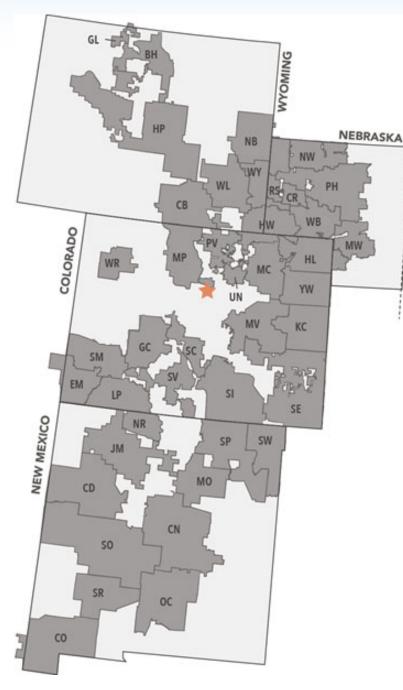


A Touchstone Energy[®] Cooperative

Colorado Rule 3627 & **FERC Order 890 Stakeholder Meeting October 10, 2022**

Who is Tri-State?

Incorporated in 1952, Tri-State is a generation and transmission cooperative ("G&T") operating on a notfor-profit basis. Tri-State was formed by its Member Systems for the purpose of providing wholesale power and energy to its Members for resale to their retail consumers. Tri-State is controlled by a 40+ seat Board of Directors, with each of Tri-State's Members occupying one seat on the Board.

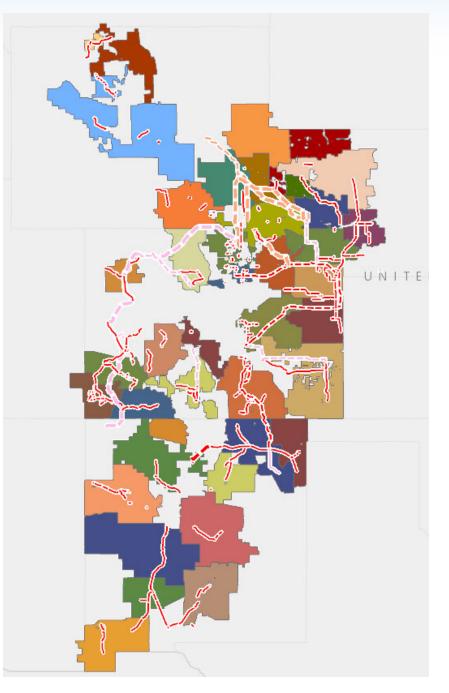


Our mission is to provide our members a reliable, affordable and responsible supply of electricity in accordance with cooperative principles.



Tri-State's Transmission System





Tri-State delivers reliable power to communities across nearly 200,000 square miles of the west, from the eastern plains through the Rocky Mountains and down to the southern deserts. We own or operate more than 5,665 miles of high-voltage lines, supported by our system of 220 substations and telecommunications sites.

This Meeting



- Participation in Tri-State's local planning process is open to all interested parties, including but not limited to, all network and point-to-point transmission service customers, interconnecting neighboring transmission providers, regulatory agencies, and other stakeholders.
- Promote discussion of all aspects of the Tri-State transmission planning activities, including, but not limited to, methodology, study inputs, public policy requirements, study results, and alternative solutions.
- Provide a forum for Tri-State to better understand the specific electric transmission interests of all stakeholders.

Scope



- Review Tri-State's transmission planning process and current study plan.
- Summarize the status of Tri-State's generator interconnection and transmission service queue.
- Provide updates on its developing and planned projects.
- Receive transmission study requests from stakeholders for review and discussion.
- Solicit information from its Transmission Customers on loads and resources and other needs, such as public policy requirements, for the preparation of its ten-year plan.

Note



- This is not the only forum to be involved.
- This meeting will be supplemented by additional stakeholder outreach activities in connection with individual transmission projects or overall programmatic needs, as necessary.
- Colorado Coordinated Planning Group (CCPG)
 - Voluntary, open transmission planning forum.
 - Membership is open to all interested stakeholders.
 - Includes all Colorado transmission providers
 - http://regplanning.westconnect.com/ccpg.htm



Planning Processes

Planning Considerations

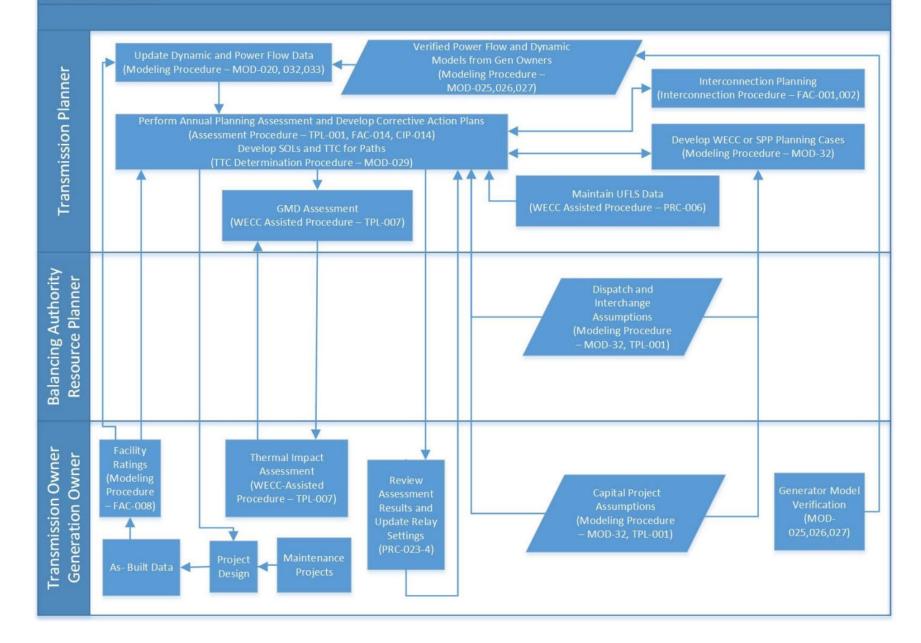


- Tri-State endeavors to conduct transmission planning with the goal of achieving best-cost solutions that balance numerous factors and result in optimal transmission projects:
 - Load projections
 - New delivery points
 - NERC reliability standards
 - Generation resources and interconnections
 - Project partnership opportunities
 - Regional congestion
 - Transmission corridors
 - City and county zoning
 - Geographic features
 - Societal and environmental impacts
 - Operational and maintenance requirements
 - Consistency with short-term and long-term planning opportunities
 - Initial construction cost

Planning Processes: NERC Compliance



Process Diagram for Assessment, Modeling, WECC/SPP-Assisted and Interconnection Procedures



Study Process and/or Methodology for Other Studies

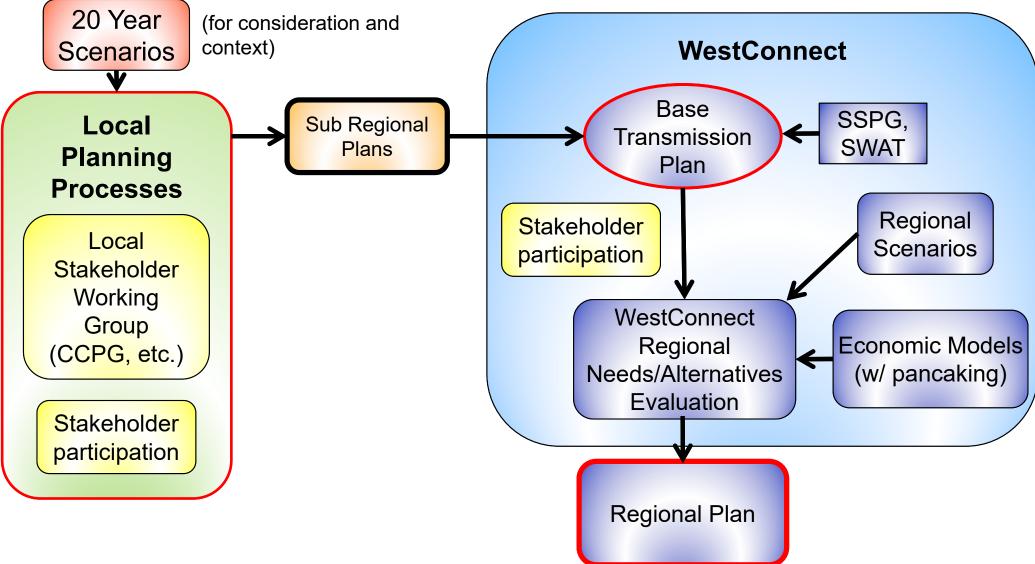


- Tri-State's Open Access Same-Time Information Site (OASIS): <u>https://www.oasis.oati.com/tsgt/index.html</u>
 - <u>Transmission Planning Process</u>
 - \rightarrow Open Access Transmission Tariff (OATT)
 - Attachment K of OATT
 - Large Generator Interconnection Procedures
 - → Open Access Transmission Tariff (OATT)
 - Attachment N of OATT
 - <u>Small Generator Interconnection Procedures</u>
 - → Open Access Transmission Tariff (OATT)
 - Attachment O of OATT
 - Engineering Standards Bulletin (Transmission Planning Criteria, etc.)
 - → Open Access Transmission Tariff
 - $_{\circ} \rightarrow$ Transmission Planning
 - \rightarrow Engineering Standards Bulletin
 - EMTP Modeling Guidelines
 - $\bullet \quad \rightarrow \text{Open Access Transmission Tariff}$
 - $_{\circ} \rightarrow$ Transmission Planning
 - \rightarrow EMTP Model Guidelines

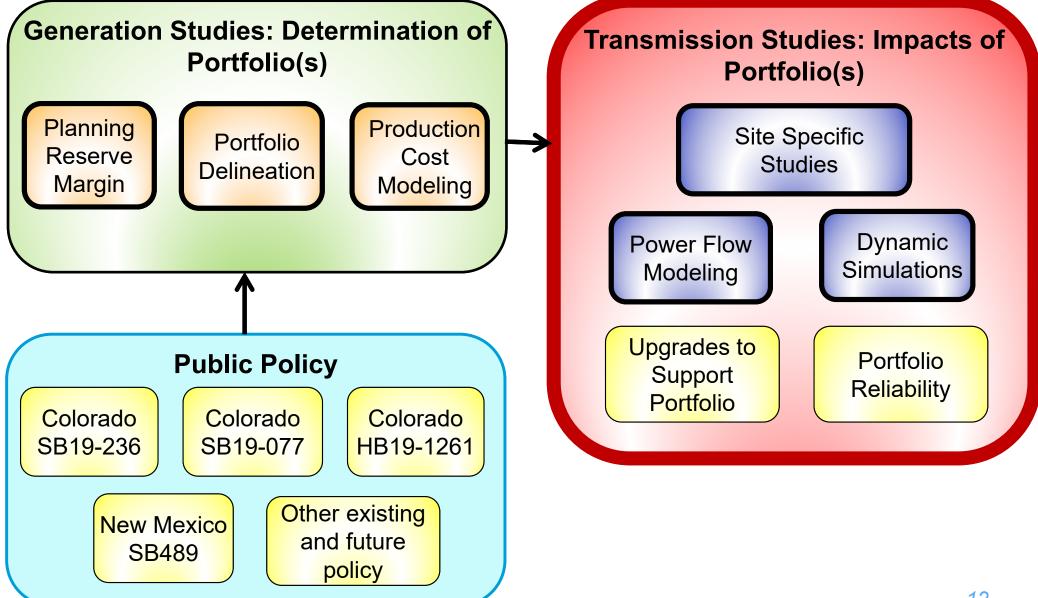
Local vs Regional Planning



Relationship between local and regional planning processes:



Resource Portfolios vs Transmission



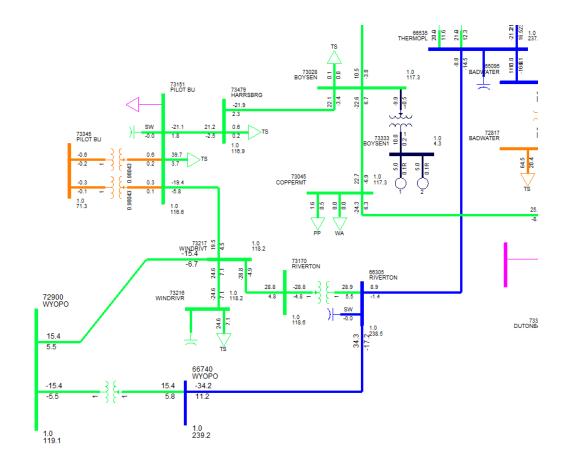
Planning

Required Studies



Power Flow Studies

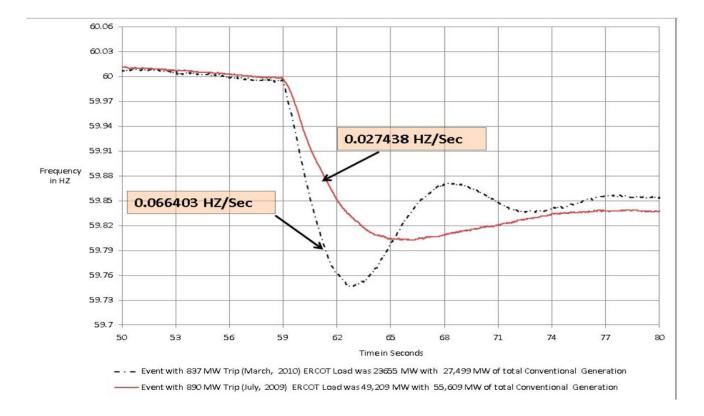
- Contingency analysis (P0-P7 & Extreme Events per NERC TPL-001-5)
- Monitor for overloads and voltage issues
- Identify areas for local, site-specific studies



Required Studies

Dynamic Simulations

- Monitor frequency response
- Monitor governor response, rotor angle stability, out of step
- Voltage instability and ride through
- Dynamic VARS

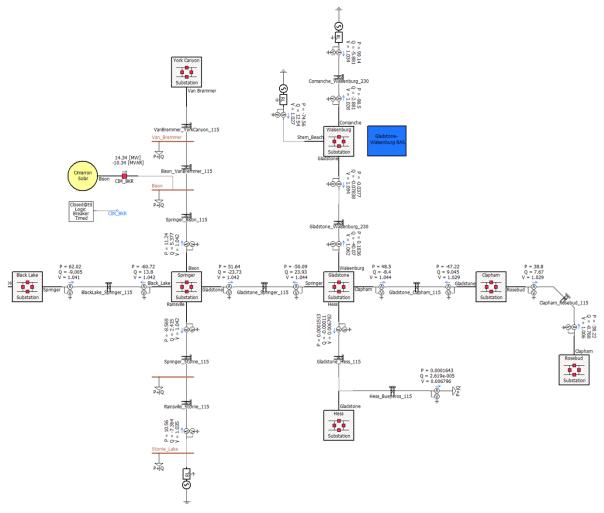


Required Studies



Localized (Electromagnetic Transient) Studies

- Controller interactions
- Flicker
- Harmonics
- Weak Grid

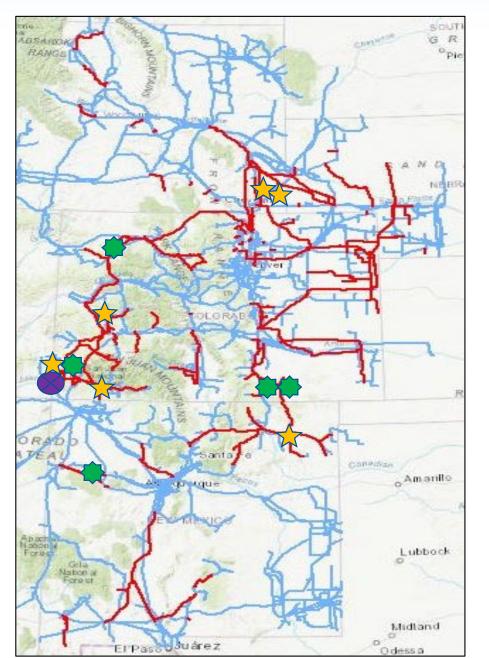


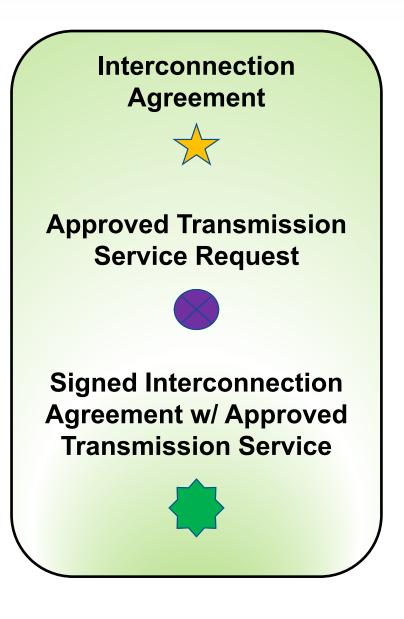
Generator Interconnection Queue



- Generator Interconnection Request Queue
 - <u>https://www.oasis.oati.com/woa/docs/TSGT/TSGTdocs/Active_Interconnection_Re</u> <u>quest_Queue.pdf</u>
- Large Generator Interconnection Requests
 - Eleven (11) executed Generator Interconnection Agreements, totaling ~1,386 MW
 - Three (3) Generator Interconnection Agreements are in suspension
 - TI-18-0227C (103MW at Round Top Substation)
 - TI-17-0228 (78MW at Gladstone Substation)
 - TI-17-0225 (248.4MW on LRS-Wayne Child 345kV line)
 - 2021 DISIS Cluster Ten (10) Interconnection Requests, totaling ~1,718 MW
 - 2022 DISIS Cluster Forty-two (42) Interconnection Requests, totaling ~6,869 MW
 - TOTAL ~9,973 MW
- <u>Small Generator Interconnection Requests</u> None

Interconnection & Transmission Service Projects







Generator Interconnection Requests with LGIAs:

https://www.oasis.oati.com/woa/docs/TSGT/TSGTdocs/LGIA_Interconnection_ n_Request_Queue.pdf

| Request Number | Date Received | Point of Interconnection | LOCATION | Service Type | MW Capacity | GIA ISD | GIA Suspended | Status / Comments |
|-------------------|------------------|--------------------------------------------|-------------------------------------------|------------------|--------------------------------|------------|---------------|-------------------|
| | | PROJECT | TS WITH COMP | LETED or UNEX | ECUTED GIA/I | .GIA | | |
| TI-08-0312 | 3/12/2008 | Springer to Van Bremmer 115kV | Colfax Couty, New Mexico | Network Resource | 30 MW Solar | 7/10/2010 | N/A | Completed |
| TI-08-0502 | 5/2/2008 | Burlington to Big Sandy 230kV | Kit Carson County, Colorado | Network Resource | 51 MW Wind | 10/15/2010 | N/A | Completed |
| TI-12-0217 | 2/17/2012 | South Canal to Dallas Creek 115kV Line | Ouray County, Colorado | Network Resource | 7.2 MW Solar | 11/1/2013 | N/A | Completed |
| TI-08-0204 | 2/4/2008 | Burlington 230 kV Bus | Kit Carson County, Colorado | Network Resource | 150 MW Wind | 11/30/2015 | N/A | Completed |
| TI-15-0227 | 2/27/2015 | Mimbres 115kV | Luna County, New Mexico | Network Resource | 25 MW Solar | 10/31/2016 | N/A | Completed |
| TI-15-0612 | 6/17/2015 | Ludlow-Pinon Canyon 115kV | Las Animas County, Colorado | Network Resource | 30 MW Solar | 9/15/2016 | N/A | Completed |
| TI-17-0224 | 2/24/2017 | Burlington-Big Sandy 230kV Line | Kit Carson/Cheyenne Counties, Colorado | Network Resource | 104 MW Wind | 9/2/2020 | N/A | Completed |
| TI-18-0827 | 8/27/2018 | Redtail 115 kV Substation | Weld County, Colorado | Network Resource | 145 MW Wind | 6/24/2022 | N/A | Completed |
| TI-18-0227C | 2/27/2018 | Round Top Switching Station | Banner County, Nebraska | Network Resource | 103 MW Wind | 11/1/2023 | Yes | Suspended LGIA |
| TI-18-0809 | 8/9/2018 | Walsenburg-Gladstone 230 kV Line | Las Animas County, Colorado | Network Resource | 100 MW Solar | 10/1/2023 | No | Executed LGIA |
| TI-17-0228 | 9/11/2019 | Gladstone Sub/Gladstone-Hess 115kV Line | Union County, New Mexico | Network Resource | 78 MW Wind | 4/15/2028 | Yes | Suspended LGIA |
| TI-17-0225 | 9/5/2019 | LRS-Wayne Child 345kV | Platte/Goshen Counties, Wyoming | Network Resource | 248.4 MW Wind | 12/1/2023 | Yes | Suspended LGIA |
| TI-19-0227 | 3/15/2021 | Hesperus 115kV Substation | La Plata County, Colorado | NRIS | 155 MW Solar+155 MW Storage | 8/1/2024 | No | Executed LGIA |
| TI-18-0831B | 4/16/2021 | Yellow Jacket 115kV Switch Station | Montezuma County, Colorado | NRIS | 127 MW Solar | 9/2/2024 | No | Executed LGIA |
| GI-TC-2021-01 | 3/15/2021 | Craig-Meeker 345kV Line | Moffat & Rio Blanco Counties, Colorado | NRIS | 145 MW Solar | 12/31/2023 | No | Executed LGIA |
| GI-TC-2021-03 | 3/15/2021 | Cahone | Dolores County, Colorado | NRIS | 110 MW Solar | 12/31/2023 | No | Executed LGIA |
| 3I-TC-2021-04 | 3/15/2021 | Walsenburg-Gladstone 230 kV Line | Las Animas County, Colorado | NRIS | 40 MW Solar | 12/31/2023 | No | Executed LGIA |
| GI-TC-2021-05 | 3/15/2021 | PEGS 230kV Station | McKinley County, New Mexico | NRIS | 200 MW Solar | 11/01/2023 | No | Executed LGIA |
| GI-TC-2021-06 | 3/15/2021 | North Yuma 230kV Substation | Logan County, Colorado | NRIS | 200 MW Wind | 10/29/2021 | N/A | Completed |
| GI-TC-2021-07 | 3/15/2021 | Garnet Mesa 115kV Substation | Delta County, Colorado | NRIS | 80 MW Solar | 5/01/2024 | No | Executed LGIA |



