility Rating:

Point of Origin/Location: Point of Termination: Intermediate Points: Length of Line (in Miles):

Type of Project:

Development Status: Planned

Routing:

Subregional Planning Group: CCPG

Purpose of Project: Accommodate CEP portfolio of generation

Project Driver (Primary): Generation

Project Driver (Secondary):

Estimated Cost: TBD

Schedule:

Construction Date:

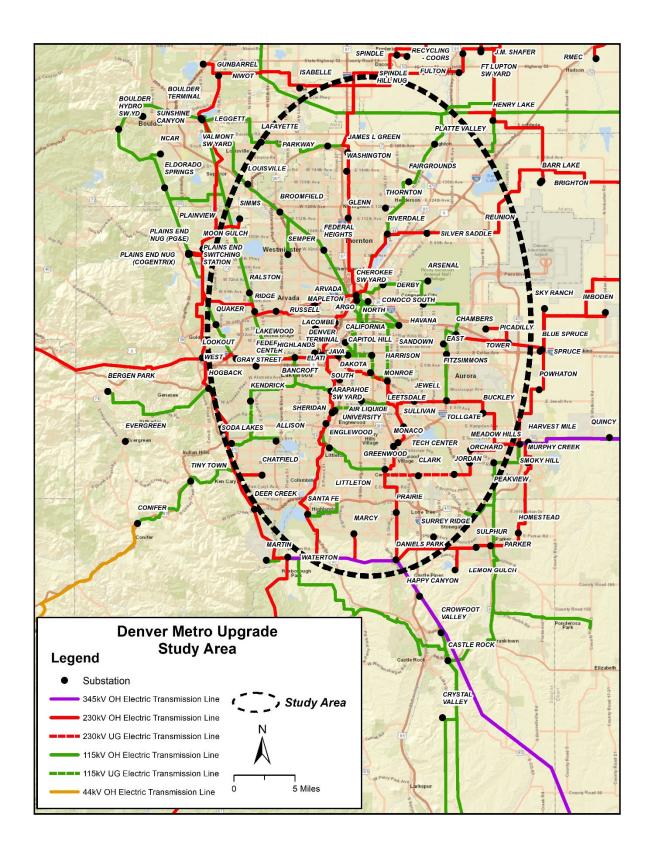
Planned In-Service Date: TBD

Regulatory Info: Regulatory Date: Permitting Info: Permitting Date:

Contact Information:

Email <u>PSCoPlanning@xcelenergy.com</u>

Phone



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Distribution Substations (Barker, Wilson, Waterton Expansion (formerly Titan), Dove Valley, High Point, Stock Show, New Castle, Solterra, Superior, Sandy Creek)

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: New distribution substations – Barker, Wilson, Waterton Expansion,

Dove Valley, High Point, Stock Show, New Castle, Solterra, Superior and Sandy Creek. These substations are driven by load growth. The transmission portion of the project includes an in-and-out line tap to interconnect the new distribution substation and the associated

equipment.

Voltage Class: Various Facility Rating: N/A

Point of Origin/Location: Corresponding distribution Substation
Point of Termination: Corresponding distribution Substation

Intermediate Points: Length of Line (in Miles):

Type of Project: Substation

Development Status: Barker, Titan, Dove Valley, High Point, Stock Show – Planned

New Castle, Solterra, Superior, Sandy Creek, Wilson - Conceptual

Purpose of Project: Load service.

Project Driver (Primary): Reliability

Project Driver (Secondary):

Estimated Cost: Wilson - TBD, Barker - \$39.2M, New Castle – TBD

Waterton Expansion - \$12.3M, Dove Valley - TBD, High Point - \$14.4M, Stock Show - TBD, Solterra - TBD, Superior - TBD, Sandy

Creek - TBD

Schedule:

Construction Date:

Planned In-Service Date: Barker – 2021; Waterton Expansion (formerly Titan) – 2023, High

Point – 2022; Stock Show – 2026; Dove Valley, New Castle, Sandy

Creek, Solterra, Superior, Wilson – TBD;

Regulatory Info: CPUC: Barker, no CPCN required, Decision No. C10-0644, Proceeding

No. 10M-206E. Waterton Expansion (Titan), CPCN granted, Decision

No. C18-0427, Proceeding No. 18A-0199E. High Point, CPCN required, Decision No. C18-0843, Proceeding No. 18M-0005E, Proceeding No. 20A-0082E, Decision No. R20-0725, exceptions

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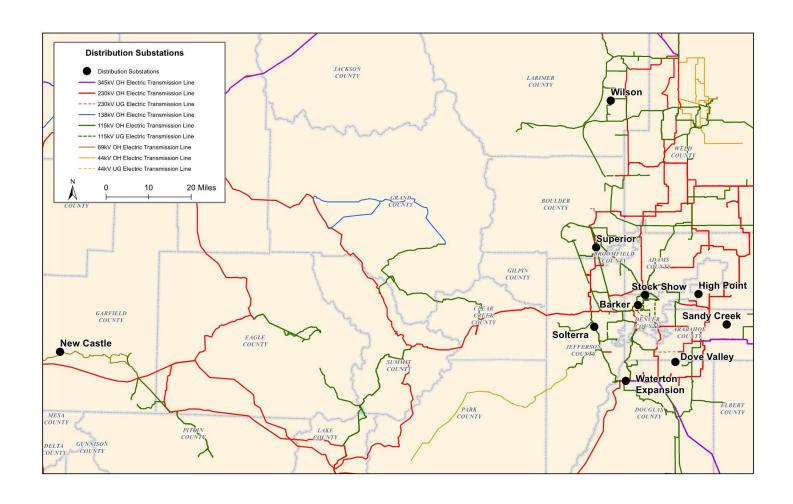
denied by Decision No. C20-0886. Dove Valley, no CPCN required, Decision No. C18-0843, Proceeding No. 18M-0005E. Stock Show, no CPCN required, Decision No. C18-0843, Proceeding No. 18M-0005. Wilson, no CPCN required, Decision No. C10-0644, Proceeding No. 10M-206E.

Regulatory Date: Permitting Info: Permitting Date:

Contact Information:

Email <u>PSCoPlanning@xcelenergy.com</u>

Phone



Gateway South – Hayden Transmission

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: Expand transmission in the northwest portion of the state to

connect to the Pacificorp Gateway South 500 kV Project.