Active Generator Interconnection Requests:

https://www.oasis.oati.com/woa/docs/TSGT/TSGTdocs/Active_Interconnection_ on_Request_Queue.pdf

| Generation Interconnection Number | Current Cluster | Date of Interconnection Request | Point of Interconnection | LOCATION | Service Type Requested | Generating Facility | MW Capacitiy | Projected COD | Status / Comments | Available Studies | Explanation why IR not completed |
|-----------------------------------------|--------------------|---------------------------------------|--------------------------------------|--------------------------------|---------------------------|------------------------|-----------------|------------------|----------------------|-------------------|----------------------------------------|
| DEFINITIVE IN | NTERCON | NECTION S | YSTEM IMPACT STUDY CL | USTER (DISIS-2 | .021) | • | | | | | |
| GI-DISIS-2021-01 | DISIS-2021 | 4/15/2021 | Gladstone-Bravo Dome West 115kV Line | Harding County, New Mexico | ERIS | Solar | 120 | 12/31/2024 | DISIS Phase 4 | Phase 2 | |
| GI-DISIS-2021-02 | DISIS-2021 | 5/21/2021 | Story 345kV Substation | Morgan County, Colorado | NRIS | Solar + Storage | 400 | 12/1/2023 | DISIS Phase 4 | Phase 2 | |
| GI-DISIS-2021-03 | DISIS-2021 | 5/25/2021 | Keota 345 kV Substation | Weld County, Colorado | NRIS | Solar + Storage | 170 | 12/1/2023 | DISIS Phase 4 | Phase 2 | |
| GI-DISIS-2021-04 | DISIS-2021 | 5/26/2021 | Alamogordo-Dona Ana 115kV Line | Otero County, New Mexico | NRIS | Solar + Storage | 100 | 6/28/2024 | DISIS Phase 4 | Phase 2 | |
| GI-DISIS-2021-05 | DISIS-2021 | 5/27/2021 | Liberty 115kV Substation | Yuma County, Colorado | NRIS/ERIS | Solar + Storage | 100 | 1/12/2023 | Withdrawn | | Withdrawn |
| GI-DISIS-2021-06 | DISIS-2021 | 5/27/2021 | Main Switch 115kV Substation | Montezuma County, Colorado | NRIS | Solar | 140 | 12/31/2023 | DISIS Phase 4 | Phase 2 | |
| GI-DISIS-2021-07 | DISIS-2021 | 5/28/2021 | Lamar 230kV Substation | Prowers County, Colorado | NRIS | Wind | 199 | 6/1/2025 | DISIS Phase 4 | Phase 2 | |
| GI-DISIS-2021-08 | DISIS-2021 | 5/28/2021 | Bravo Dome 115kV Substation | Union County, New Mexico | NRIS | Solar + Storage | 100 | 6/28/2024 | Withdrawn | | Withdrawn |
| GI-DISIS-2021-09 | DISIS-2021 | 5/28/2021 | El Paso 115kV Tap | La Plata County, Colorado | ERIS | Gas | 50 | 1/1/2024 | DISIS Phase 4 | Phase 2 | |
| GI-DISIS-2021-10 | DISIS-2021 | 5/28/2021 | DJ-LRS 230kV Line | Converse County, Wyoming | NRIS | Solar + Storage | 199 | 6/1/2023 | DISIS Phase 4 | Phase 2 | |
| GI-DISIS-2021-11 | DISIS-2021 | 5/28/2021 | Walsenburg-Gladstone 230kV Line | Las Animas County, Colorado | NRIS | Solar + Storage | 200 | 6/15/2024 | DISIS Phase 4 | Phase 2 | |
| GI-DISIS-2021-12 | DISIS-2021 | 6/1/2021 | Peach Valley 115kV Switching Station | Montrose County, Colorado | ERIS | Solar + Storage | 140 | 12/1/2025 | DISIS Phase 4 | Phase 2 | |



Active Generator Interconnection Requests:

https://www.oasis.oati.com/woa/docs/TSGT/TSGTdocs/Active_Interconnection_ on_Request_Queue.pdf

| Generation Interconnection Number | Current Cluster | Date of Interconnection Request | Point of Interconnection | LOCATION | Service Type Requested | Generating Facility | MW Capacitiy | Projected COD | Status / Comments | Available Studies | Explanation why IR not completed |
|-----------------------------------------|--------------------|---------------------------------------|--------------------------------------|-------------------------------|---------------------------|------------------------|-----------------|------------------|----------------------|-------------------|----------------------------------------|
| DEFINITIVE IN | NTERCON | INECTION S | YSTEM IMPACT STUDY CL | USTER (DISIS-2 | 022) | | | | | | |
| GI-DISIS-2022-01 | DISIS-2022 | 5/5/2022 | Redtail 115kV Substation | Weld County, CO | NRIS/ERIS | Solar + Storage | 90 | 6/1/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-02 | DISIS-2022 | 5/5/2022 | Keota 345kV Substation | Weld County, CO | NRIS/ERIS | Solar + Storage | 199 | 6/1/2026 | DISIS Phase 1 | | |
| GI-DISIS-2022-03 | DISIS-2022 | 5/9/2022 | Wauneta 115kV Substation | Yuma County, CO | NRIS/ERIS | Solar + Storage | 122 | 12/31/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-04 | DISIS-2022 | 5/9/2022 | South Fork 115kV Substation | Kit Carson County, CO | NRIS/ERIS | Solar + Storage | 158 | 12/31/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-05 | DISIS-2022 | 5/9/2022 | Idalia 115kV Substation | Yuma County, CO | NRIS/ERIS | Solar + Storage | 125 | 12/31/2025 | Withdrawn | | Withdrawn |
| GI-DISIS-2022-06 | DISIS-2022 | 5/10/2022 | Craig 230kV Switchyard | Moffat County, CO | NRIS/ERIS | Solar + Storage | 150 | | Withdrawn | | Withdrawn |
| GI-DISIS-2022-07 | DISIS-2022 | 5/24/2022 | Henry Lake -Story 230kV Line | Weld County, CO | NRIS/ERIS | Solar + Storage | 199 | 12/31/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-08 | DISIS-2022 | 5/26/2022 | Boone - La Junta 115kV Line | Otero County, CO | NRIS/ERIS | Solar + Storage | 80 | 6/1/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-09 | DISIS-2022 | 5/26/2022 | La Junta - Willow Creek 115kV Line | Otero County, CO | ERIS | Solar + Storage | 40 | 6/1/2025 | Withdrawn | | Withdrawn |
| GI-DISIS-2022-10 | DISIS-2022 | 5/26/2022 | Walsenburg - Gladstone 230kV Line | Las Animas County, CO | NRIS/ERIS | Solar + Storage | 100 | 6/1/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-11 | DISIS-2022 | 5/27/2022 | Torrance - Willard Switch 115kV Line | Torrance County, NM | NRIS/ERIS | Solar | 75 | 9/30/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-12 | DISIS-2022 | 5/27/2022 | Ludlow - Walsenburg 115kV Line | Huerfano County, CO | NRIS/ERIS | Solar + Storage | 100 | 12/1/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-13 | DISIS-2022 | 5/27/2022 | Lamar 230kV Substation | Prowers County, CO | NRIS/ERIS | Solar + Storage | 199 | 7/15/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-14 | DISIS-2022 | 5/27/2022 | Walsenburg - Gladstone 230kV Line | Colfax County, NM | NRIS/ERIS | Wind | 400 | 6/30/2026 | DISIS Phase 1 | | |
| GI-DISIS-2022-15 | DISIS-2022 | 5/27/2022 | Poncha - San Luis Valley 230kV Line | Alamosa County, CO | NRIS/ERIS | Solar | 115 | 12/31/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-16 | DISIS-2022 | 5/27/2022 | Meeker - Rifle 345kV Line | Garfield County, CO | NRIS/ERIS | Solar | 145 | 6/1/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-17 | DISIS-2022 | 5/27/2022 | Lamar-Burlington 230kV Line | Kiowa County/Prowers | NRIS/ERIS | Wind | 199 | 12/31/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-18 | DISIS-2022 | 5/27/2022 | Axial Basin - Hayden 138kV Line | Routt County, CO | NRIS/ERIS | Solar | 125 | 11/1/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-19 | DISIS-2022 | 5/27/2022 | Comanche-Walsenburg 230kV Line | Pueblo/Huerfano County, CO | NRIS/ERIS | wind | 290 | 12/31/2024 | DISIS Phase 1 | | |
| GI-DISIS-2022-20 | DISIS-2022 | 5/27/2022 | Lincoln 230kv Substation | Lincoln County, CO | NRIS/ERIS | Wind | 100 | 12/31/2025 | DISIS Phase 1 | | |



Active Generator Interconnection Requests:

https://www.oasis.oati.com/woa/docs/TSGT/TSGTdocs/Active_Interconnection on Request Queue.pdf

| Generation Interconnection Number | Current Cluster | Date of Interconnection Request | Point of Interconnection | LOCATION | Service Type Requested | Generating Facility | MW Capacitiy | Projected COD | Status / Comments | Available Studies | Explanation why IR not completed |
|-----------------------------------------|--------------------|---------------------------------------|-------------------------------------|--------------------------|---------------------------|---------------------------|-----------------|------------------|----------------------|-------------------|----------------------------------------|
| DEFINITIVE IN | NTERCON | INECTION S | YSTEM IMPACT STUDY CL | USTER (DISIS-2 | 022) | | | | | | |
| GI-DISIS-2022-21 | DISIS-2022 | 5/27/2022 | Yellow Jacket 115kV Substation | Montezuma County, CO | NRIS/ERIS | Solar | 127 | 12/31/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-22 | DISIS-2022 | 5/27/2022 | Hell Creek Substation | Kit Carson County, CO | NRIS/ERIS | Wind + Solar + Storage | 90 | 6/1/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-23 | DISIS-2022 | 5/27/2022 | Lamar 230kV Substation | Prowers County, CO | NRIS/ERIS | Solar + Storage | 350 | 12/31/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-24 | DISIS-2022 | 5/27/2022 | Boone 230kV Substation | Pueblo County, CO | NRIS/ERIS | Solar + Storage | 199 | 12/31/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-25 | DISIS-2022 | 5/27/2022 | Laramie River Station-Stegall Line | Goshen County, WY | NRIS/ERIS | Solar | 163 | 12/31/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-26 | DISIS-2022 | 5/30/2022 | Craig - Meeker 345kV Line | Moffat County, CO | NRIS/ERIS | Wind + Storage | 400 | 12/31/2025 | Withdrawn | | Withdrawn |
| GI-DISIS-2022-27 | DISIS-2022 | 5/30/2022 | Elephant Butte - Socorro 115kV Line | Socorro County, NM | NRIS/ERIS | Solar + Storage | 32 | 6/16/2026 | DISIS Phase 1 | | |
| GI-DISIS-2022-28 | DISIS-2022 | 5/31/2022 | Burlington - Lamar 230kV Line | Kit Carson County, CO | NRIS/ERIS | Solar + Storage | 199 | 12/31/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-29 | DISIS-2022 | 5/31/2022 | Big Sand - Windtalker 230kV Line | Lincoln County, CO | NRIS/ERIS | Wind | 200 | 12/31/2023 | DISIS Phase 1 | | |
| GI-DISIS-2022-30 | DISIS-2022 | 5/31/2022 | Big Sandy 115kV Substation | Lincoln County, CO | NRIS | Storage | 199 | 3/29/2025 | Withdrawn | | Withdrawn |
| GI-DISIS-2022-31 | DISIS-2022 | 5/31/2022 | Gladstone 230kV Substation | Gladstone County, NM | NRIS/ERIS | Solar | 100 | 12/15/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-32 | DISIS-2022 | 5/31/2022 | Gladstone 230kV Substation | Gladstone County, NM | NRIS/ERIS | Storage | 50 | 12/15/2025 | Withdrawn | | Withdrawn |
| GI-DISIS-2022-33 | DISIS-2022 | 5/31/2022 | Waverly 115 kV Substation | Alamosa County, CO | NRIS/ERIS | Storage | 50 | 12/15/2025 | Withdrawn | | Withdrawn |
| GI-DISIS-2022-34 | DISIS-2022 | 5/31/2022 | Waverly 115 kV Substation | Alamosa County, CO | NRIS/ERIS | Solar | 100 | 12/15/2025 | Withdrawn | | Withdrawn |
| GI-DISIS-2022-35 | DISIS-2022 | 5/31/2022 | Laramie River - Stegall 230kV Line | Goshen County, WY | NRIS/ERIS | Solar | 200 | 12/15/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-36 | DISIS-2022 | 5/31/2022 | Laramie River - Stegall 230kV Line | Goshen County, WY | NRIS/ERIS | Storage | 50 | 12/15/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-37 | DISIS-2022 | 5/31/2022 | Cahone - Maverick 115kV Line | San Miguel County, CO | NRIS/ERIS | Storage | 25 | 12/15/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-38 | DISIS-2022 | 5/31/2022 | Cahone - Maverick 115kV Line | San Miguel County, CO | NRIS/ERIS | Solar | 100 | 12/15/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-39 | DISIS-2022 | 5/31/2022 | Norwood - Wilson Mesa 115kV Line | San Miguel County, CO | NRIS/ERIS | Solar + Storage | 100 | 12/23/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-40 | DISIS-2022 | 5/31/2022 | Sand Hills - Wray 115kV Line | Yuma County, CO | ERIS | Solar | 199 | 9/30/2024 | DISIS Phase 1 | | |



Active Generator Interconnection Requests:

https://www.oasis.oati.com/woa/docs/TSGT/TSGTdocs/Active_Interconnection_ on_Request_Queue.pdf

| Generation Interconnection Number | Current Cluster | Date of Interconnection Request | Point of Interconnection | LOCATION | Service Type Requested | Generating Facility | MW Capacitiy | Projected COD | Status / Comments | Available Studies | Explanation why IR not completed |
|-----------------------------------------|--------------------|---------------------------------------|------------------------------|------------------------------------|---------------------------|------------------------|-----------------|------------------|----------------------|-------------------|----------------------------------------|
| DEFINITIVE IN | ITERCON | NECTION S | YSTEM IMPACT STUDY CI | USTER (DISIS-2 | 022) | | | | | | |
| GI-DISIS-2022-41 | DISIS-2022 | 5/31/2022 | Bonny Creek 115kV Substation | Kit Carson County, CO | NRIS/ERIS | Wind | 50 | 5/31/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-42 | DISIS-2022 | 5/31/2022 | Keota 345kV Substation | Weld County, CO | NRIS/ERIS | solar | 200 | 12/15/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-43 | DISIS-2022 | 5/31/2022 | Keota 345kV Substation | Weld County, CO | NRIS/ERIS | Storage | 100 | 12/15/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-44 | DISIS-2022 | 5/31/2022 | Craig 345kV Substation | Moffat County, CO | NRIS/ERIS | Solar + Storage | 199 | 12/1/2026 | DISIS Phase 1 | | |
| GI-DISIS-2022-45 | DISIS-2022 | 5/31/2022 | Huckleberry 230kV Substation | Pueblo County, CO | NRIS/ERIS | Solar + Storage | 199 | 12/1/2026 | DISIS Phase 1 | | |
| GI-DISIS-2022-46 | DISIS-2022 | 5/31/2022 | Nucla | Montrose County, CO | TBD | Solar | 20 | 12/1/2026 | Withdrawn | | Withdrawn |
| GI-DISIS-2022-47 | DISIS-2022 | 5/31/2022 | Laramie River Station | Platte County, WY | NRIS/ERIS | Solar + Storage | 250 | 12/1/2026 | DISIS Phase 1 | | |
| GI-DISIS-2022-48 | DISIS-2022 | 5/31/2022 | Brighton 230kV Substation | Adams County, CO | NRIS/ERIS | Solar + Storage | 150 | 12/1/2026 | Withdrawn | | Withdrawn |
| GI-DISIS-2022-49 | DISIS-2022 | 5/31/2022 | Lamar 230kV Substation | Prowers County, CO | NRIS/ERIS | Solar + Storage | 150 | 12/1/2026 | DISIS Phase 1 | | |
| GI-DISIS-2022-50 | DISIS-2022 | 5/31/2022 | Boone 230kV Substation | Pueblo County, CO | NRIS/ERIS | Solar + Storage | 240 | 12/1/2026 | DISIS Phase 1 | | |
| GI-DISIS-2022-51 | DISIS-2022 | 5/31/2022 | Boone-Huckleberry 230kV line | Pueblo County, CO | NRIS/ERIS | Solar + Storage | 400 | 12/31/2025 | DISIS Phase 1 | | |
| GI-DISIS-2022-52 | DISIS-2022 | 5/31/2022 | LRS-Wayne Child 345kV | Platte/Goshen Counties, Wyoming | NRIS/ERIS | Wind | 252 | 1/1/2026 | DISIS Phase 1 | | |