Voltage Class: TBD Facility Rating: TBD Point of Origin/Location: TBD

Point of Termination: Intermediate Points: Length of Line (in Miles):

Type of Project: Transmission line

Development Status: Conceptual

Routing:

Subregional Planning Group: CCPG

Purpose of Project:

Project Driver (Primary): Import/export capability

Project Driver (Secondary):

Estimated Cost: TBD

Schedule:

Construction Date:

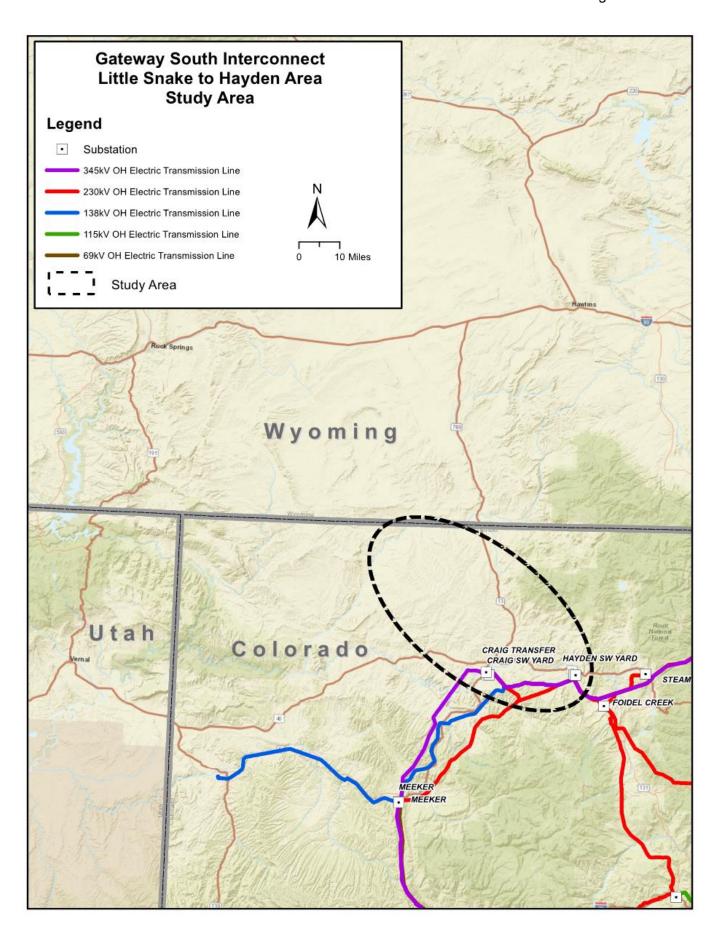
Planned In-Service Date: TBD

Regulatory Info: Regulatory Date: Permitting Info: Permitting Date:

Contact Information:

Email PSCoPlanning@xcelenergy.com

Phone



Glenwood -Rifle 115 kV Transmission

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: The project consists of the upgrading the Glenwood Springs – Rifle

69kV line to 115kV.

Voltage Class: 115 kV Facility Rating: 248.6 MVA

Point of Origin/Location: Glenwood Substation
Point of Termination: Rifle Substation

Intermediate Points: Mitchell Creek and New Castle substations

Length of Line (in Miles): 26.0

Type of Project: Transmission line

Development Status: Conceptual

Routing:

Subregional Planning Group: CCPG

Purpose of Project: Reliability and load growth

Project Driver (Primary): Reliability

Project Driver (Secondary):

Estimated Cost: TBD

Schedule:

Construction Date:

Planned In-Service Date: TBD

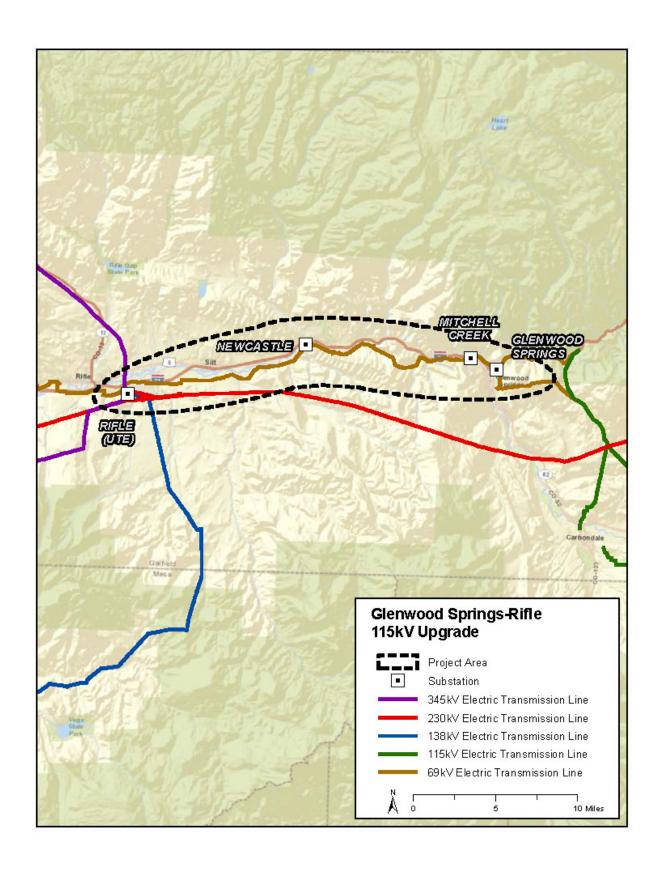
Regulatory Info: CPUC: No CPCN required.

Regulatory Date: Permitting Info: Permitting Date:

Contact Information:

Email <u>PSCoPlanning@xcelenergy.com</u>

Phone



Greenwood – Denver Terminal 230kV Line

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: Construct a new 230 kV transmission line between the existing

Greenwood and Denver Terminal substation within existing right-ofway. The new line will be implemented by rebuilding existing

facilities from Greenwood to Denver Terminal

Voltage Class: 230kV
Facility Rating: 576 MVA
Point of Origin/Location: Greenwood
Point of Termination: Denver Terminal

Intermediate Points:

Length of Line (in Miles): 15

Type of Project: Transmission

Development Status: Planned

Routing:

Subregional Planning Group: CCPG

Purpose of Project: To accommodate CEP portfolio of generation and mitigate potential

overloads.

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

Estimated Cost: \$74,700,000

Schedule:

Construction Date:

Planned In-Service Date: 2022

Regulatory Info: CPUC: CPCN required, Decision No. C20-0648, Proceeding No. 20A-

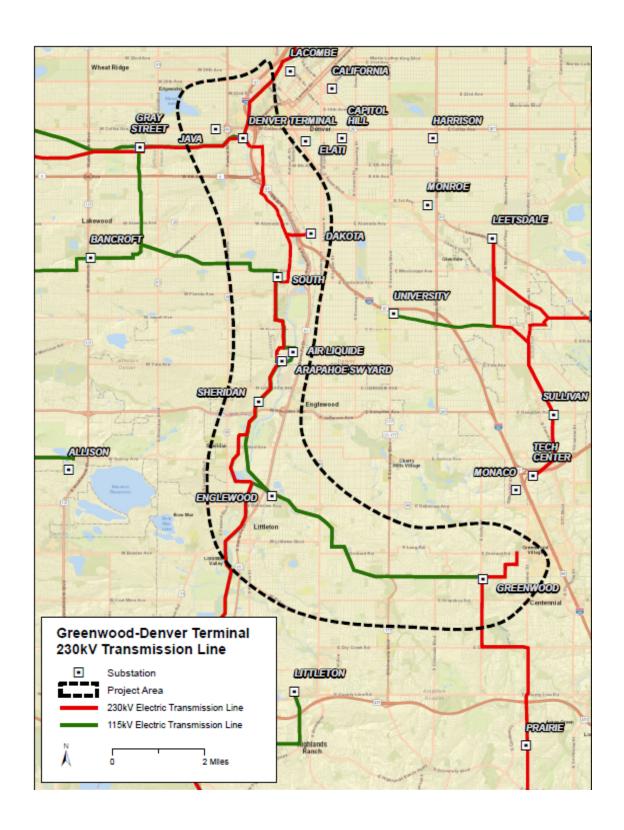
0063E.