Transmission Service Request Queue

<u>https://www.oasis.oati.com/woa/docs/TSGT/TSGTdocs/Transmission_Servic</u>
<u>e_Request_Queue_6-23-2022_-_Format_Cleanup.pdf</u>

| Networ | k Service Trans | smission Re | equests | | | | | | | | |
|-------------------|-------------------------------------------|---------------------------------------|------------------------------------------------------------------------|-----------------|------------------------------------------|--------------------|--------------------------------------------------------------------------|----------|-----------------------|--------------------|------------------------------------------------------------------------------------------|
| Request Number | Application/Submission Completion Date | Oasis Reservation or Status Change | Location or POR / POD | Service Type | MW Capacity Requested (Granted) | In-service Date | Status / Comments | Study | Agreement Executed | Study Completed | Network Service Granted |
| TSR-15-0319 | 3/19/2015 | TSR # 81269893 | Lamar 230 kV to Midway 230 kV | Network Service | 75 (75) | 12/1/2017 | Evaluation Complete | N/A | | | Declared acceptable for Network Resource Designation |
| | 12/19/2018 | TSR# TSWALTCOMA | Walsenburg 230kV to Gladstone 230kV | Network Service | 100 | 12/31/2024 | Evaluation Complete | N/A | | | Declared acceptable for Network Resource Designation |
| | 2/15/2019 | TSR # TSBURLBSAN | Landsman Creek to Big Sandy 230kV | Network Service | 104 | 12/18/2020 | Evaluation Complete | N/A | | | Declared acceptable for Network Resource Designation |
| TSOA-19-0025 | 10/18/2019 | NITS Application | Southeastern Colorado | Network Service | 63 | 1/1/2020 | Network Integration Transmission Service Agreement Executed | N/A | | N/A | |
| TSOA-19-0063 | 12/10/2019 | TSR # TSAXBASINSOLAR | Moffat County, Colorado | Network Service | 145 | 12/31/2024 | Evaluation Complete | SIS | | 3/18/2020 | Declared acceptable for Network Resource Designation |
| TSOA-19-0064 | 12/10/2019 | TSR # TSDOLOCANSOLAR | Cahone 115kV | Network Service | 110 | 12/31/2024 | Evaluation Complete | SIS | | 3/18/2020 | Declared acceptable for Network Resource Designation |
| TSOA-19-0065 | 12/10/2019 | TSR # TSESCALANTESOLAR | PEGS TO AMBROSIA 230kV | Network Service | 200 | 10/1/2023 | Evaluation Complete | SIS | | 3/12/2020 | Declared acceptable for Network Resource Designation |
| TSOA-19-0066 | 12/10/2019 | TSR # TSSPANPEAKSII | Las Animas County, Colorado | Network Service | 40 | 12/31/2024 | Evaluation Complete | SIS | | 3/23/2020 | Declared acceptable for Network Resource Designation |
| TSOA-19-0067 | 12/18/2019 | TSR # TSNIYOLWIND | Logan and Washington Counties, Colorado | Network Service | 201 (201) | 8/18/2021 | Evaluation Complete | SIS | | 3/13/2020 | Declared acceptable for Network Resource Designation |
| TSOA-20-0007 | 1/7/2020 | NITS Application TSOA-20-0007 | Montrose, Colorado | Network Service | 99 | 5/1/2020 | Evaluation Complete | SIS | | 3/13/2020 | Declared acceptable for Network Integration Transmission Service |
| TSOA-20-0004 | 1/13/2020 | TSR # TSCGULSOLAR | Southwestern Colorado | Network Service | 120 | 1/1/2023 | Evaluation Complete | SIS | | 3/24/2020 | Withdrawn |
| TSR-20-1203 | 12/17/2020 | TSR# TSCGULSOLAR | Southwestern Colorado | Network Service | 140 (140) | 12/1/2024 | Network Upgrades Required | SIS/FACS | | 7/6/2021 | Declared acceptable for Network Resource Designation dependent on Network Upgrades |
| TSR-21-0719 | 7/19/2021 | | Redtail to Story, Lamar230kV to Midway | Network Service | 52 | 6/1/2022 | Application Incomplete- Evaluation Phase to Determine Completeness | | | | Withdrawn-Start Date changed |
| TSR-21-0729 | 7/29/2021 | | Redtail to Story, Lamar230kV to Midway | Network Service | 27 | 6/1/2022 | Application Incomplete- Deficiencies not corrected | | | | Withdrawn |
| TSR-21-0920A | 9/20/2021 | | Redtail to Story, Lamar230kV to Midway, Ojo345 to Taos | Network Service | 27 | 6/1/2022 | Facilities Study | FAC | | 6/3/2022 | Withdrawn |
| TSR-21-0920B | 9/20/2021 | | Redtail to Ault, Craig to Montrose 115kV, Ojo345 to Taos | Network Service | 27 | 6/1/2022 | Facilities Study | FAC | | 6/3/2022 | Withdrawn |
| TSR-21-1020A | 10/20/2021 | | Redtail to Ault, Craig to Montrose 115kV | Network Service | 118 | 6/1/2022 | Facilities Study | FAC | | 6/3/2022 | Withdrawn |
| TSR-21-1020B | 10/20/2021 | | Redtail to Story, Lamar230kV to Midway, Craig to Montrose 115kV. | Network Service | 52 | 10/1/2022 | Facilities Study | FAC | | 6/3/2022 | Withdrawn |



Transmission Service Request Queue

<u>https://www.oasis.oati.com/woa/docs/TSGT/TSGTdocs/Transmission_Servic</u>
<u>e_Request_Queue_6-23-2022_-_Format_Cleanup.pdf</u>

| Point-to | o-Point Transm | ission Serv | ice Requests | | | | | | | | |
|-----------------------------|---------------------------------------------------------|---------------------------------------|-----------------------------------------------|------------------------------------------------------|------------------------------------------|--------------------|--------------------------------------------------------------------------------------------------------|-------|--------------------------------|-----------------------------|---------------------------------------------------------|
| Request Number | Application Submission/Submission Completion Date | Oasis Reservation or Status Change | Location or POR / POD | Service Type | MW Capacity Requested (Granted) | In-service Date | Status / Comments | Study | Agreement Executed | Study Completed | Transmission Service Agreement Executed |
| TSR-22-0411 | 4/11/2022 | TSR# 96694725 | Las Cruces 115kV to Alamogordo 115kV | Pt. to Pt. long term firm transmission service | 3 (3) | 5/1/2022 | Transmission Service Agreement Draft Phase | N/A | 4/26/2022 | | Agreement Executed |
| TSR-21-1105 | 11/5/2021 | TSR# 95365811 | Pyramid to Hidalgo 115 | Pt. to Pt. long term firm transmission service | 40 (40) | 1/1/2023 | Transmission Service Agreement Executed | N/A | 12/28/2021 | | Agreement Executed |
| TSR-21-0908 | 9/8/2021 | TSR# 94936658 | Gladstone 230kV to Ojo 345kV | Pt. to Pt. long term firm transmission service | 104 (104) | 1/1/2022 | Transmission Service Agreement Executed | N/A | 10/25/2021 | | Agreement Executed |
| TSR-21-0707B | 7/7/2021 | TSR# 94428573 | San Juan345kV to Four Corners 345kV Path 2 | Pt. to Pt. long term firm transmission service | 25 (25) | 1/1/2022 | Transmission Service Agreement Executed | N/A | 8/13/2021 | | Agreement Executed |
| TSR-21-0707 | 7/7/2021 | TSR# 94428494 | San Juan345kV to Four Corners 345kV | Pt. to Pt. long term firm transmission service | 50 (50) | 1/1/2022 | Transmission Service Agreement Executed | N/A | 8/13/2021 | | Agreement Executed |
| TSR-21-0624 | 6/24/2021 | TSR #94318063 | Montrose 115kV to San Juan 345kV | Pt. to Pt. long term firm transmission service | 27 (27) | 6/1/2022 | Transmission Service Agreement Executed | N/A | 9/2/2021 | | Agreement Executed |
| TSR-21-0524 | 6/3/2021 | TSR #94182966 | Ault to Calamity Ridge 138kV | Pt. to Pt. long term firm transmission service | 120 (0) | 10/1/2024 | System Impact Study Completed. Facilities Study Agreement currently in draft phase. | FAC | | SIS-10/7/2021 | Withdrawn |
| TSR-21-0402 | 4/2/2021 | TSR #93529784 | Laramie River Station 345kV to Ault | Pt. to Pt. long term firm transmission service | 150 (129) | 6/1/2022 | System Impact Study Completed | SIS | 5/3/2021 | 7/29/2021 | Agreement Executed |
| TSR-20-1216 | 12/16/2020 | TSR# 92823403 | Laramie River Station 345kV to Ault | Pt. to Pt. long term firm transmission service | 120 (0) | 6/1/2021 | System Impact Study Complete (SISA TSOA-20-0062) Request has been REFUSED due to SIS findings | SIS | | 4/2/2021 | Withdrawn |
| TSOA-19-0057 | | TSR# 90541456 | Ambrosia to Fort Wingate/Mendoza | Pt. to Pt. long term firm transmission service | 8 (8) | 1/1/2020 | Transmission Service Agreement Executed | N/A | | | 12/18/2019 |
| TSOA-19-0057 | | TSR# 90541456 | Ambrosia to Fort Wingate/Mendoza | Pt. to Pt. long term firm transmission service | 8 (8) | 1/1/2020 | Transmission Service Agreement Executed | N/A | | | 12/18/2019 |
| TSR-17-1018 | 10/18/2017 | TSR #85694125 | Story 345 kV to Dave Johnston | Pt. to Pt. long term firm transmission service | 214 | 10/31/2020 | Evaluation Phase to Determine Need for System Impact Study | | | | |
| TI-04-1208 | 5/1/2005 | Met Network Resource Qualification | Willow Creek | Upgraded Network Resource for Existing | 14 (14) | 4/1/2008 | Plant testing and Emissions gualification | SIS | 4/19/2007 | 6/20/2005 6/15/2007 | Pending Commercial Operation of Plant |
| | | ••••• | | Network Customer Pt. to Pt. long term | | | - | SIS | | 6/15/2007 | |
| TSR-08-0229 | 2/29/2008 | TSR Application Letter | Playas to Hidalgo 115 kV | firm transmission service | 11 (11) | 11/1/2012 | Transmission Service Agreement Executed | N/A | | 6/20/2008 | 12/19/2008 (11 MW) |
| TSR-09-0708 | 7/8/2009 | TSR# 73220095 | Burlington to Big Sandy 230kV | Network Service | 51 (51) | 1/1/2011 | Evaluation Completed: No System Impact Study(SIS) required. | | | | Declared acceptable for Network Resource Designation |
| TSR-14-0102 | 1/2/2014 | Met Network Resource Qualification | Burlington 230KV | Network Service | 150 (150) | 21/1/2015 | Evaluation Phase complete | | | | Declared acceptable for Network Resource Designation |
| TSR-14-0623 | 6/23/2014 | TSR # 79820792 | Ambrosia to Fort Wingate/Mendoza | Pt. to Pt. long term firm transmission service | 10 (10) | 1/1/2015 | Transmission Service Agreement Executed | N/A | | | 1/1/2015 (10 MW) |
| TSR-08-0623B (Tri-State) | 6/23/2008 | TSR# 72284716 | Burlington to Big Sandy 230kV | Pt. to Pt. long term firm transmission service | 75 | 12/1/2010 | Evaluation completed; No System Impact Study(SIS) required. | | Use results of TI- 06-0929A | | N/A |
| TSR-08-0623C (Tri-State) | 6/23/2008 | TSR# 72284717 | Burlington to Big Sandy 230kV | Pt. to Pt. long term firm transmission service | 100 | 12/1/2010 | Evaluation completed; No System Impact Study(SIS) required. | | Use results of TI- 06-0929A | | N/A |
| TSR-08-0606 | 6/6/2008 | TSR Application Letter | Springer to 030345 | Pt. to Pt. long term firm transmission service | 179 | 1/1/2010 | System Impact Study Phase | SIS | 8/11/2008 | 10/21/2008 Countered 153 | 11/14/2008 Withdrawn |



Study Requests

Study/Information Requests



- Transmission Study Requests
 - None received outside of the sub-regional planning groups (CCPG, SWAT)
 - Any new requests for discussion?
- Economic Study Requests
 - None received outside of regional study process (Westconnect)
 - Due to Tri-State by Sept 1 each year for discussion at this annual meeting
 - Submit any requests to Tri-State at: <u>transmissionplanning@tristategt.org</u>

Information Requests

- Load and Resource information requests have been sent to Network Customers
 - Tri-State requests Network Customers continue to provide updates to Load and Resource information, as well as other modeling information, to assist in preparation of our ten-year transmission plan



Projects

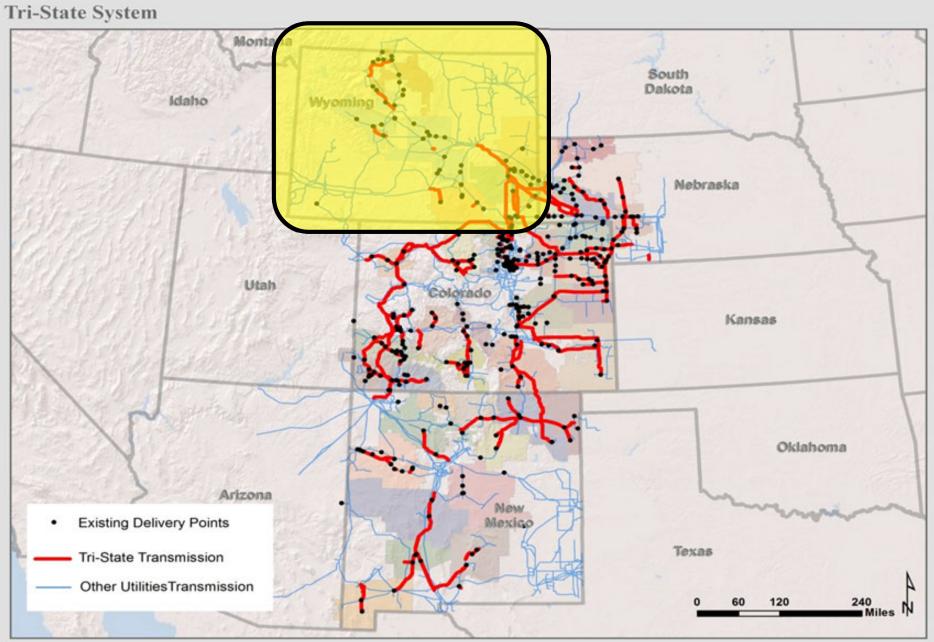
Project Status Categories



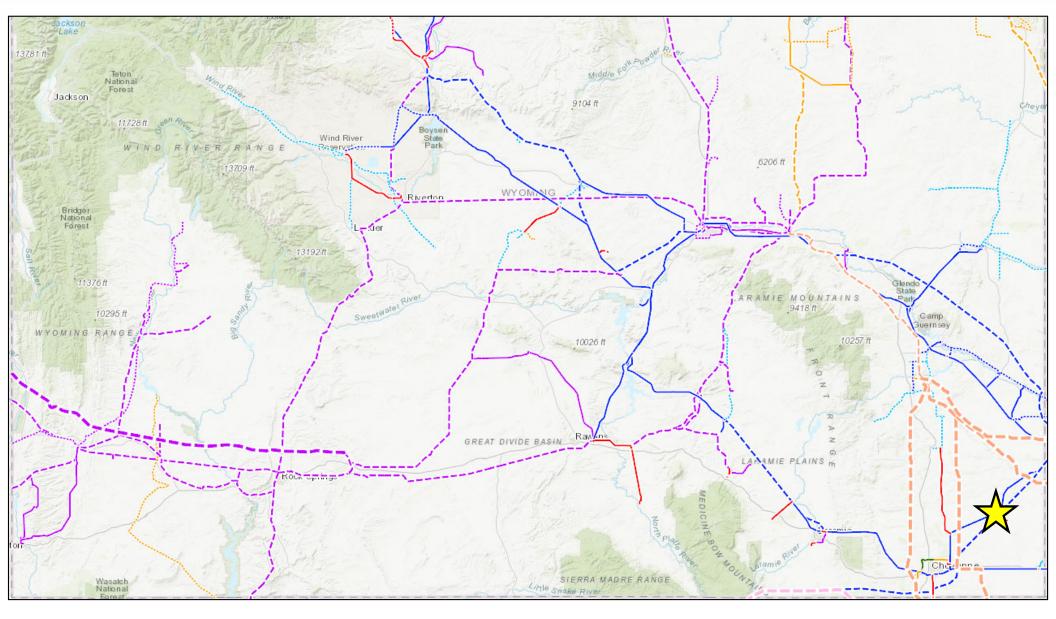
- <u>Developing</u>
 - Some objectives and needs have been identified. Some alternatives have or are being considered, but stakeholder proposed alternatives are also requested.
- <u>Conceptual</u>
 - Conceptual/hypothetical objectives and needs. Alternative(s) has been decided. Project drivers are uncertain.
- Planned
 - Objectives and needs are clearer at the current time, but are subject to change. Preferred alternative(s) has been identified. Project drivers have more certainty than Conceptual projects.
- <u>Under-Construction</u>
 - Board approved project. Project has started accruing costs due to preliminary activities (i.e. design, routing, permitting, regulatory activities), and/or actual construction.
- <u>Energized</u>
- <u>Canceled</u>

Projects: Wyoming (3)

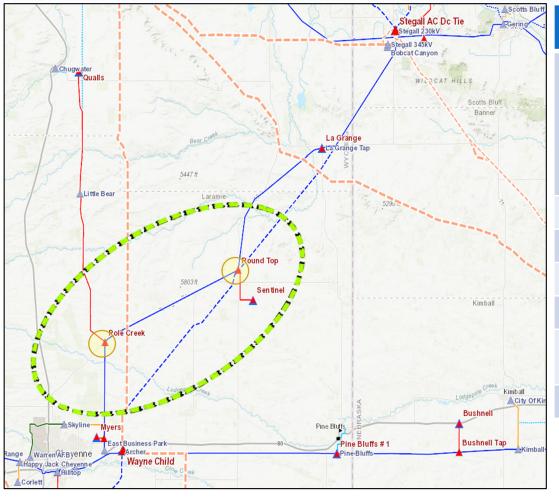




Archer - Stegall Sectionalizing Project



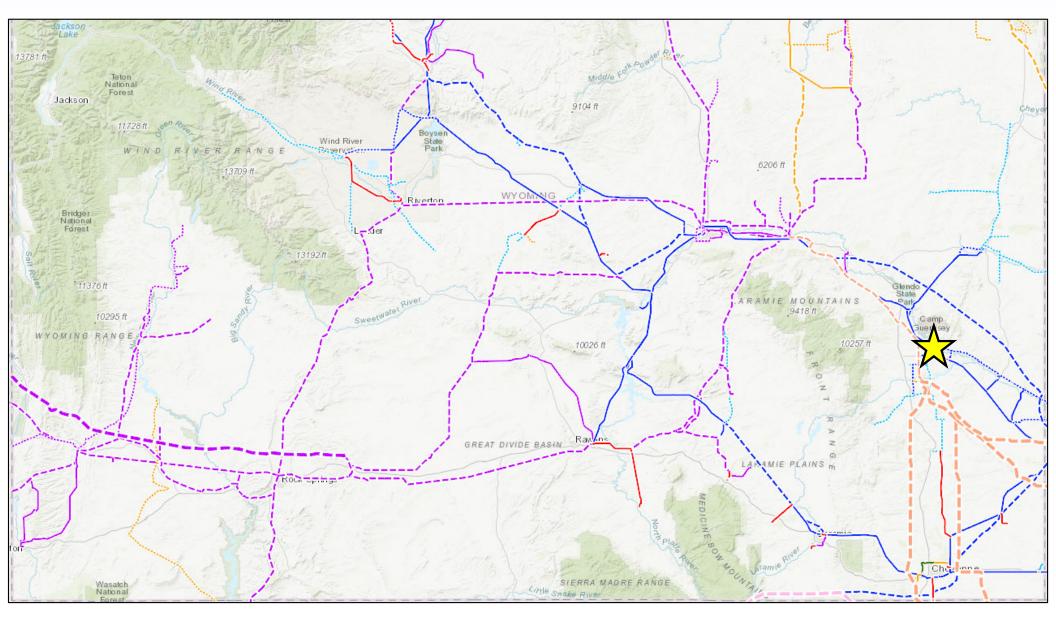




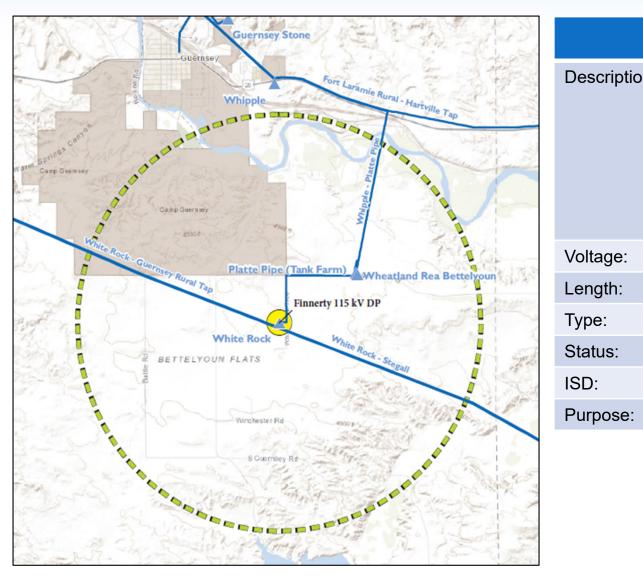
Archer - Stegall Sectionalizing Project

| Description: | Sectionalize Archer – Stegall 115 kV line with a new 115 kV three breaker ring bus (expandable to four) at Pole Creek and three 115 kV breakers in a star bus configuration at Round Top |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Voltage: | 115 kV |
| Length: | 0 miles |
| Туре: | Substation |
| Status: | Planned |
| Planned ISD: | 2024 |
| Purpose: | Reliability |

Finnerty 115 kV DP







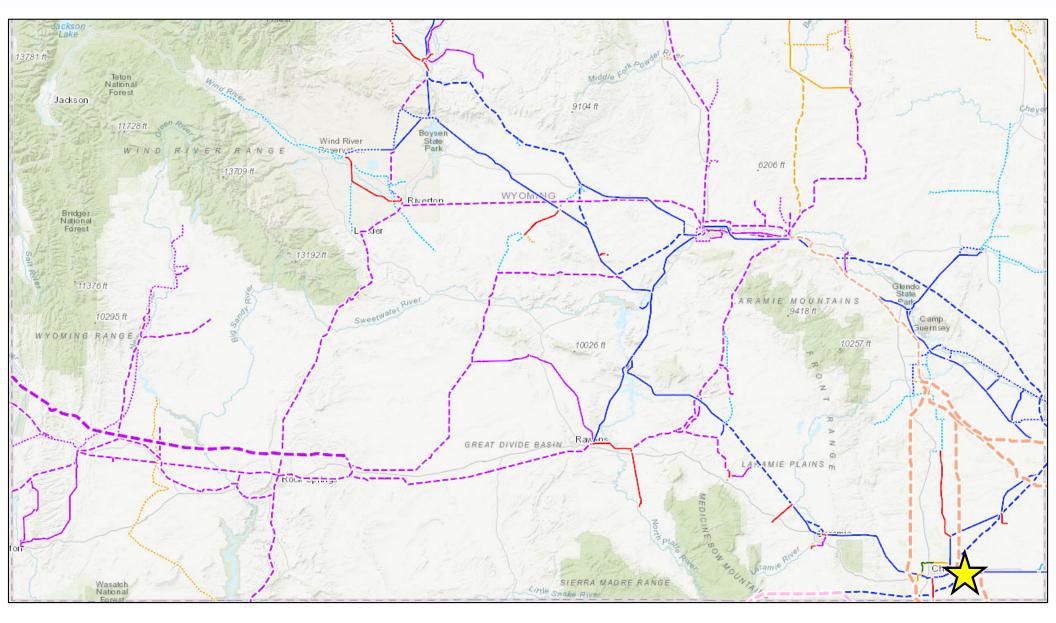
| | Finnerty 115 kV DP |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| on: | Establish a new 115 kV DP for WLREA. Scope of project includes a 115 kV breaker addition to adjacent WAPA Whiterock Substation, 115 kV transmission line from Whiterock to Finnerty. Finnerty Substation will consist of a single 115 kV breaker, 115/34.5 |

kV 50 MVA transformer, low side 34.5 kV

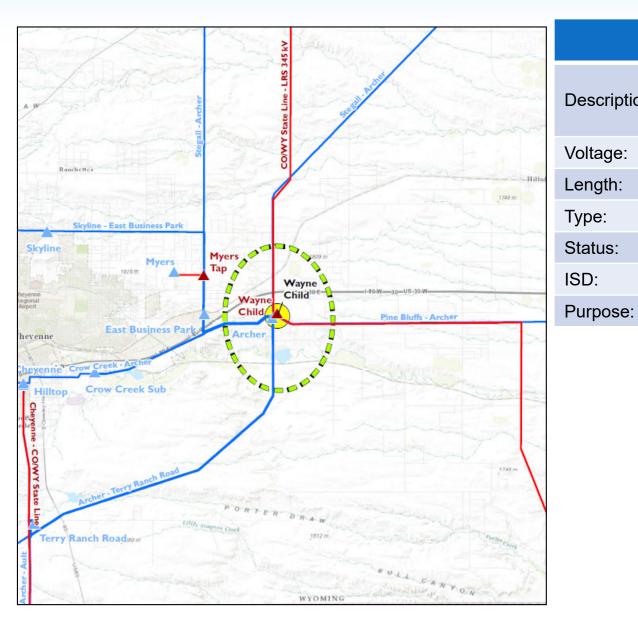
| | equipment and metering equipment. |
|----------|-----------------------------------|
| Voltage: | 115 kV |
| Length: | >.5 miles |
| Туре: | Substation |
| Status: | Energized |
| ISD: | 2022 |
| Purpose: | Load Serving |

Wayne Child Phase II







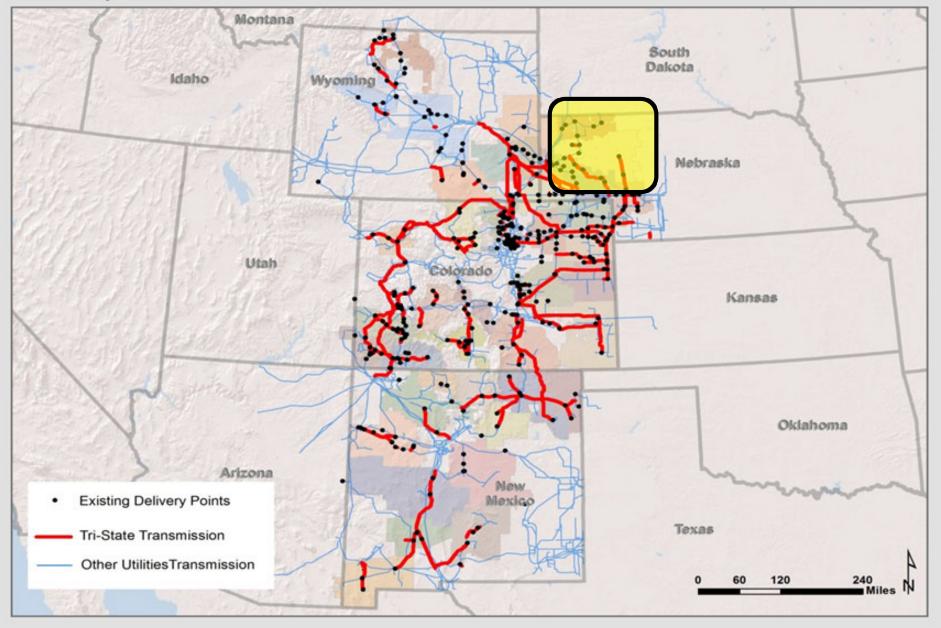


Wayne Child Phase II Sectionalize Laramie River Station (LRS) -Description: Story 345 kV line at the existing Wayne Child substation. Voltage: 345 kV 0 miles Length: Substation. Type: Status: Energized ISD: 2022 Load Serving, increased transfer capabilities.

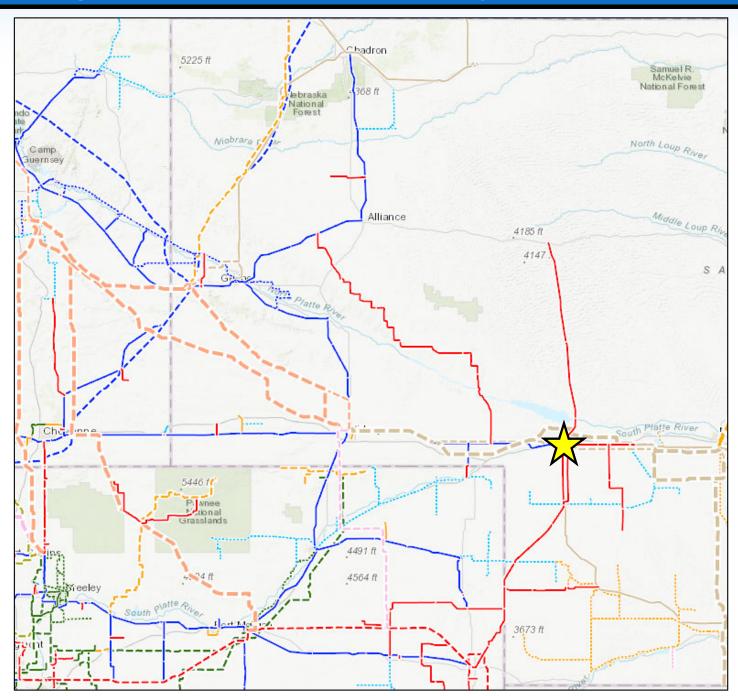
Projects: Nebraska (1)



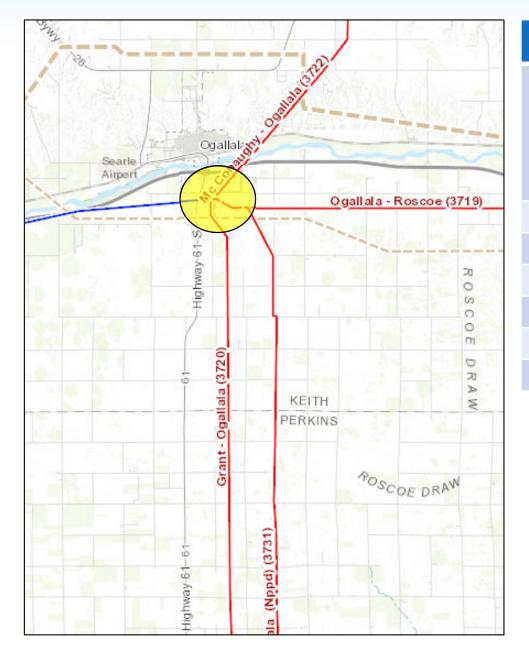
Tri-State System



Ogallala 115/34.5kV Delivery Point







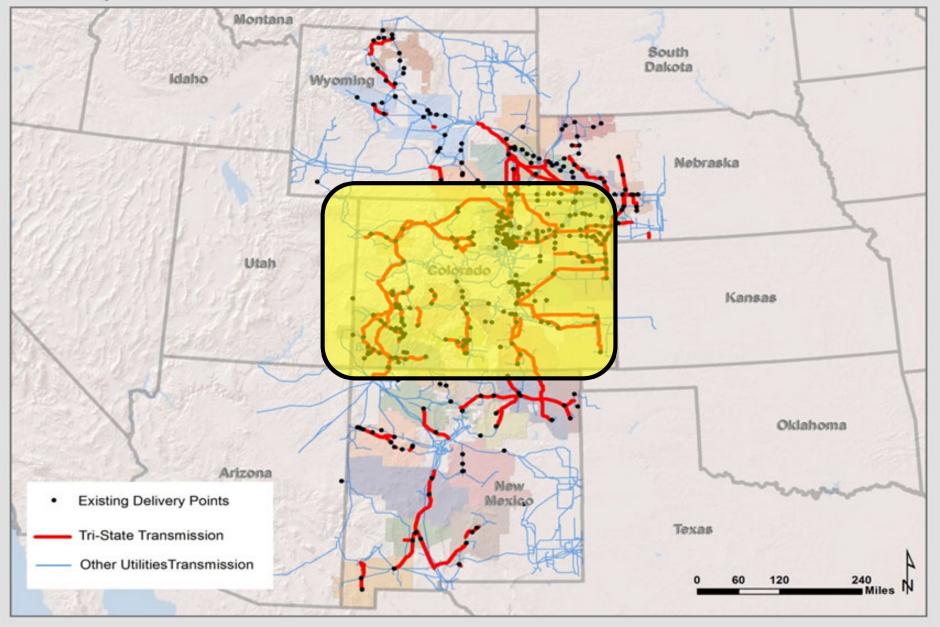
Ogallala 115/34.5kV Delivery Point

| Description: | Establish a new 115 kV DP for MWECC. Scope of project includes a 115 kV breaker addition inside Tri-State's Ogallala substation along with the installation of 115/34.5 kV 50 MVA transformer, low side 34.5 kV equipment and metering equipment. |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Voltage: | 115 kV |
| Length: | N/A |
| Туре: | Substation |
| Status: | Planned |
| ISD: | 2025 |
| Purpose: | Load Serving |

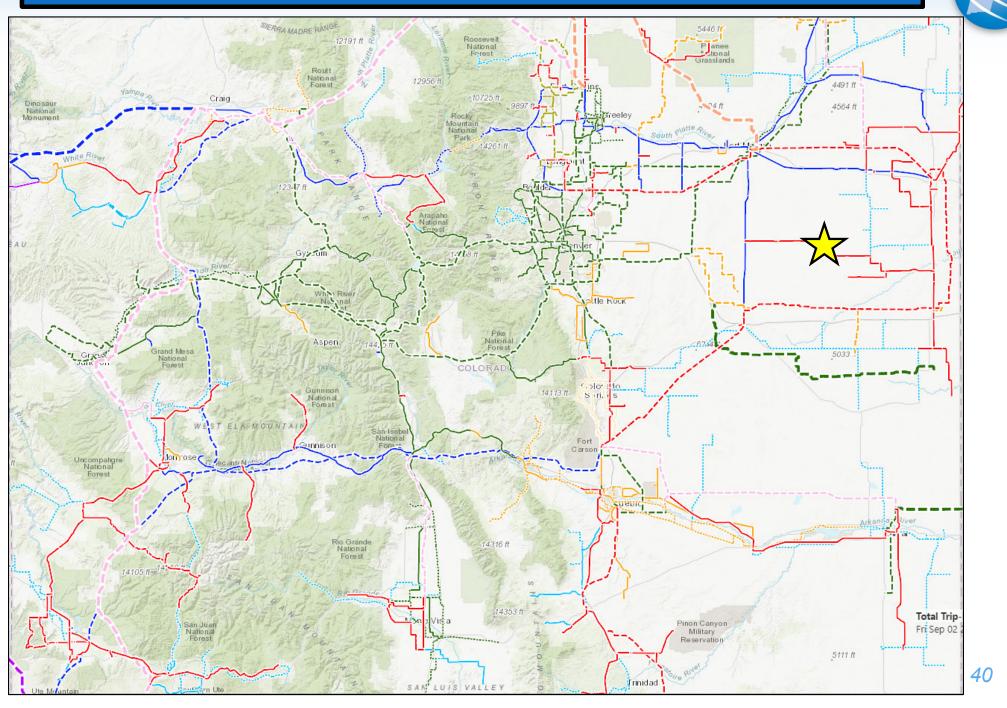
Projects: Colorado (27)



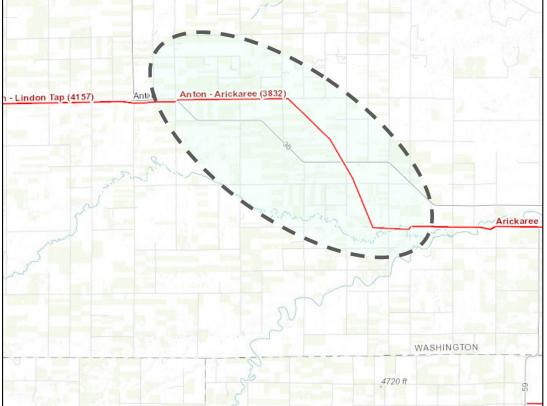
Tri-State System



Anton – Arickaree 115 kV Line Uprate



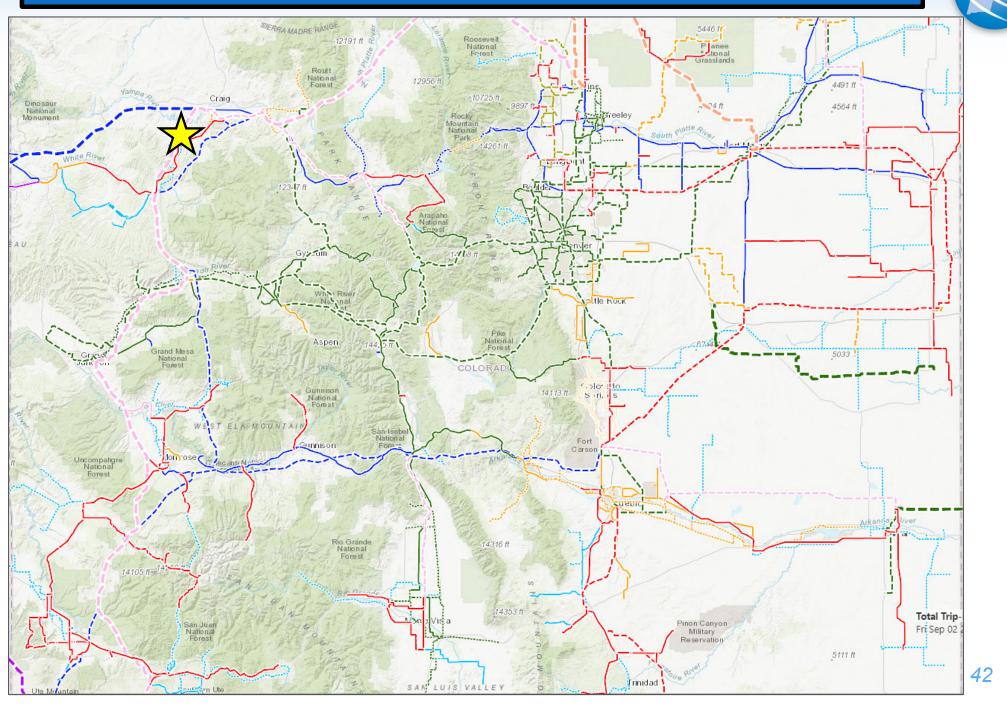




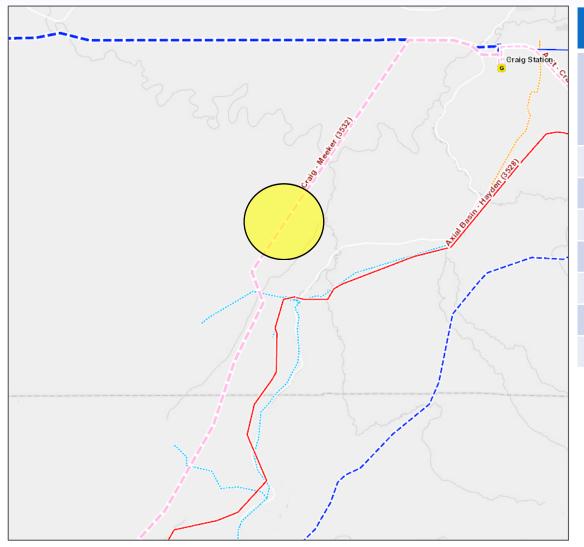
Anton – Arickaree 115 kV Line Uprate

| Description: | Uprate of existing 115 kV line between Anton and Arickaree Substations. |
|--------------|-------------------------------------------------------------------------|
| Voltage: | 115 kV |
| Length: | 27 miles |
| Туре: | Line. |
| Status: | Planned |
| ISD: | 2025 |
| Purpose: | Increase overall line rating |

Axial Basin Solar Interconnect



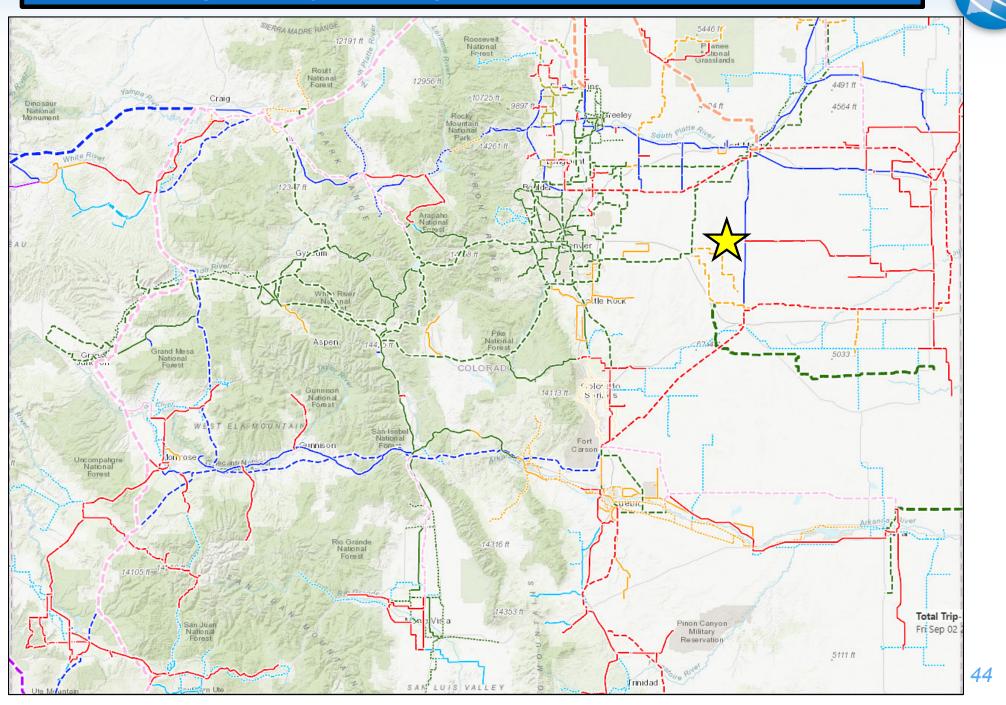




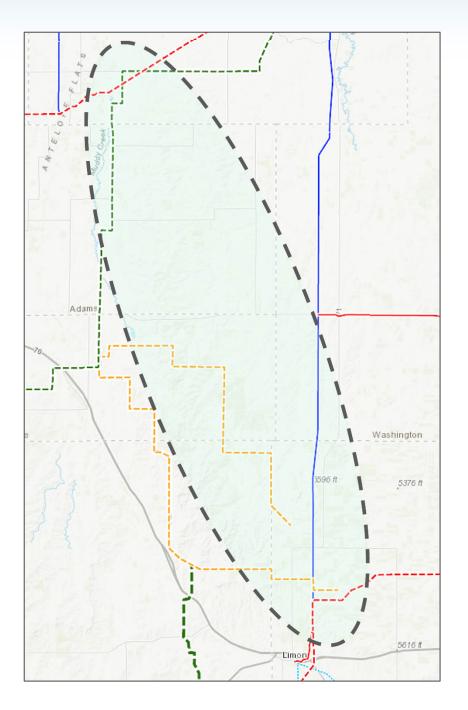
Axial Basin Solar Interconnect

| Description: | Construct new 345 kV Milk Creek Switching Station along Craig – Meeker 345 kV line to accommodate Axial Basin Solar |
|--------------|------------------------------------------------------------------------------------------------------------------------------|
| Voltage: | 345 kV |
| Location | ~16.5 Miles Southwest of Craig |
| Length: | 0 miles |
| Туре: | Substation |
| Status: | Under Construction |
| Planned ISD: | 2024 |
| Purpose: | Generation Addition |