Regulatory Date: Permitting Info: Permitting Date:

Contact Information:

Email PSCoPlanning@xcelenergy.com

Phone



Hayden - Foidel Creek - Gore Pass 230kV

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: Tap the Hayden – Gorepass 230kV line at the existing Foidel Creek

Substation. The Wolcott reactor project was an interim solution to address near-term voltage issues, but long-term alternatives will

need to be identified.

Voltage Class: 230 kV Facility Rating: N/A

Point of Origin/Location: Foidel Creek Substation
Point of Termination: Foidel Creek Substation

Intermediate Points:

Length of Line (in Miles): 800ft in-and-out tap

Type of Project: Transmission

Development Status: Conceptual

Routing:

Subregional Panning Group: CCPG

Purpose of Project: Improve reliability of the Wolcott area

Project Driver (Primary): Reliability

Project Driver (Secondary):

Estimated Cost: TBD

Schedule:

Construction Date:

Planned In-Service Date: TBD

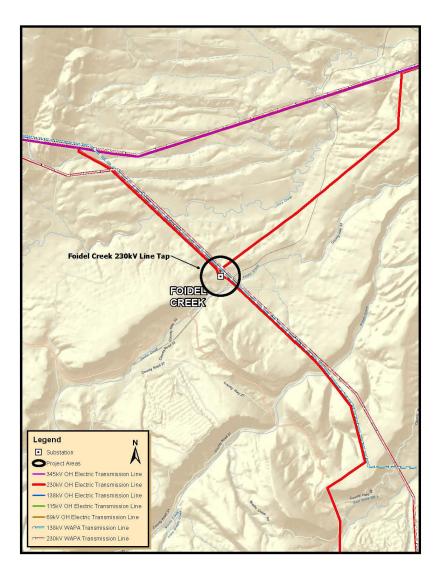
Regulatory Info: CPUC: CPCN required

Regulatory Date:
Permitting Info:
Permitting Date:

Contact Information:

Email PSCoPlanning@xcelenergy.com

Phone



Approximate Location of the Foidel Creek 230 kV Line Tap Project

Keenesburg Substation – Generation Interconnect (CEPP bid W090)

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: Upgrades to the Keenesburg substation to accommodate the

Company's CEP portfolio of generation.

Voltage Class: Various

Facility Rating:

Point of Origin/Location: Point of Termination: Intermediate Points: Length of Line (in Miles):

Type of Project:

Development Status: Planned

Routing:

Subregional Planning Group: CCPG

Purpose of Project: Accommodate CEP portfolio of generation

Project Driver (Primary):

Generation

Project Driver (Secondary):

Estimated Cost: \$200,000

Schedule:

Construction Date:

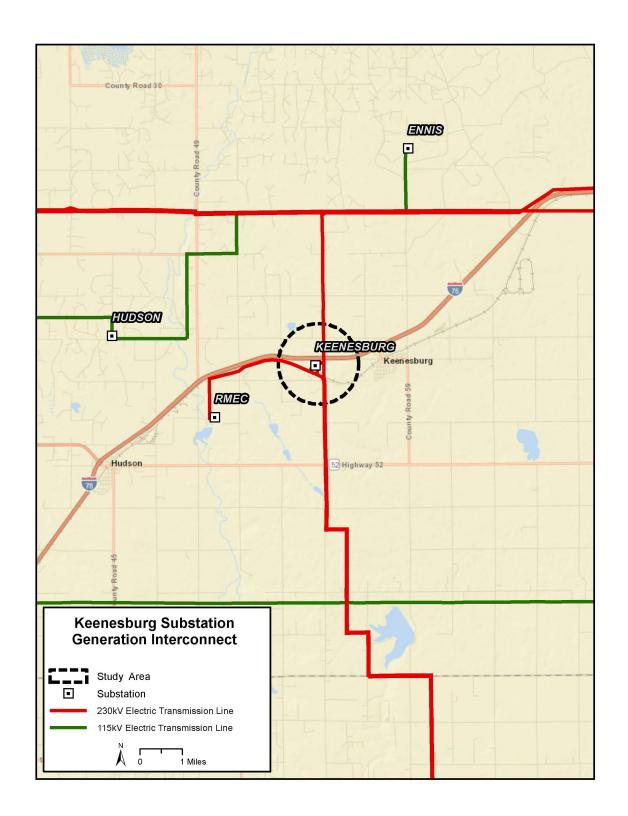
Planned In-Service Date: 2020

Regulatory Info: Regulatory Date: Permitting Info: Permitting Date:

Contact Information:

Email PSCoPlanning@xcelenergy.com

Phone



Midway Substation – Generation Interconnect (CEPP bid 056)

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: Upgrades to Midway substation to accommodate the Company's

CEP portfolio of generation.

Voltage Class: Various

Facility Rating:

Point of Origin/Location: Point of Termination: Intermediate Points: Length of Line (in Miles):

Type of Project:

Development Status: Planned

Routing:

Subregional Planning Group: CCPG

Purpose of Project: Accommodate CEP portfolio of generation

Project Driver (Primary):

Generation

Project Driver (Secondary):

Estimated Cost: \$1,700,000

Schedule:

Construction Date:

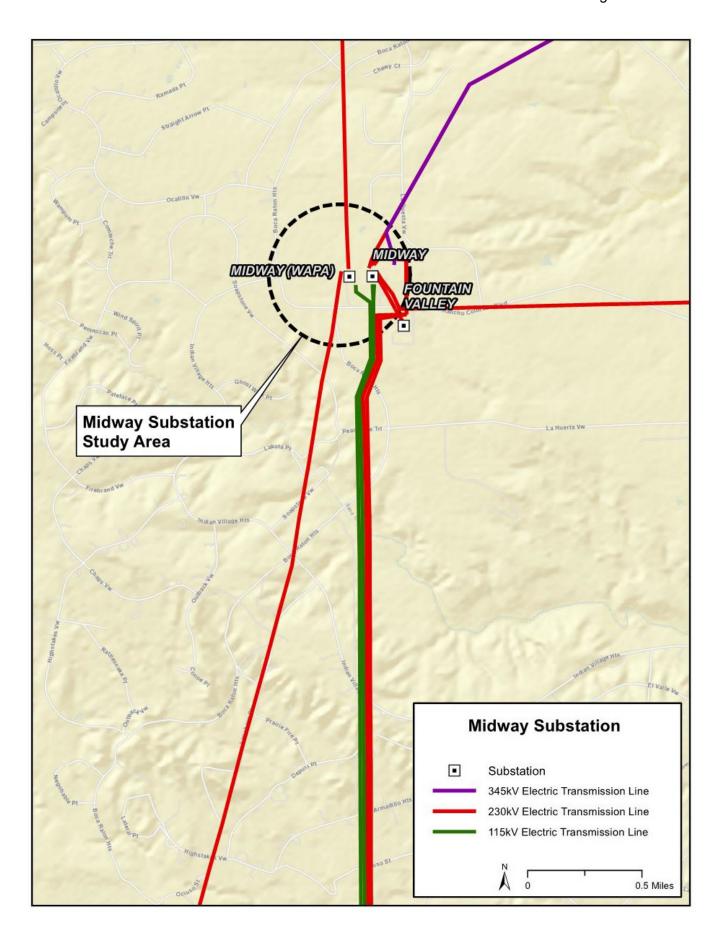
Planned In-Service Date: 2022

Regulatory Info: Regulatory Date: Permitting Info: Permitting Date:

Contact Information:

Email PSCoPlanning@xcelenergy.com

Phone



Mirasol (Formerly Badger Hills) Switching Station (CEPP Bid X647)

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: New 230 kV Mirasol Substation tapping one Comanche – Midway

230 kV line.

Voltage Class: 345 kV Facility Rating: N/A

Point of Origin/Location: Mirasol Switching Station
Point of Termination: Mirasol Switching Station

Intermediate

Points: N/A Length of Line (in Miles): N/A

Type of Project: Substation

Development Status: Planned

Routing:

Subregional Planning Group: CCPG

Purpose of Project: Provide an interconnection point for future resource additions in

the Comanche area.

Project Driver (Primary): Resource interconnection

Project Driver (Secondary):

Estimated Cost: \$24,200,000

Schedule:

Construction Date: TBD Planned In-Service Date: 2022

Regulatory Info: CPUC: CPCN required. Filed in 2017 Colorado Energy Plan. Decision

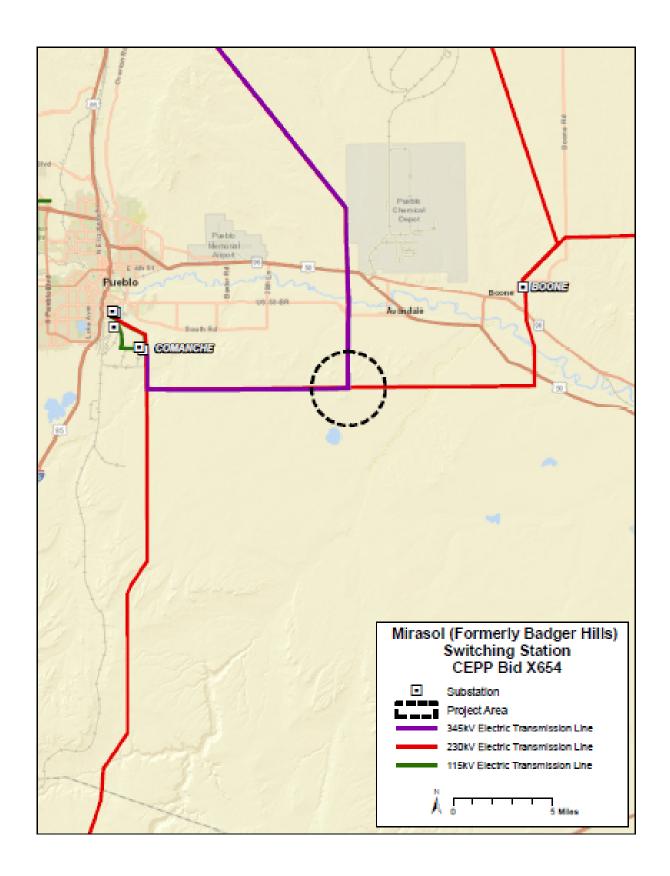
No. C18-0761, Proceeding No. 16A-0396E.

Regulatory Date: Permitting Info: Permitting Date:

Contact Information:

Email PSCoPlanning@xcelenergy.com

Phone



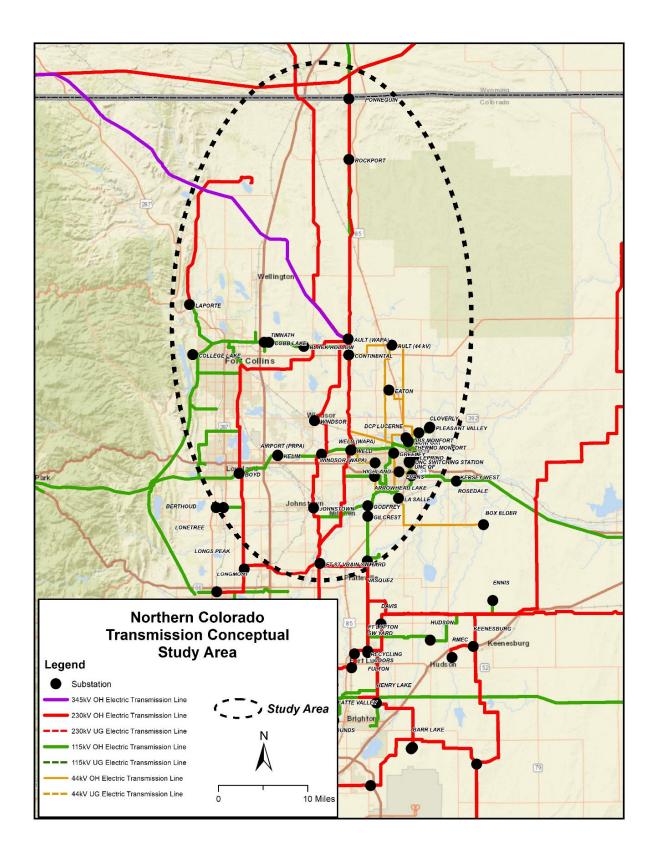
Northern Colorado Transmission

Project Sponsor:	Public Service Company of Colorado/ Xcel Energy
Additional Project Participants:	
Project Description:	Expanding transmission service to the northern border to improve bi-directional transfer capability with neighboring entities.
Voltage Class: Facility Rating: Point of Origin/Location: Point of Termination: Intermediate Points: Length of Line (in Miles): Type of Project: Development Status:	Transmission lines Conceptual
Routing:	
Subregional Planning Group:	CCPG
Purpose of Project:	
Project Driver (Primary): Project Driver (Secondary):	
Estimated Cost:	TBD
Schedule: Construction Date:	
Planned In-Service Date: Regulatory Info: Regulatory Date: Permitting Info: Permitting Date:	TBD
Contact Information:	

PSCoPlanning@xcelenergy.com

Email

Phone



NREL Substation

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: New substation tapping the Plainview – Eldorado 115kV line south of

Boulder, Colorado

Voltage Class: 115 kV Facility Rating: N/A

Point of Origin/Location: NREL Substation
Point of Termination: NREL Substation

Intermediate Points: Length of Line (in Miles):

Type of Project: Substation

Development Status: Planned

Routing:

Subregional Planning Group: CCPG

Purpose of Project: Interconnect NREL hybrid generation facility

Project Driver (Primary): Resource interconnection

Project Driver (Secondary):

Estimated Cost: \$12,100,000

Schedule:

Construction Date: 2019 Planned In-Service Date: 2020

Regulatory Info: CPUC: No CPCN required, Decision No. C17-0539, Proceeding No.