Big Sandy – Badger Creek 230 kV Line



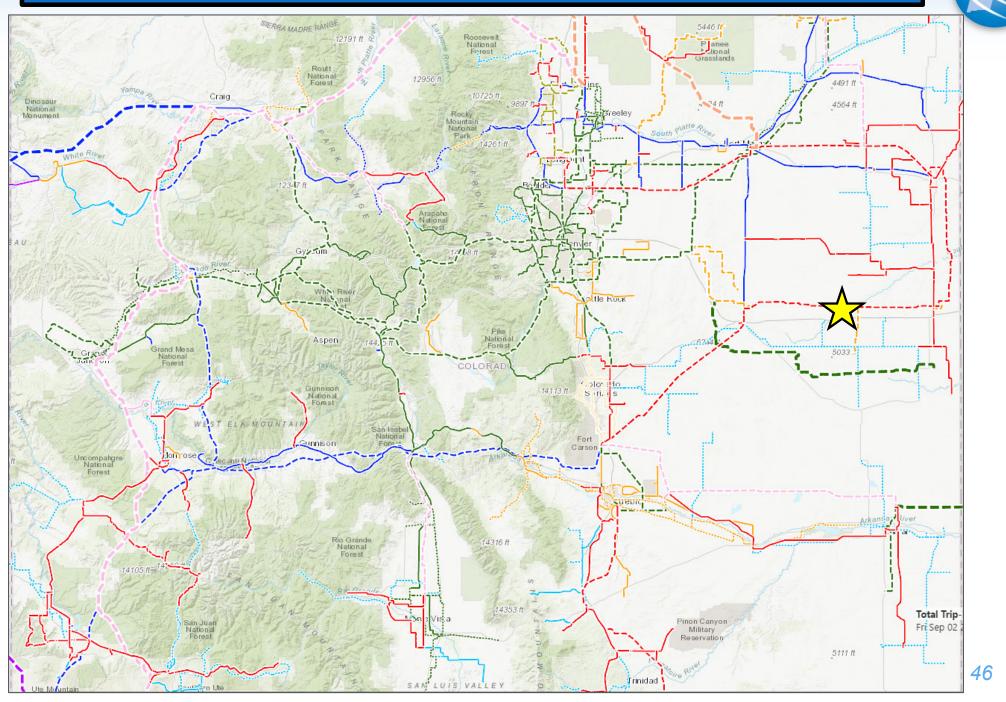




Big Sandy – Badger Creek 230 kV Line

| Description: | Construct a 230 kV transmission line from existing Big Sandy Substation to new Badger Creek Substation. |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Voltage: | 230 kV |
| Length: | 80 miles |
| Туре: | Substation and Line |
| Status: | Planned |
| ISD: | 2028 |
| Purpose: | Reliability, improve load-serving capability, remove generation operating restrictions, and support renewable resource development in eastern Colorado. |

Big Sandy – Burlington 230 kV Line Uprate



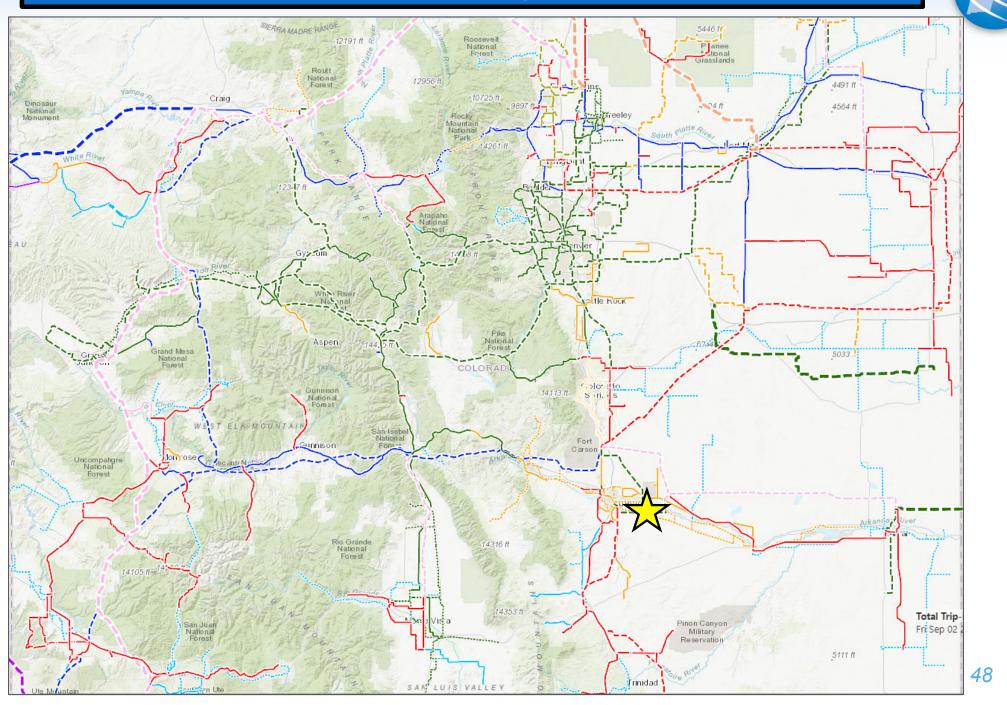




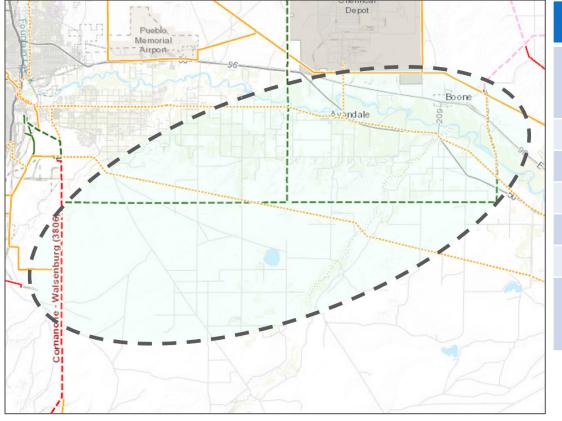
Big Sandy – Burlington 230 kV Line Uprate

| Description: | Uprate of existing 230 kV line between Big Sandy and Burlington Substations. |
|--------------|------------------------------------------------------------------------------|
| Voltage: | 230 kV |
| Length: | 81 miles |
| Туре: | Line |
| Status: | Planned |
| ISD: | 2028 |
| Purpose: | Increase overall line rating |

Boone – Huckleberry 230 kV Line



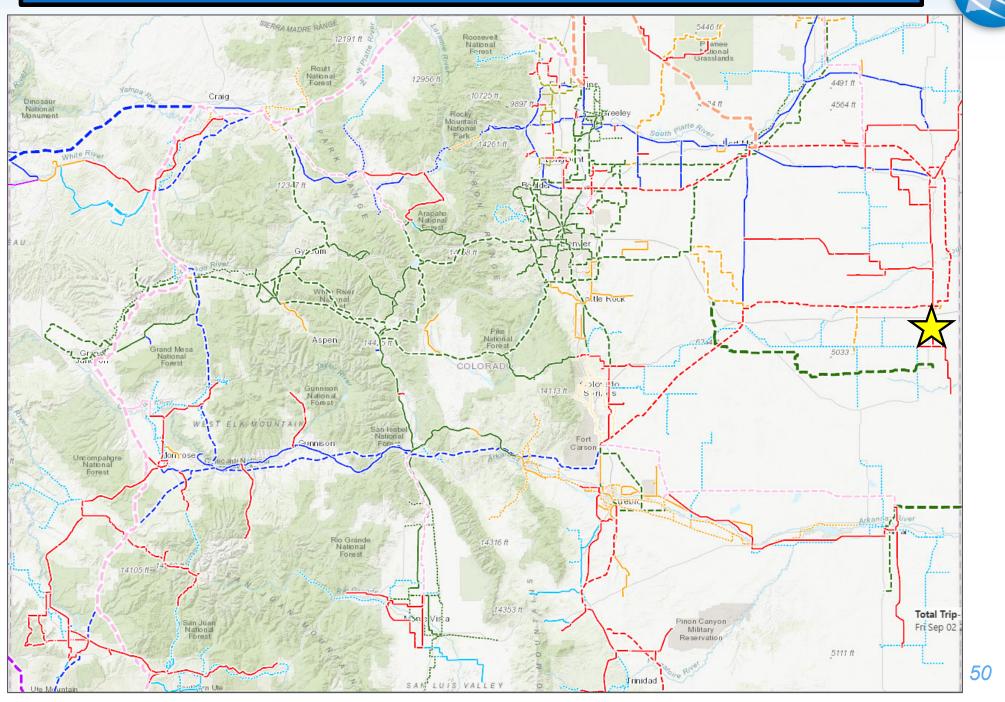




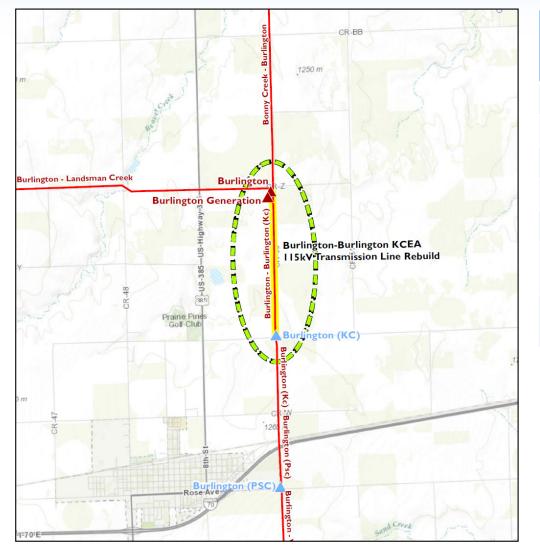
Boone – Huckleberry 230 kV Line

| Description: | Construct a 230 kV transmission line from existing Boone Substation to new Huckleberry Substation. |
|--------------|---------------------------------------------------------------------------------------------------------------------|
| Voltage: | 230 kV |
| Length: | 30 miles |
| Туре: | Substation and Line |
| Status: | Planned |
| ISD: | 2026 |
| Purpose: | Reliability, improve load-serving capability, and support renewable resource development in eastern Colorado. |

Burlington (TS) – Burlington (KCEA) 115 kV



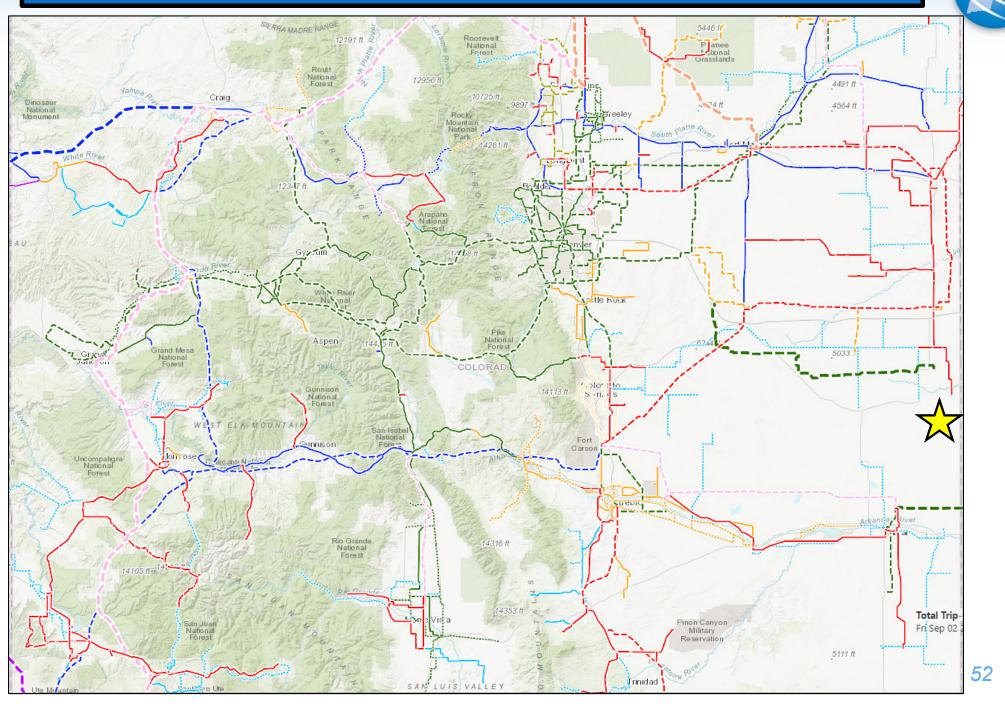




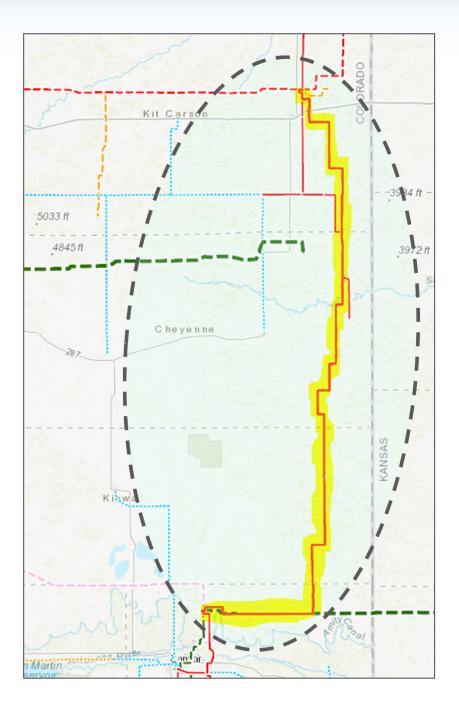
Burlington (TS) – Burlington (KCEA) 115 kV

| Description: | Reconductor with 795 ACSR. |
|-----------------|------------------------------------------------|
| Voltage: | 115 kV |
| Length: | 1.87 miles |
| Туре: | Line |
| Status: | Planned |
| Planned ISD: | 2026 |
| Purpose: | Accommodate distribution system load shifting. |

Burlington – Lamar 230 kV Line



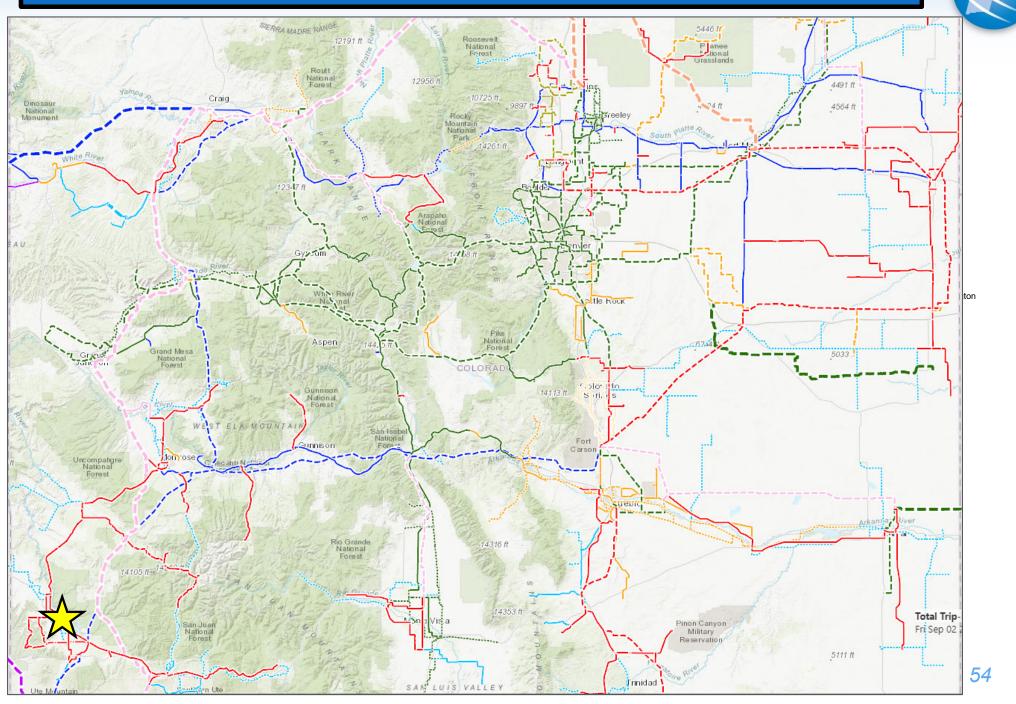




Burlington – Lamar 230 kV Line

| Description: | Construct a 230 kV transmission line from existing Burlington Substation to the existing Lamar Substation. |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Voltage: | 230 kV |
| Length: | 107 miles |
| Туре: | Line |
| Status: | Under Construction |
| ISD: | 2025 |
| Purpose: | Reliability, improve load-serving capability, remove generation operating restrictions, and support renewable resource development in eastern Colorado. |

Cahone – Empire 115 kV Line Uprate



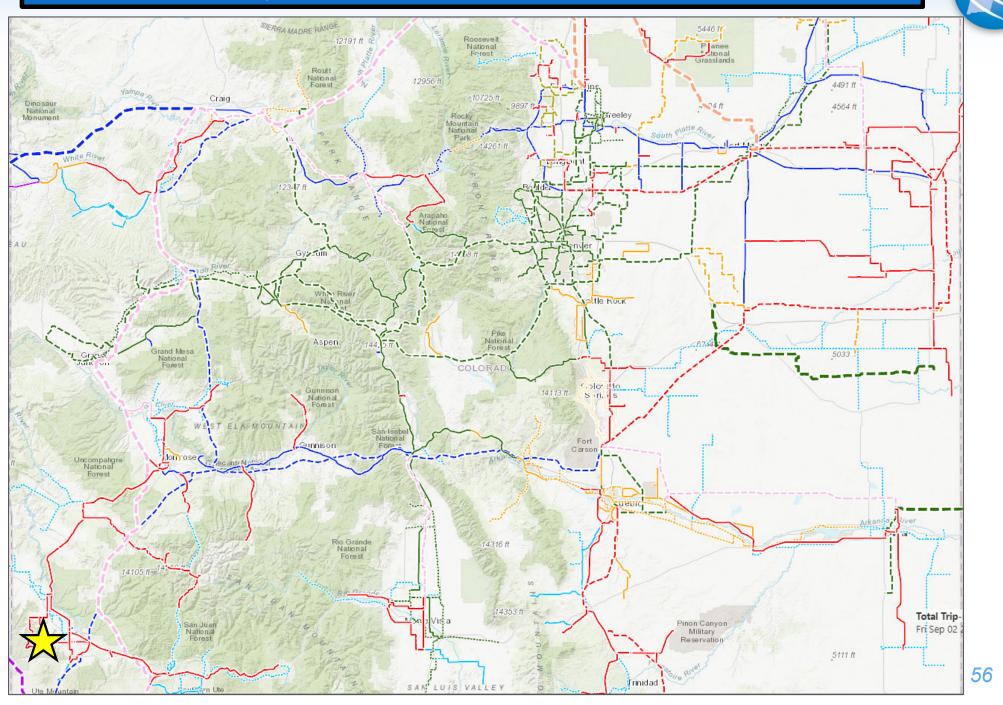




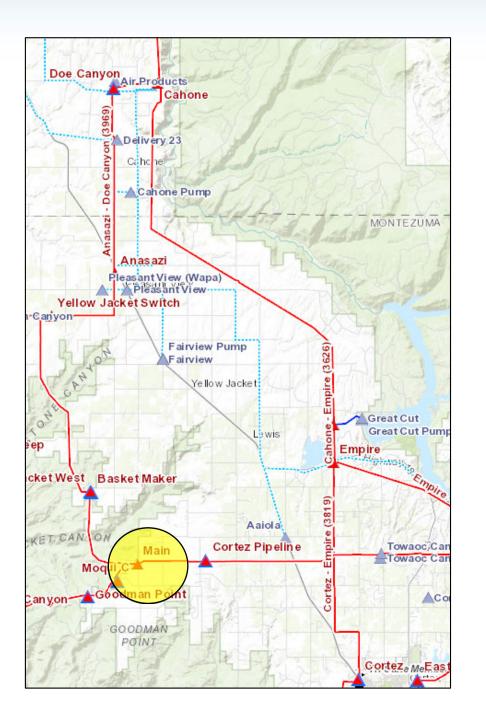
Cahone – Empire 115 kV Line Uprate

| Description: | Uprate of existing 115 kV line between Cahone and Empire. Project includes terminal upgrades at Cahone. |
|-----------------|---------------------------------------------------------------------------------------------------------------|
| Voltage: | 115 kV |
| Length: | 20 miles |
| Туре: | Line. |
| Status: | Under Construction |
| Planned ISD: | 2022 |
| Purpose: | Increase overall line rating |