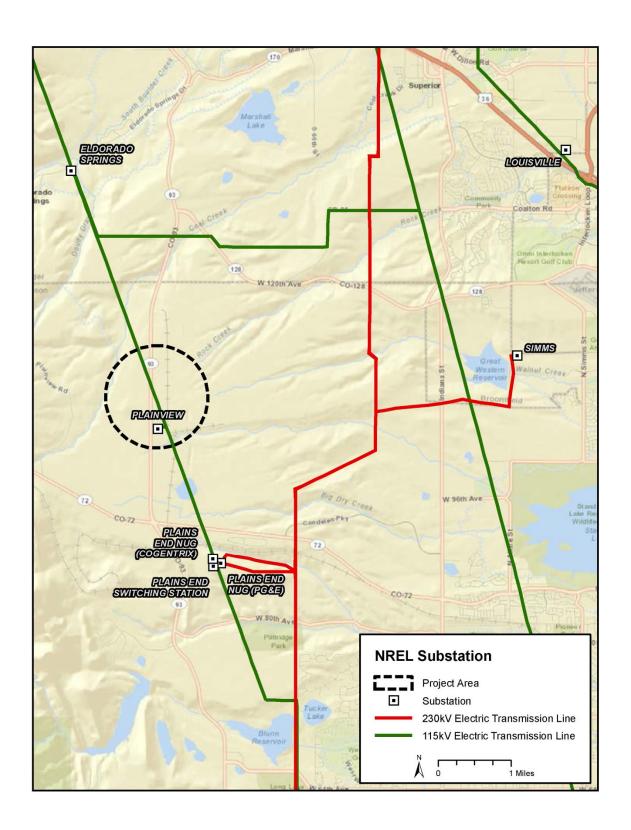
17M-005E.

Regulatory Date: Permitting Info: Permitting Date:

Contact Information:

Email PSCoPlanning@xcelenergy.com

Phone



Parachute - Cameo 230 kV #2 Transmission

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: Construct approximately 31 miles of new 230kV transmission line

between the Parachute and Cameo Substations.

Voltage Class: 230 kV Facility Rating: 576 MVA

Point of Origin/Location: Parachute Substation
Point of Termination: Cameo Substation

Intermediate Points:

Length of Line (in Miles): 31.0

Type of Project: Transmission Line

Development Status: Conceptual

Routing:

Subregional Planning Group: CCPG

Purpose of Project:To improve reliability and support future load growth in the region

Project Driver (Primary): Reliability

Project Driver (Secondary):

Estimated Cost: TBD

Schedule:

Construction Date:

Planned In-Service Date: TBD

Regulatory Info: CPUC: CPCN required, Decision No. C10-0644, Proceeding No. 10M-

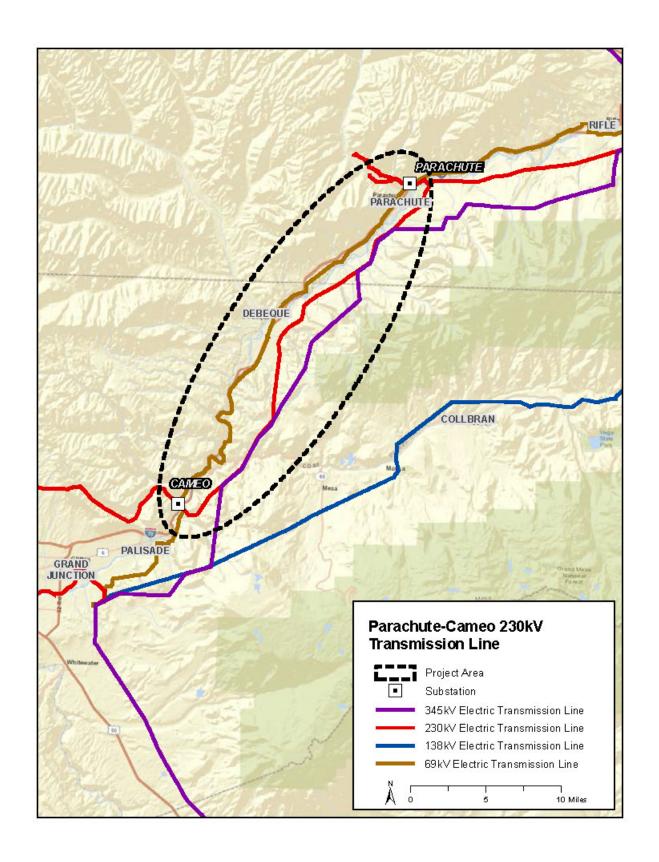
206E.

Regulatory Date: Permitting Info: Permitting Date:

Contact Information:

Email <u>PSCoPlanning@xcelenergy.com</u>

Phone



Pathway Voltage Control/Support

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: A series of voltage control devices required to accommodate the

Company's CEP portfolio of generation.

Voltage Class: Various

Facility Rating:

Point of Origin/Location: Point of Termination: Intermediate Points: Length of Line (in Miles):

Type of Project:

Development Status: Planned

Routing:

Subregional Planning Group: CCPG

Purpose of Project: Accommodate CEP portfolio of generation

Project Driver (Primary): Generation

Project Driver (Secondary):

Estimated Cost: TBD

Schedule:

Construction Date:

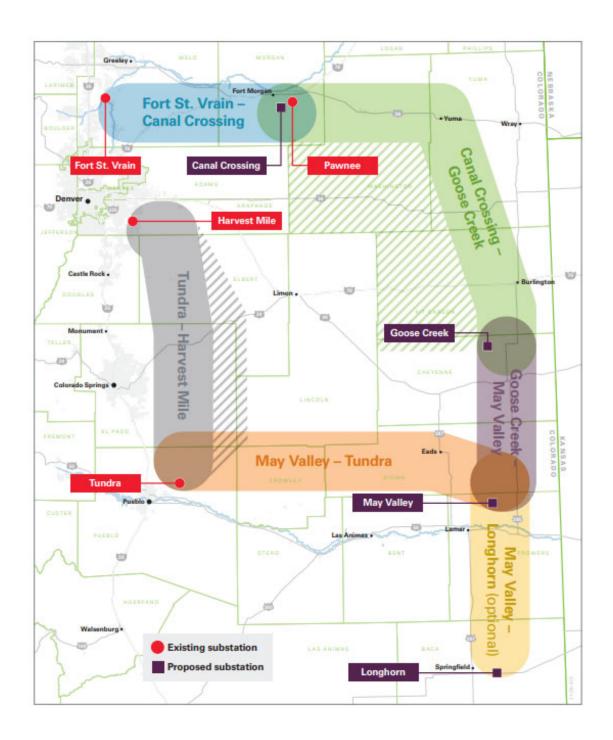
Planned In-Service Date: TBD

Regulatory Info: Regulatory Date: Permitting Info: Permitting Date:

Contact Information:

Email PSCoPlanning@xcelenergy.com

Phone



Poncha – Front Range 230 kV Transmission Line

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: Construct a 230 kV transmission line from the Poncha Substation to

terminate at a location in the Front Range.

Voltage Class: 230 kV
Facility Rating: 1100 MVA
Point of Origin/Location: Poncha

Point of Termination: Front Range area

Intermediate Points:

Length of Line (in Miles):

Type of Project: Transmission line
Development Status: Conceptual

Routing:

Subregional Planning Group: CCPG

Purpose of Project: Improve reliability and load-service capability of the San Luis Valley

area

Reliability

Project Driver (Primary):

Project Driver (Secondary):

Estimated Cost: TBD

Schedule:

Construction Date:

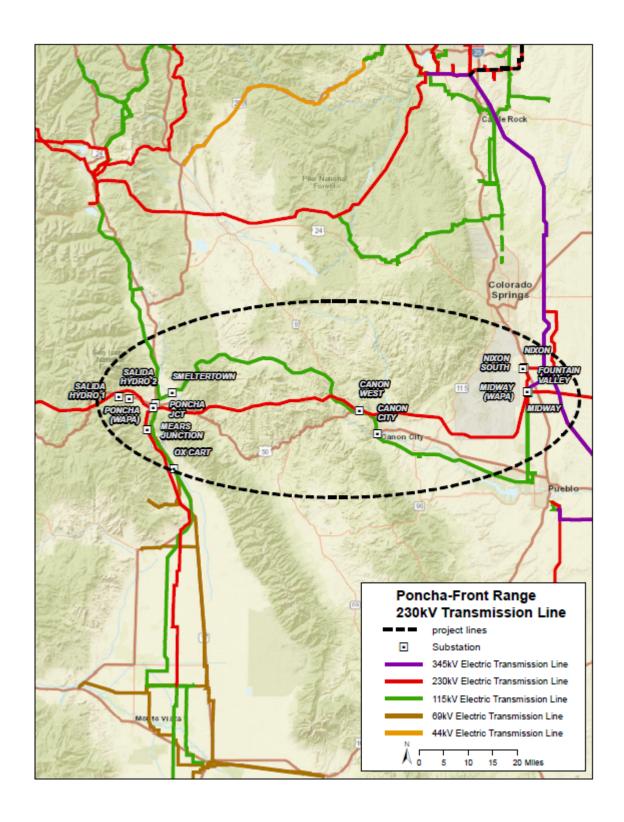
Planned In-Service Date: TBD

Regulatory Info: Regulatory Date: Permitting Info: Permitting Date:

Contact Information:

Email <u>PSCoPlanning@xcelenergy.com</u>

Phone



Rifle - Story Gulch 230 kV Transmission Line

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants: None

Project Description: Construct a single circuit 230 kV transmission line from a new

substation called Story Gulch substation to the Rifle (Ute) substation

Voltage Class: 230 kV

Facility Rating:

Point of Origin/Location: Story Gulch Substation
Point of Termination: Rifle (Ute) Substation

Intermediate Points:

Length of Line (in Miles): 25

Type of Project: Transmission line and substation

Development Status: Conceptual

Routing:

Subregional Planning Group: CCPG

Purpose of Project: Load service
Project Driver (Primary): Reliability

Project Driver (Secondary):

Estimated Cost: TBD

Schedule:

Construction Date:

Planned In-Service Date: TBD

Regulatory Info: CPUC: A CPCN will be required for this project pursuant to Decision

No. C10-0644, Proceeding No. 10M-206E

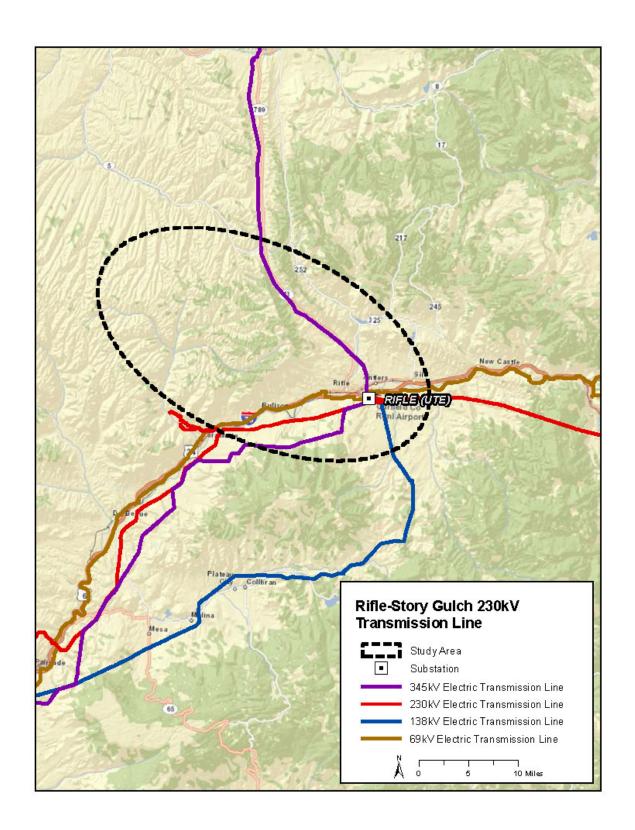
Regulatory Date:

Permitting Info: Permitting Date:

Contact Information:

Email <u>PSCoPlanning@xcelenergy.com</u>

Phone



San Luis Valley-Poncha 230 kV Line #2

Project Sponsor: Tri-State Generation and Transmission Association

Additional Project Participants: Public Service Company of Colorado/ Xcel Energy

Project Description: Construct a second 230 kV transmission line from the San Luis Valley

Substation to the Poncha Substation.

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: Conceptual

Routing:

Subregional Planning Group: CCPG

Purpose of Project: Improve reliability and load service capability of the San Luis Valley

area

Project Driver (Primary): Reliability

Project Driver (Secondary):

Estimated Cost: TBD

Schedule:

Construction Date:

Planned In-Service Date: TBD

Regulatory Info: CPUC: CPCN required, Decision No.C16-0627, Proceeding No. 16M-

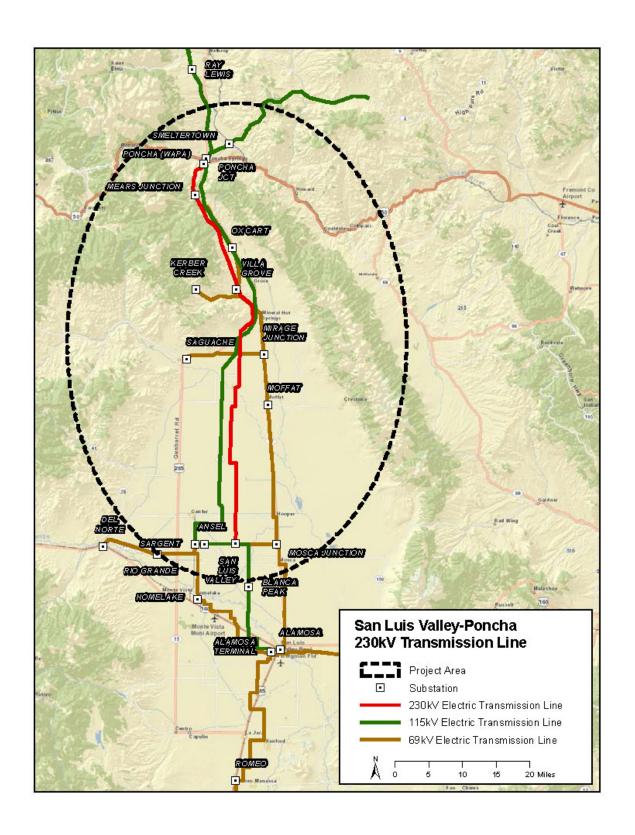
0009E

Regulatory Date: Permitting Info: Permitting Date:

Contact Information:

Email <u>PSCoPlanning@xcelenergy.com</u>

Phone



Stagecoach Switching Station

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: A new 230 kV switching station to connect GI-2014-9, a 70 MW

solar generation facility. The requested Point of Interconnection (POI) for GI-2014-9 is a tap on the Comanche – Midway 230 kV line.