Coyote Gulch Solar Interconnect



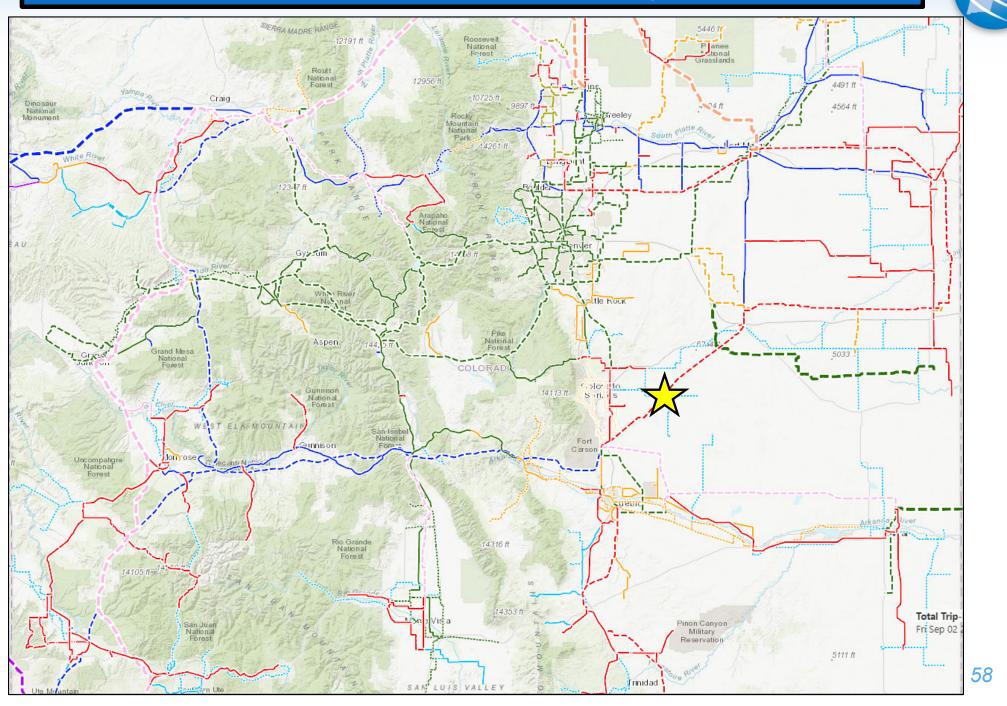




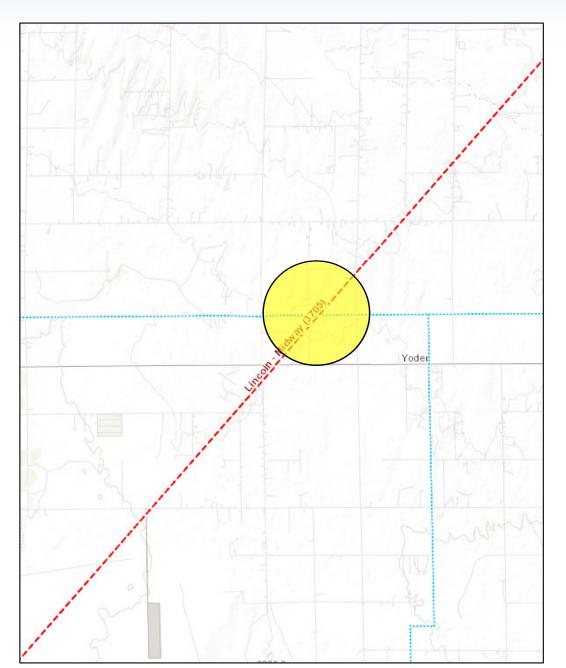
Coyote Gulch Solar Interconnect

| Description: | Construct a 115 kV line bay at the existing Main Switch Substation to accommodate solar interconnection |
|--------------|---------------------------------------------------------------------------------------------------------|
| Voltage: | 115 kV |
| Length: | 0 miles |
| Туре: | Substation |
| Status: | Planned |
| Planned ISD: | 2024 |
| Purpose: | Generation Addition |

Cross Point 230/69kV Delivery Point



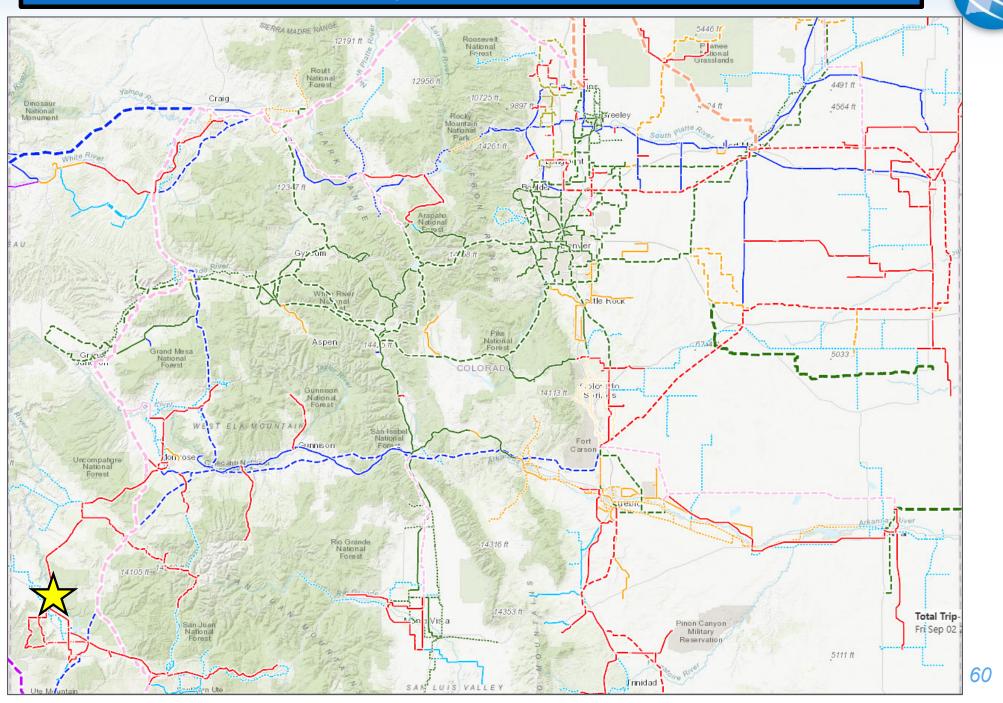




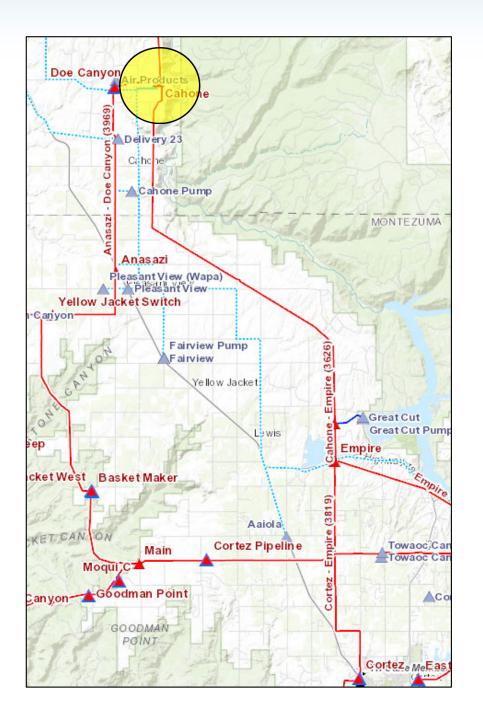
Cross Point 230/69kV Delivery Point

| Description: | Construct new 230/69kV Cross Point substation. |
|--------------|------------------------------------------------|
| Voltage: | 230/69 kV |
| Length: | 0 miles |
| Туре: | Substation |
| Status: | Planned |
| Planned ISD: | 2025 |
| Purpose: | Load Serving; Reliability |

Dolores Canyon Solar Interconnect



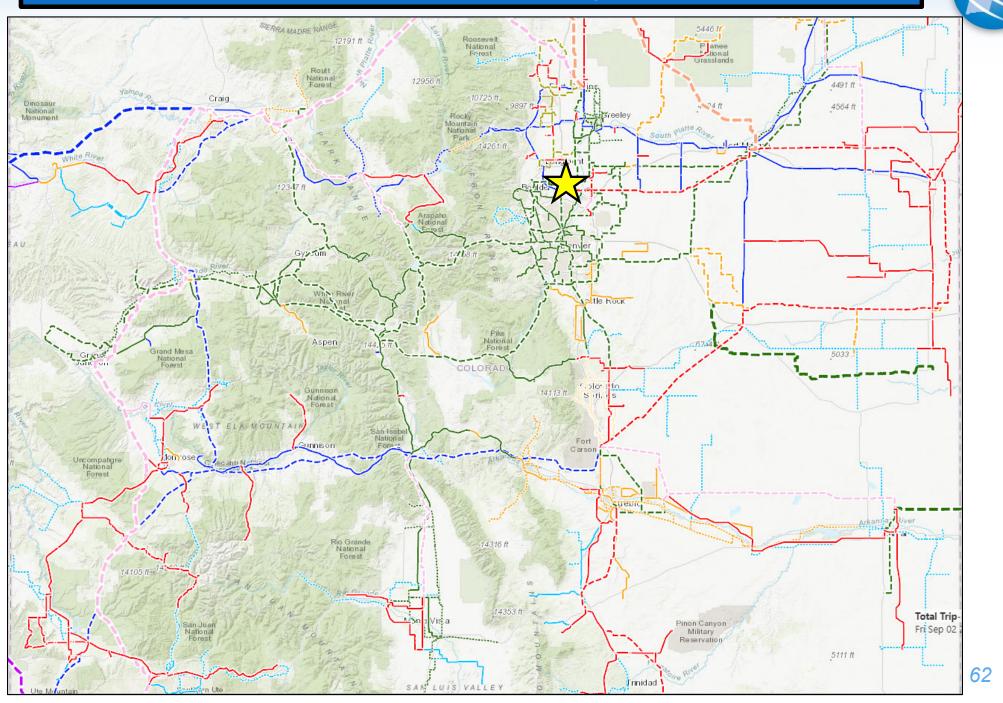




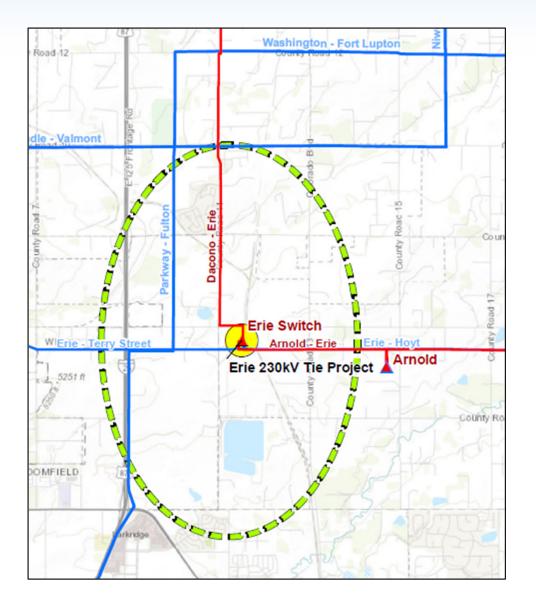
Dolores Canyon Solar Interconnect

| Description: | Construct a 115 kV line bay at the existing Cahone Substation to accommodate solar interconnection |
|--------------|----------------------------------------------------------------------------------------------------|
| Voltage: | 115 kV |
| Length: | 0 miles |
| Туре: | Substation |
| Status: | Under Construction |
| Planned ISD: | 2024 |
| Purpose: | Generation Addition |

Erie 230 kV Tie Project



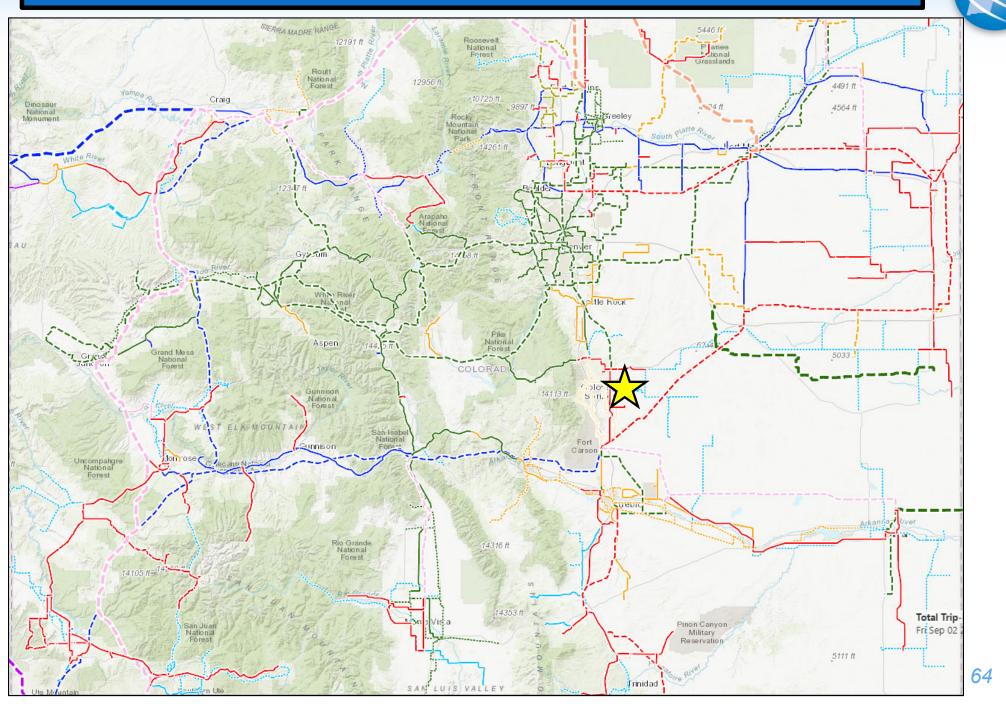




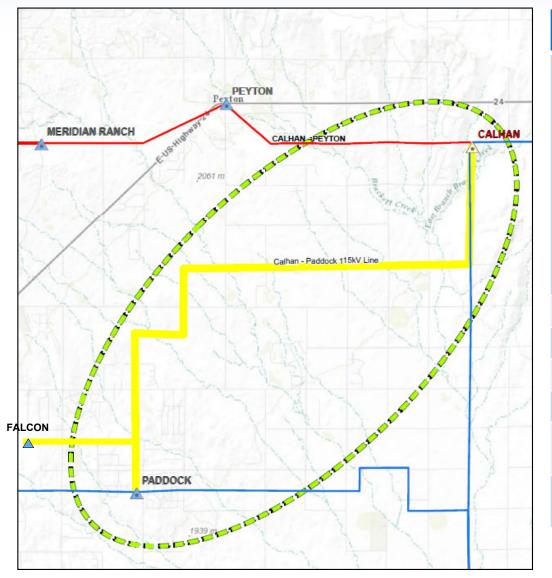
Erie 230 kV Tie Project

| Description: | Cut and loop PSCo's Ft. Lupton – JL Green 230 kV line into Erie Substation. Add line breakers to the ring bus, and add a 2nd 230/115 kV transformer for reliability. |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Voltage: | 230/115 kV |
| Length: | 1 mile |
| Туре: | Line and Substation |
| Status: | Cancelled |
| Planned ISD: | - |
| Purpose: | Reliability; Load Serving |
| | |

Falcon – Paddock – Calhan 115 kV



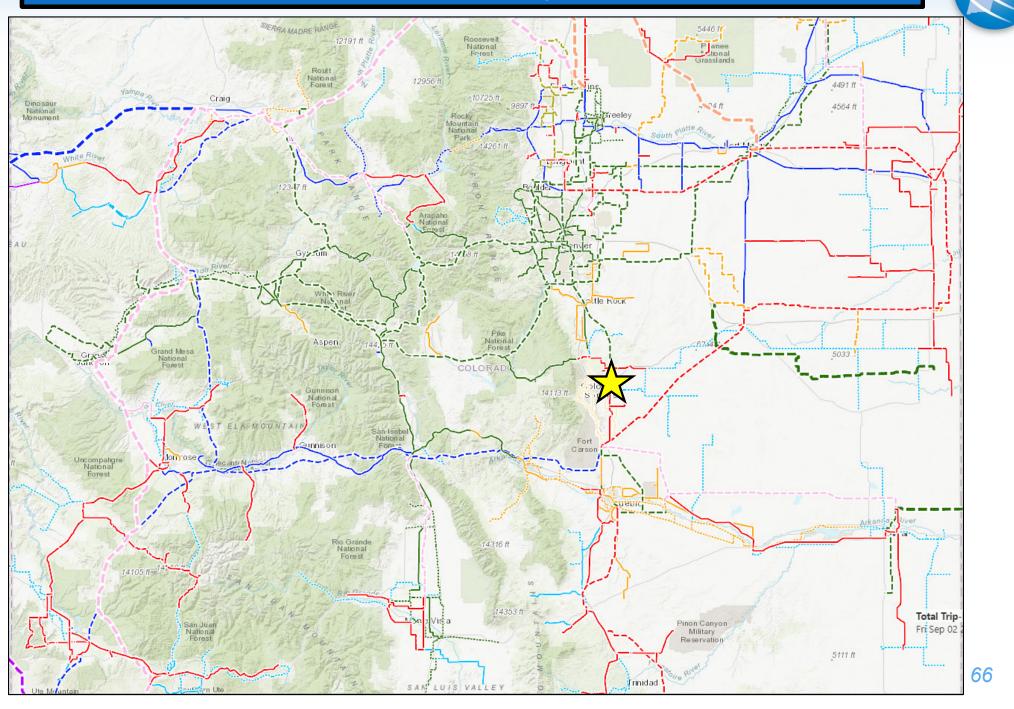




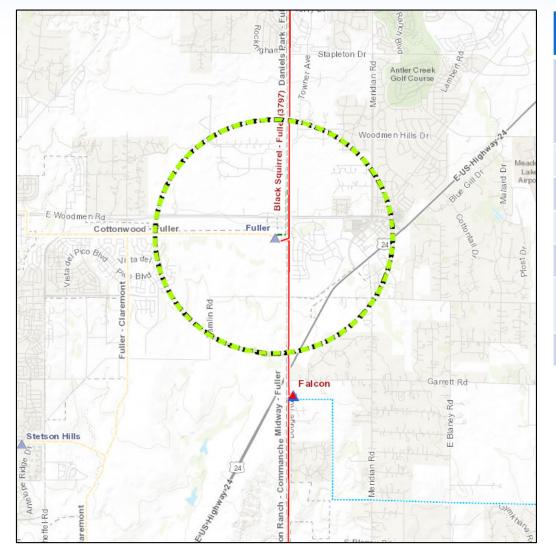
Falcon – Paddock – Calhan 115 kV

| Description: | New 115 kV line and 69 kV line rebuilds to 115 kV. Rebuild Falcon Substation with 115 kV ring bus. Rebuild Paddock Substation to 115 kV ring bus. Replace Paddock 69/12.47kV distribution transformers with 115/12.47kV distribution transformers. Potentially utilize existing 110/67kV, 46 MVA Falcon T1 at rebuilt Paddock Substation for Ellicott delivery. Install new breaker in the existing 115 kV ring bus at Calhan Substation for new Paddock-Calhan 115 kV transmission line. |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Voltage: | 115 kV |
| Length: | 25 miles |
| Туре: | Line/Substation (Multiple). |
| Status: | Conceptual |
| Planned ISD: | твр |
| Purpose: | Accommodate increased loads and improve reliability. |

Fuller T2 Project



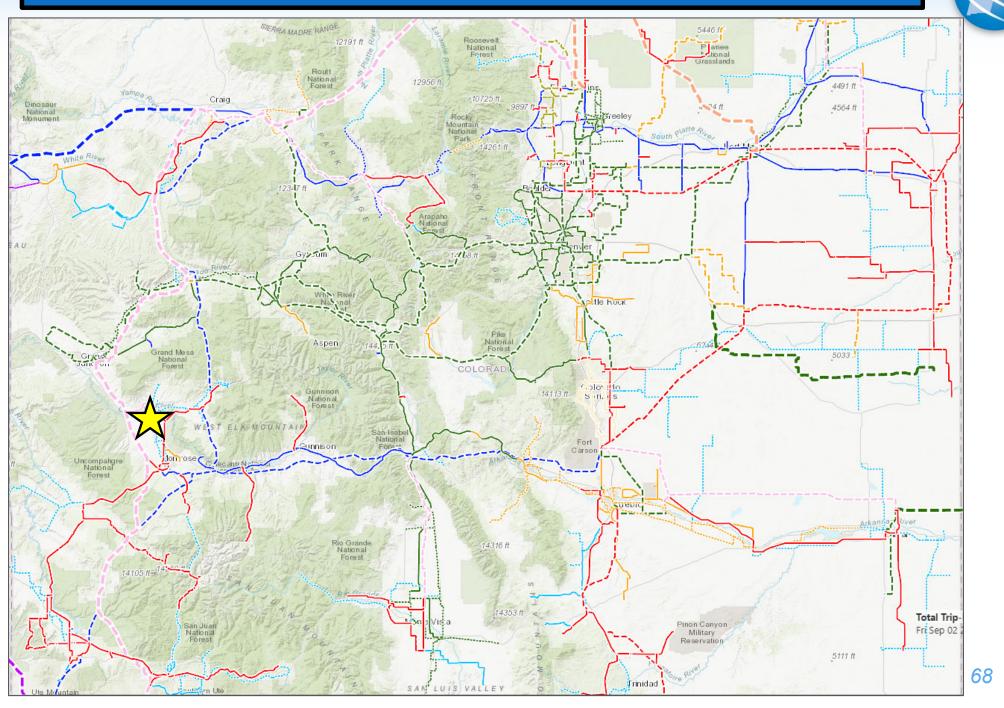




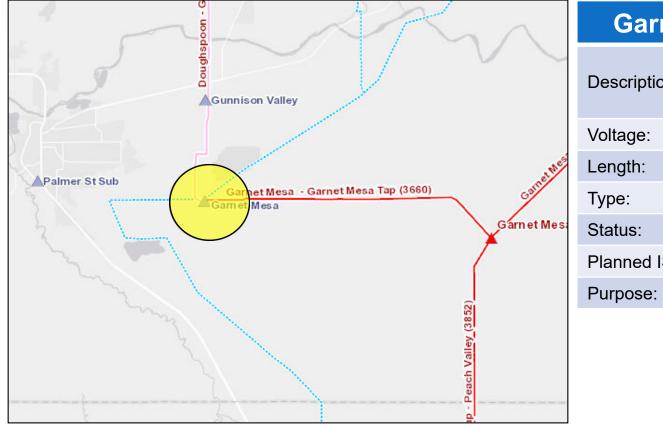
Fuller T2 Project

| Description: | Add a second 230/115kV transformer at CSU's Jackson Fuller substation |
|-----------------|-----------------------------------------------------------------------|
| Voltage: | 230/115 kV |
| Length: | 0 miles |
| Туре: | Substation |
| Status: | Under Construction |
| Planned ISD: | 2022 |
| Purpose: | Reliability |