Voltage Class: 230 kV

Facility Rating:

Point of Origin/Location: Point of Termination: Intermediate Points: Length of Line (in Miles):

Type of Project:

Development Status: Planned

Routing:

Subregional Planning Group: CCPG

Purpose of Project: Accommodate GI-2014-9

Generation

Project Driver (Primary):

Project Driver (Secondary):

Estimated Cost: \$11,000,000

Schedule:

Construction Date:

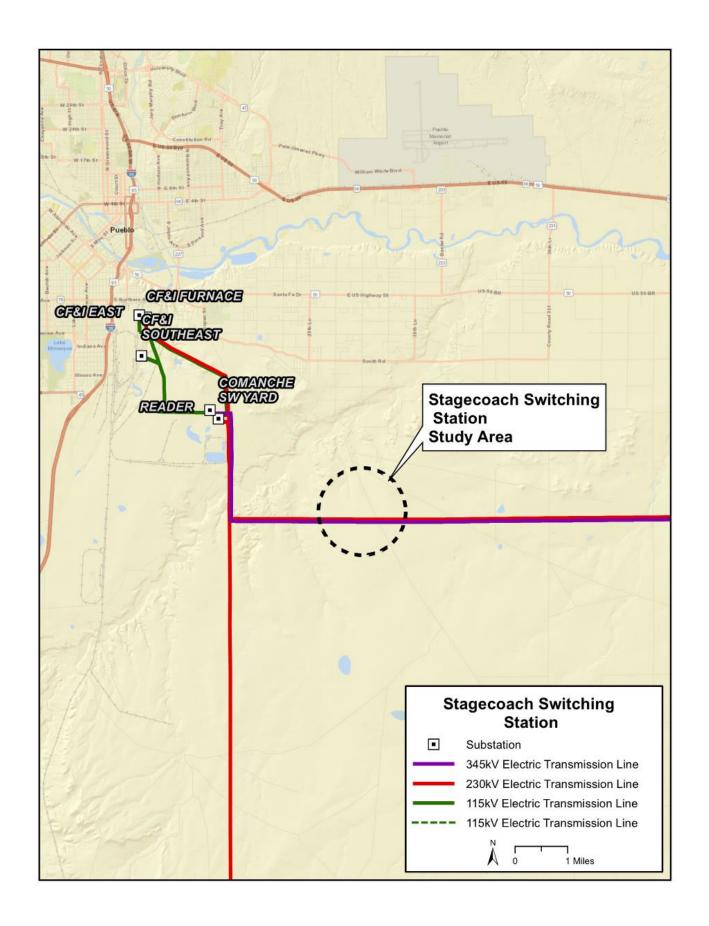
Planned In-Service Date: 2024

Regulatory Info: Regulatory Date: Permitting Info: Permitting Date:

Contact Information:

Email <u>PSCoPlanning@xcelenergy.com</u>

Phone



Shortgrass Switching Station

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: Construct new 345kV facilities to expand switching station to

integrate renewables

Voltage Class: 345 kV

Facility Rating:

Point of Origin/Location: Shortgrass
Point of Termination: Shortgrass

Intermediate Points:

Length of Line (in Miles):

Type of Project: Substation
Development Status: Planned

Routing:

Subregional Planning Group: CCPG

Purpose of Project: Accommodate future interconnections of renewables

Project Driver (Primary):

Generation

Project Driver (Secondary):

Estimated Cost: \$22,100,000

Schedule:

Construction Date:

Planned In-Service Date: 2020

Regulatory Info: CPUC: CPCN required, Decision No. C19-0175, Proceeding No. 18A-

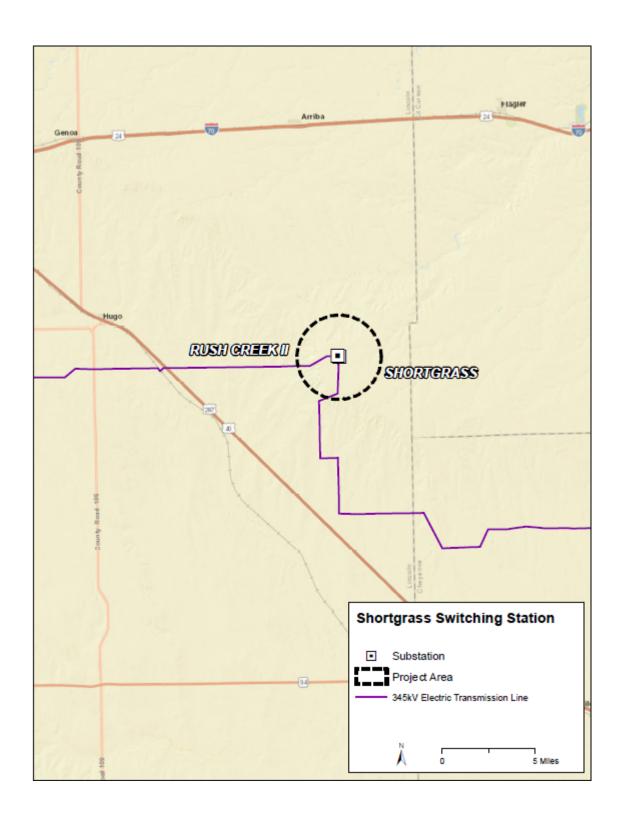
0860E

Regulatory Date: Permitting Info: Permitting Date:

Contact Information:

Email <u>PSCoPlanning@xcelenergy.com</u>

Phone



Shortgrass – Cheyenne Ridge 345 kV Transmission Line Project

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: Construct new 345 kV transmission line extending from Shortgrass

switching station to Cheyenne Ridge collector station.

Voltage Class: 345 kV
Facility Rating: 1440 MVA
Point of Origin/Location: Shortgrass
Point of Termination: Cheyenne Ridge

Intermediate Points:

Length of Line (in Miles): 73

Type of Project: Transmission

Development Status: Planned

Routing:

Subregional Planning Group: CCPG

Purpose of Project: Provide interconnection for generation

Project Driver (Primary): Generation

Project Driver (Secondary):

Estimated Cost: \$62,400,000

Schedule:

Construction Date:

Planned In-Service Date: 2020

Regulatory Info: CPUC: CPCN required, Decision No. C19-0367, Proceeding No. 18A-

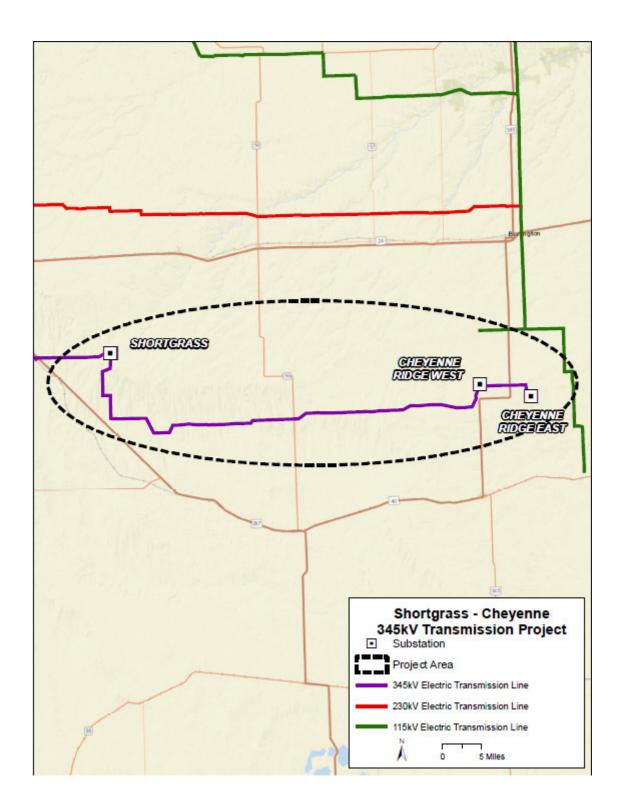
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Regulatory Date: Permitting Info: Permitting Date:

Contact Information:

Email <u>PSCoPlanning@xcelenergy.com</u>

Phone



Weld – Rosedale – Box Elder – Ennis Transmission

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: Build a new 230 kV transmission line from Weld to Rosedale and a

230kV or 115kV line from Rosedale to Box Elder to Ennis.