Garnet Mesa Solar Interconnect



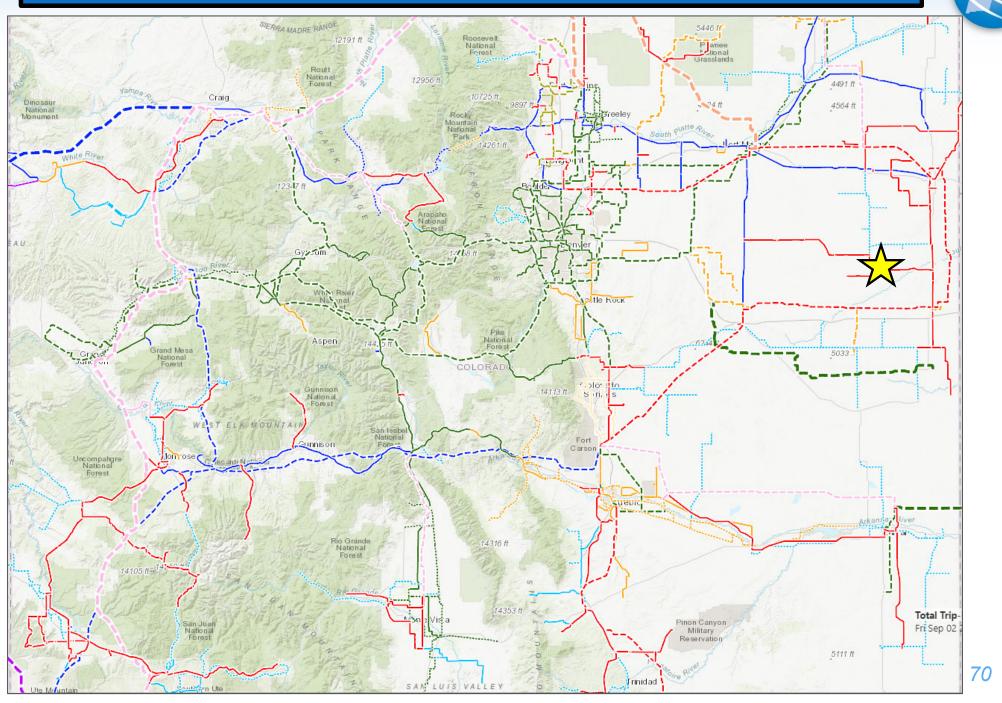




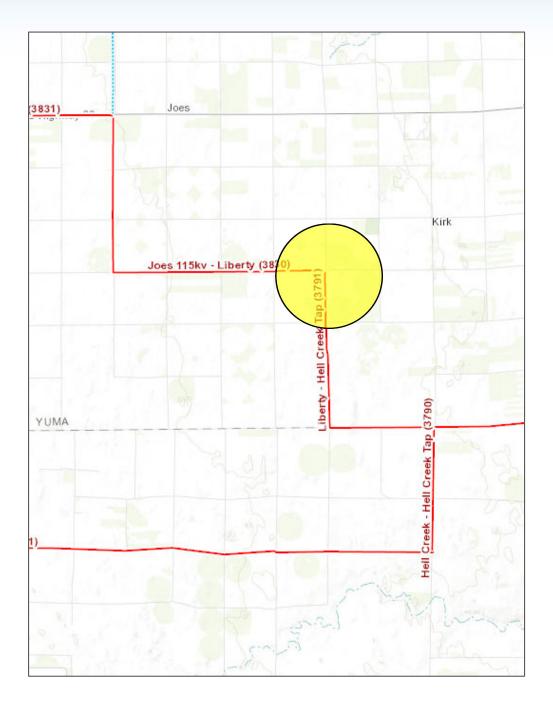
Garnet Mesa Solar Interconnect

| ~ | Description: | Construct a 115 kV line bay at the existing Garnet Mesa Substation to accommodate solar interconnection |
|-----|--------------|---------------------------------------------------------------------------------------------------------|
| | Voltage: | 115 kV |
| Aes | Length: | 0 miles |
| | Туре: | Substation |
| esa | Status: | Planned |
| | Planned ISD: | 2024 |
| | Purpose: | Generation Addition |

Hell Creek Tap – Liberty 115 kV Meter Bypass/Removal



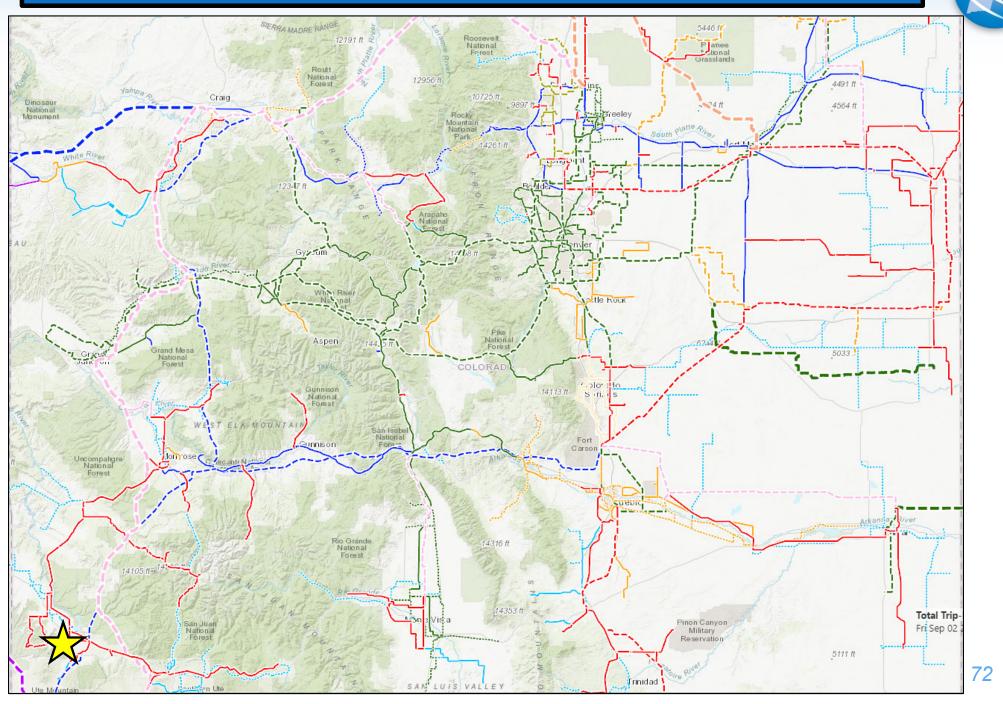




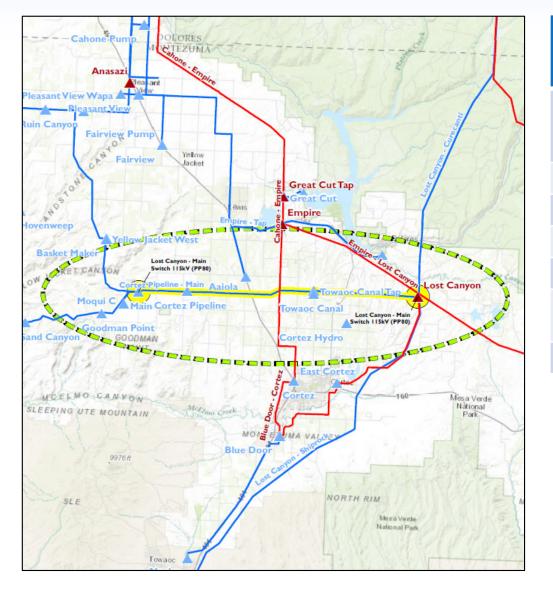
Hell Creek Tap – Liberty 115 kV Meter Bypass/Removal

| Description: | Bypass or remove revenue meter at Liberty Substation |
|--------------|------------------------------------------------------|
| Voltage: | 115 kV |
| Length | 0 miles |
| Туре: | Substation |
| Status: | Planned |
| Planned ISD: | 2025 |
| Purpose: | Increase overall line rating |

Lost Canyon – Main Switch 115 kV Line



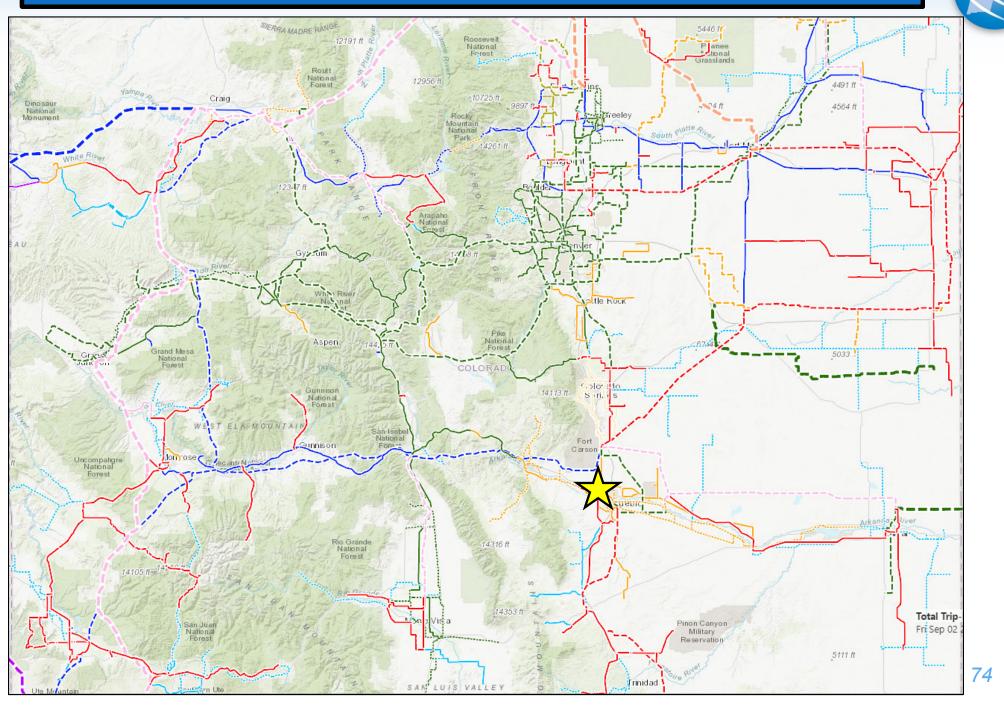




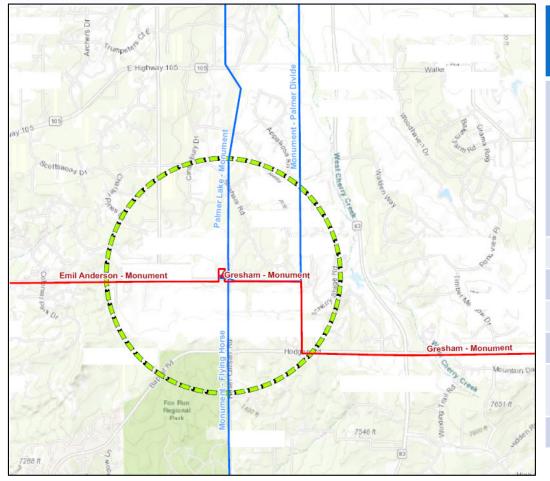
Lost Canyon – Main Switch 115 kV Line

| Description: | Construct a 115 kV transmission line from the existing Main Switch Substation to the existing Lost Canyon Substation. |
|-----------------|-----------------------------------------------------------------------------------------------------------------------|
| Voltage: | 115 kV |
| Length: | 16 miles |
| Туре: | Line |
| Status: | Conceptual |
| Planned ISD: | ТВD |
| Purpose: | Load Serving; Generation Accommodation |

Monument – Substation Improvements



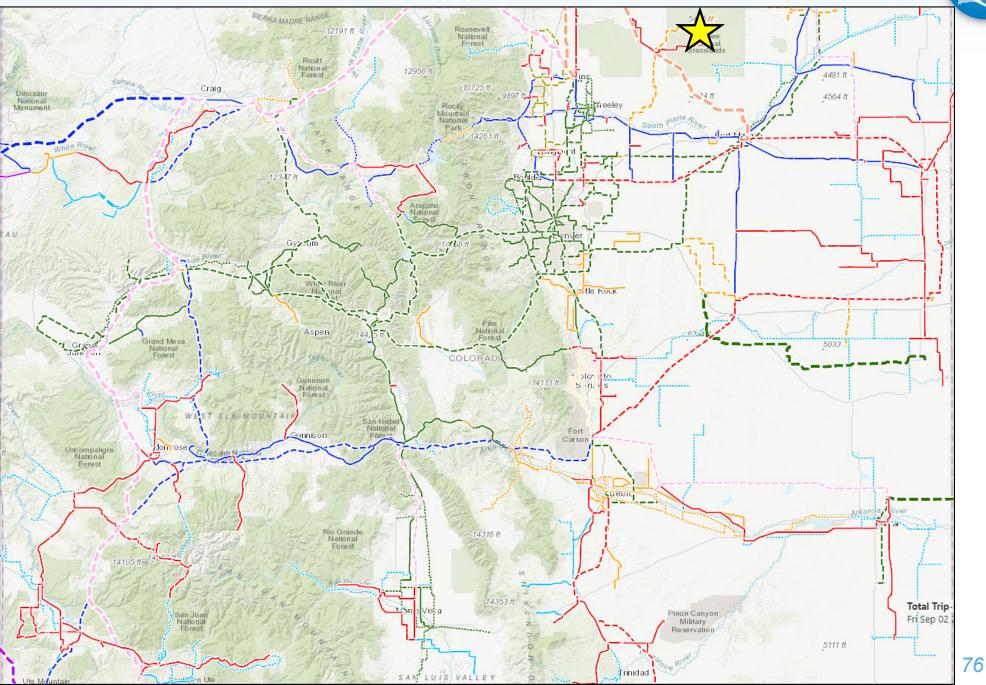




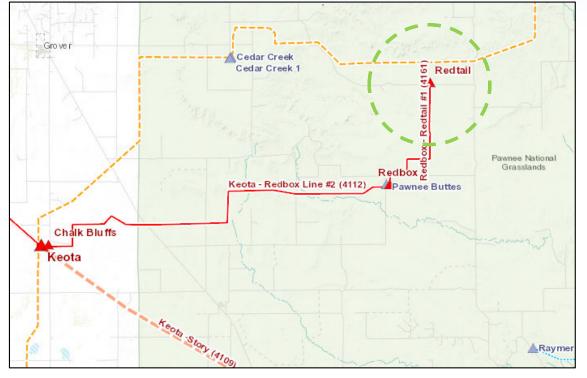
Monument – Substation Improvements

| Redesign substation to an eight-position preaker-and-a-half design. Replace 69/12.47kV distribution transformers with 115/12.47kV distribution transformers. Relocate existing 115/69kV and 115/67kV ransformer to new yard called Fox Run Substation. |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 15/69/12.47 kV |
| Star Bus |
| Breaker-and-a-half |
| Jnder Construction |
| 2024 |
| oad Serving/Reliability/Area Capacity |
| |

Panorama Point Wind Interconnect



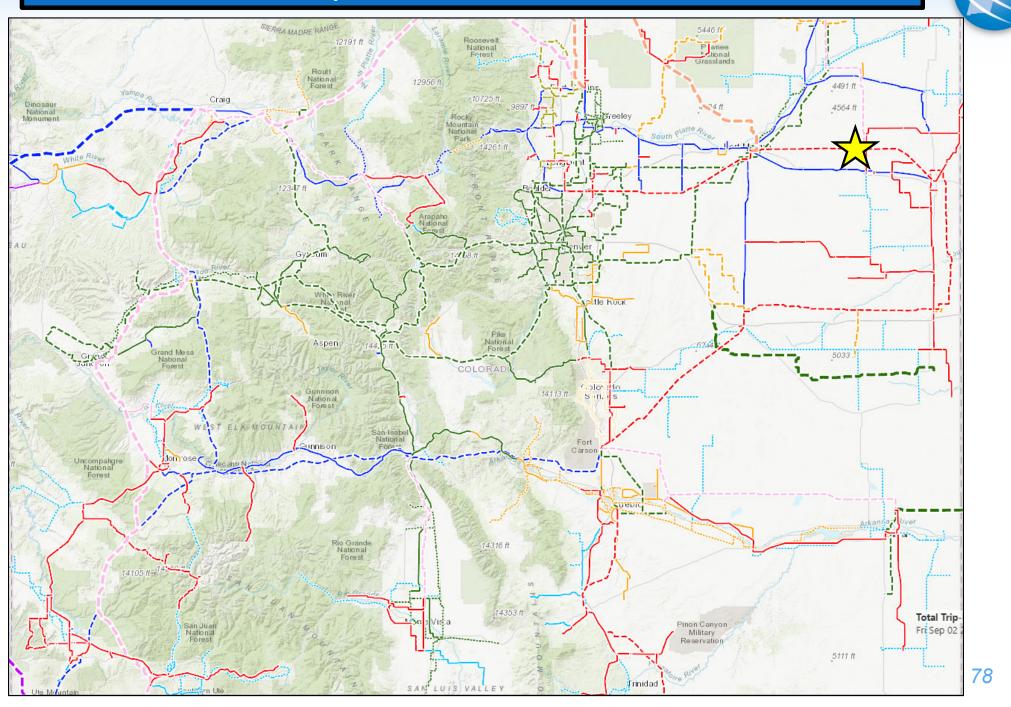




Panorama Point Wind Interconnect

| Description: | Construct a 115 kV line bay at the existing Redtail Substation to accommodate wind interconnection |
|--------------|----------------------------------------------------------------------------------------------------|
| Voltage: | 115 kV |
| Туре: | Substation |
| Status: | Energized |
| ISD: | 2022 |
| Purpose: | Generation Addition |