Voltage Class: 230 kV Facility Rating: 576 MVA

Point of Origin/Location: Weld Substation
Point of Termination: Ennis Substation

Intermediate Points: Rosedale Substation, BB Draw Substation (New)

Length of Line (in Miles): 13 + 7

Type of Project: Transmission Line

Development Status: Conceptual

Routing:

Subregional Planning Group: CCPG

Purpose of Project:To increase reliability, load-serving capability and resource

accommodation in northeast Greeley.

Project Driver (Primary): Reliability

Project Driver (Secondary): Load service and resource accommodation

Estimated Cost: TBD

Schedule:

Construction Date:

Planned In-Service Date: TBD

Regulatory Info: CPCN: No CPCN required, Decision No. C16-0627, Proceeding No.

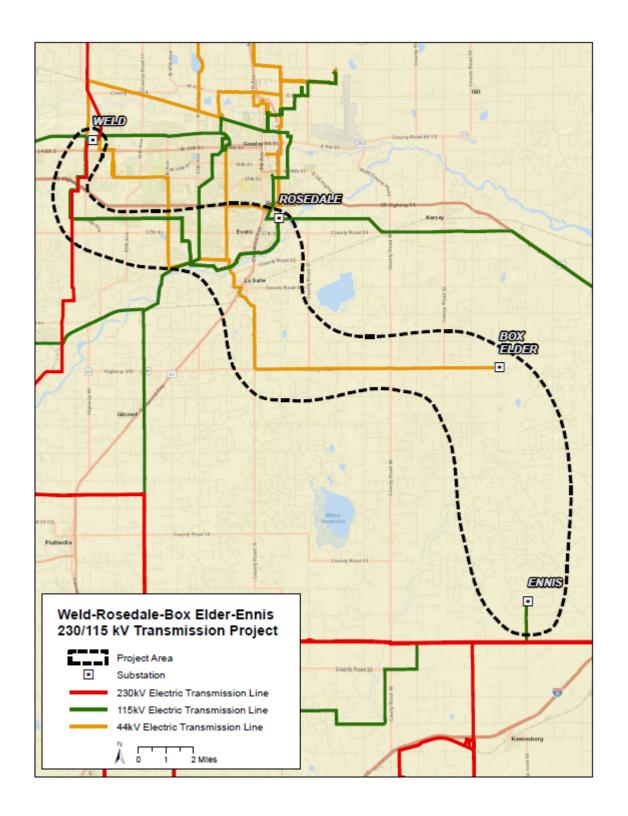
16M-0009E. Decision No. C20-0477, Proceeding No. 20M-005E.

Regulatory Date: Permitting Info: Permitting Date:

Contact Information:

Email PSCoPlanning@xcelenergy.com

Phone



Weld County Transmission Expansion

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: A conceptual plan for the Northeast Colorado to increase

generation and load-serving capability and meet Public Service goals

as outlines in the 80x30 Plan.

Voltage Class: 230 kV Facility Rating: TBD

Point of Origin/Location: Ault Substation

Point of Termination: South of Greeley
Intermediate Points: Rosedale Substation

Length of Line (in Miles): TBD

Type of Project: Transmission line
Development Status: Conceptual

Routing:

Subregional Planning Group: CCPG

Purpose of Project: Reliability, load and resource accommodation, and increase TOT7

path.

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

Estimated Cost: TBD

Schedule:

Construction Date:

Planned In-Service Date: TBD

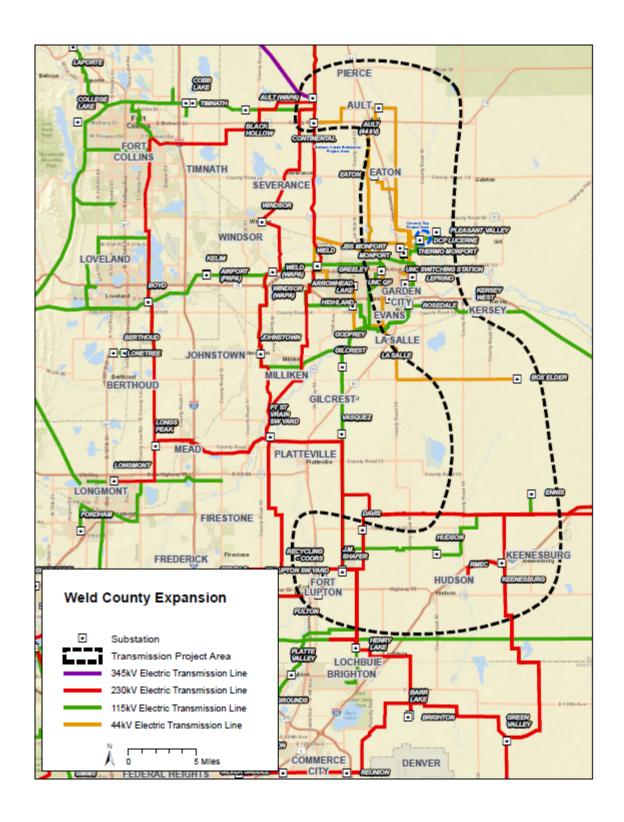
Regulatory Info: Regulatory Date: Permitting Info: Permitting Date:

Contact Information:

Email PSCoPlanning@xcelenergy.com

Phone

Website Information http://www.transmission.xcelenergy.com/Projects/Colorado



Wheeler - Wolf Ranch 230 kV Transmission Project

Project Sponsor: Public Service Company of Colorado/ Xcel Energy

Additional Project Participants:

Project Description: The project consists of the construction of a new 230 kV

transmission line approximately 18 miles from Wheeler Substation to a new Wolf Ranch Substation to accommodate a new 50 MVA natural gas customer load. The line will also interconnect to the

Middle Fork Substation.

Voltage Class: 230 kV Facility Rating: 440 MVA

Point of Origin/Location: Wheeler Substation
Point of Termination: Wolf Ranch Substation
Intermediate Points: Middle Fork Substation

Length of Line (in Miles): 18.0

Type of Project: Transmission line and substation

Development Status: Conceptual

Routing:

Subregional Planning Group: CCPG

Purpose of Project: Load service
Project Driver (Primary): Reliability

Project Driver (Secondary):

Estimated Cost: TBD

Schedule:

Construction Date:

Planned In-Service Date: TBD

Regulatory Info: CPUC: No CPCN is required for this project pursuant to Decision No.

C10-0644, Proceeding No. 10M-206E. Proceeding No. 14M-0061E,

Decision No. C14-0732.

Regulatory Date: Permitting Info: Permitting Date:

Contact Information:

Email PSCoPlanning@xcelenergy.com

Phone