Paper Moon 115 kV DP



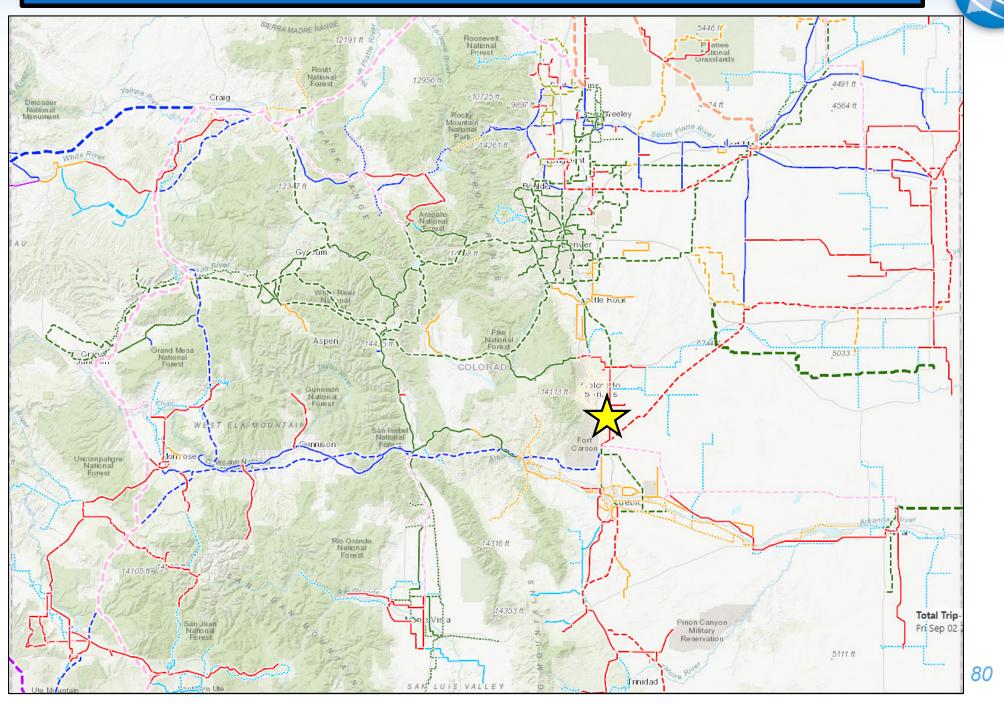




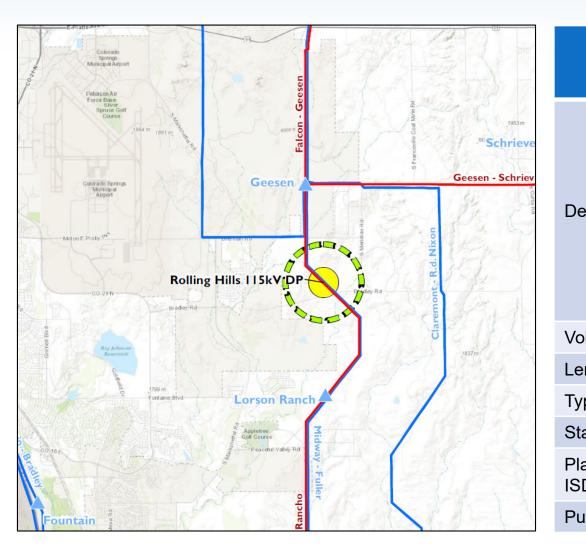
Paper Moon 115 kV DP

| Description: | Establish a new 115 kV DP for YWEA. Scope of project includes tapping 115 kV Burdett- North Yuma Transmission Line, 115 kV circuit switcher, 115/12.47kV 10 MVA transformer, metering equipment and low side equipment. |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Voltage: | 115 kV |
| Туре: | Substation |
| Status: | Under Construction |
| ISD: | 2022 |
| Purpose: | Load Serving |

Rolling Meadows 115 kV Delivery Point



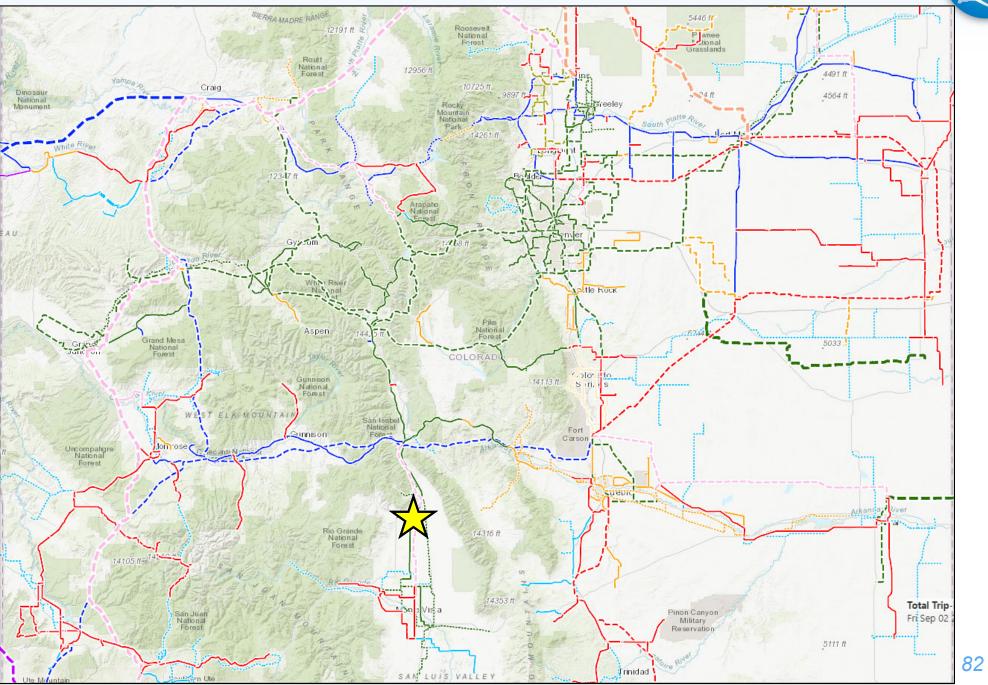




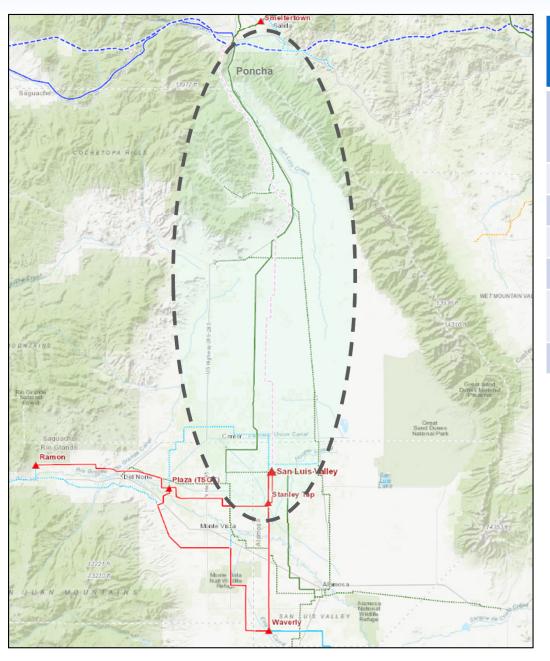
| Rolling Meadows 115 kV Delivery | |
|---------------------------------|--|
| Point | |

| escription: | Formerly known as Rolling Hills 115 kV Delivery Point. |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | The proposed scope of work for this project will be to establish a new 115 kV Point of Delivery for MVEA at Rolling Hills 115/12.5kV Substation by 'tapping' (with an in and out configuration), the existing 115 kV Geesen- Lorson Ranch-Rancho-Midway line between Geesen and Lorson Ranch subs. |
| oltage: | 115 kV |
| ength: | 0 |
| /pe: | Substation |
| atus: | Planned |
| anned D: | 2025 |
| urpose: | Load Serving |

San Luis Valley – Poncha 230 kV Project



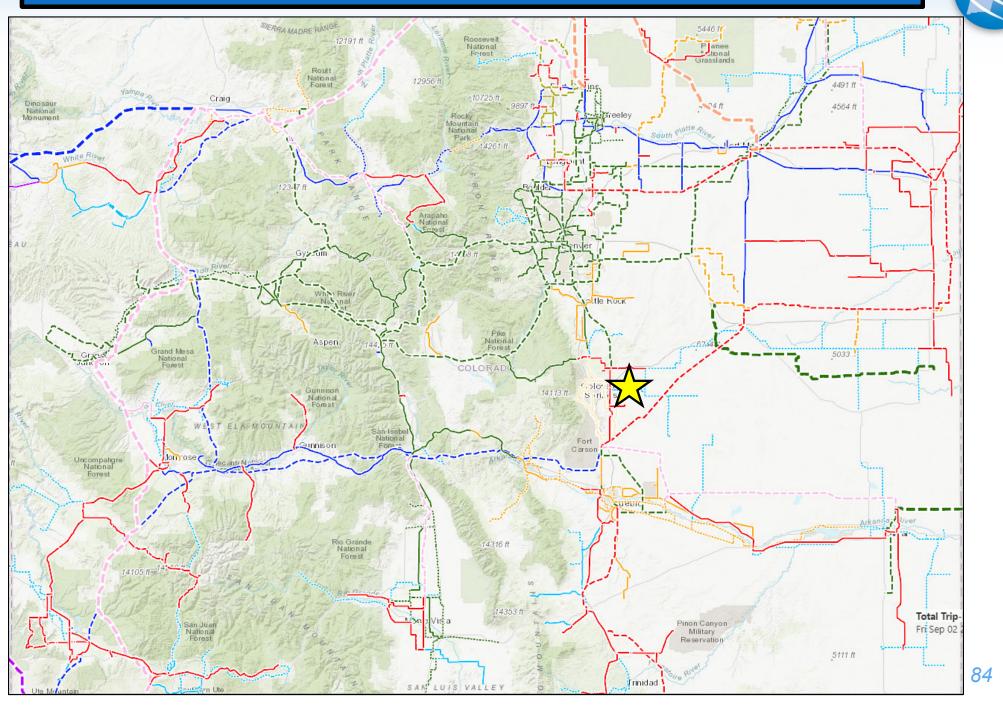




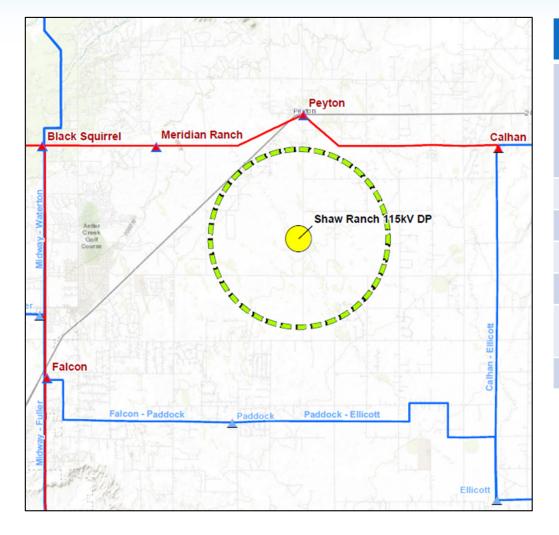
San Luis Valley – Poncha 230 kV Project

| Description: | Construct approximately 60 mile 230 kV transmission line from the San Luis Valley to Poncha 230 kV. |
|-----------------|-----------------------------------------------------------------------------------------------------|
| Voltage: | 230 kV |
| Length: | 60 miles |
| Туре: | Line. |
| Status: | Re-development |
| Planned ISD: | ТВD |
| Purpose: | Reliability. |

Shaw Ranch 115 kV Substation



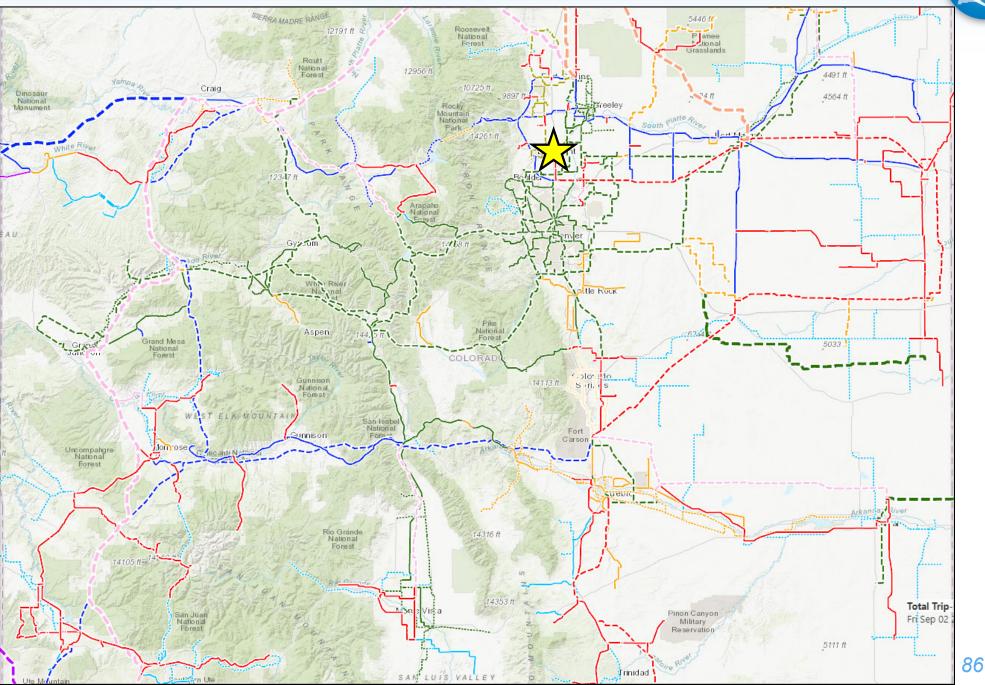




Shaw Ranch 115 kV Substation

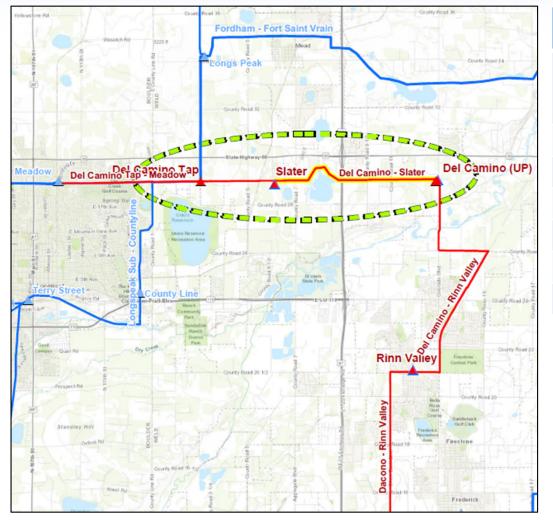
| Description: | New 115 kV single circuit line approximately 4 miles on wood H frame structures from the Peyton substation to new Shaw Ranch. Construct new 115 kV Shaw Ranch substation. |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Voltage: | 115/12.47 kV |
| Length: | 4 miles |
| Туре: | Line and Substation |
| Status: | Planned |
| Planned ISD: | 2026 |
| Purpose: | Load Serving |

Slater – Del Camino Line Uprate





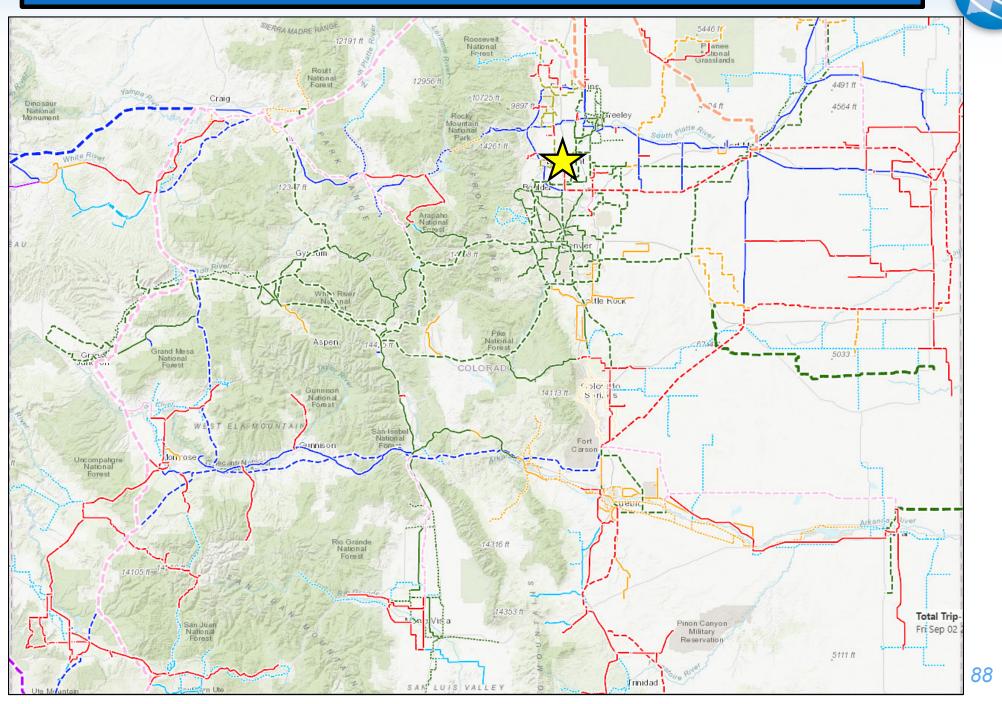




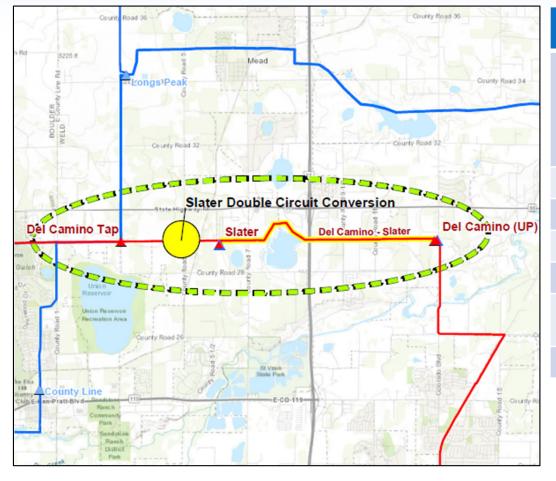
Slater – Del Camino Line Uprate

| Description: | Uprate Slater – Del Camino line to increase capacity by replacing conductor and poles where needed. |
|--------------|-----------------------------------------------------------------------------------------------------|
| Voltage: | 115 kV |
| Length: | 3.7 miles |
| Туре: | Line |
| Status: | Energized |
| ISD: | 2022 |
| Purpose: | Load Serving |

Slater Double Circuit Conversion



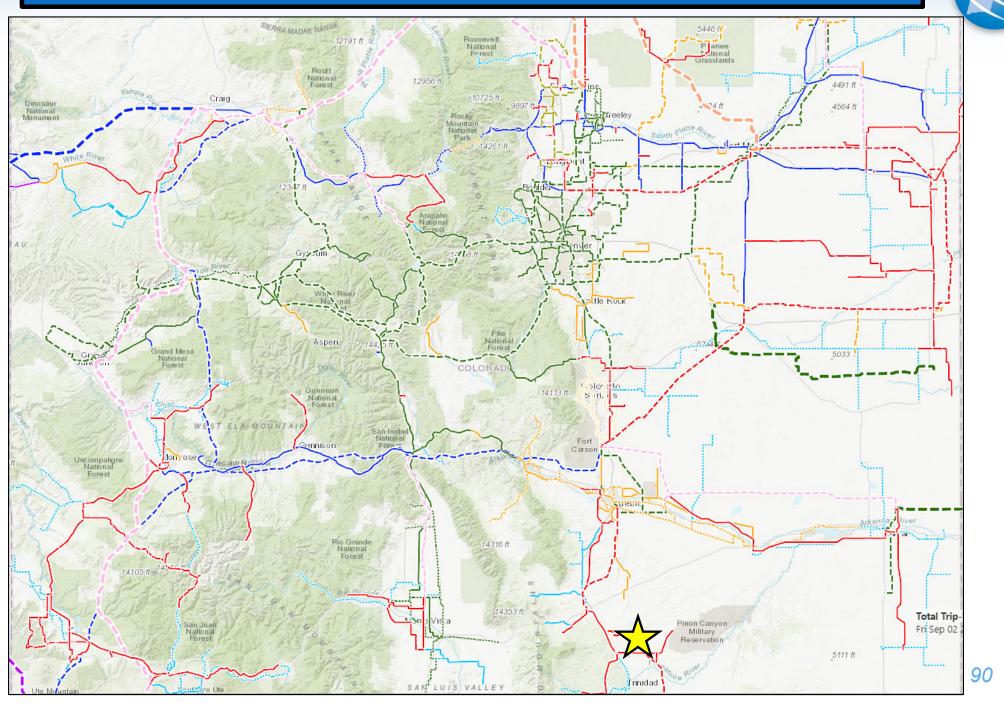




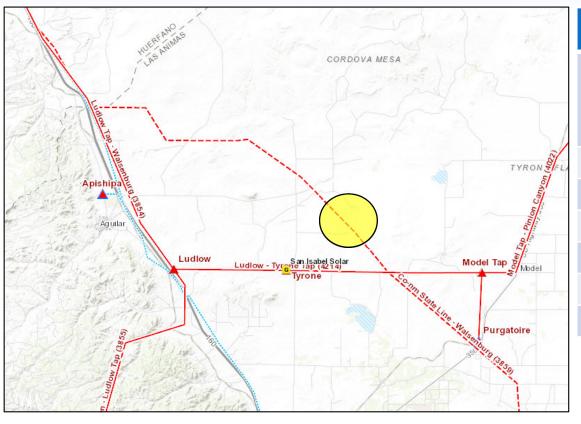
Slater Double Circuit Conversion

| Description: | Rebuild the Del Camino Tap – Slater 115 kV line as a double circuit. Convert three terminal line to separate Longs Peak – Slater 115 kV and Meadow – Slater 115 kV lines. Add 115 kV breaker to Slater. |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Voltage: | 115 kV |
| Length: | 2 miles |
| Туре: | Line and Substation |
| Status: | Planned |
| Planned ISD: | 2025 |
| Purpose: | Load Serving, Reliability |

Spanish Peaks Solar Interconnect



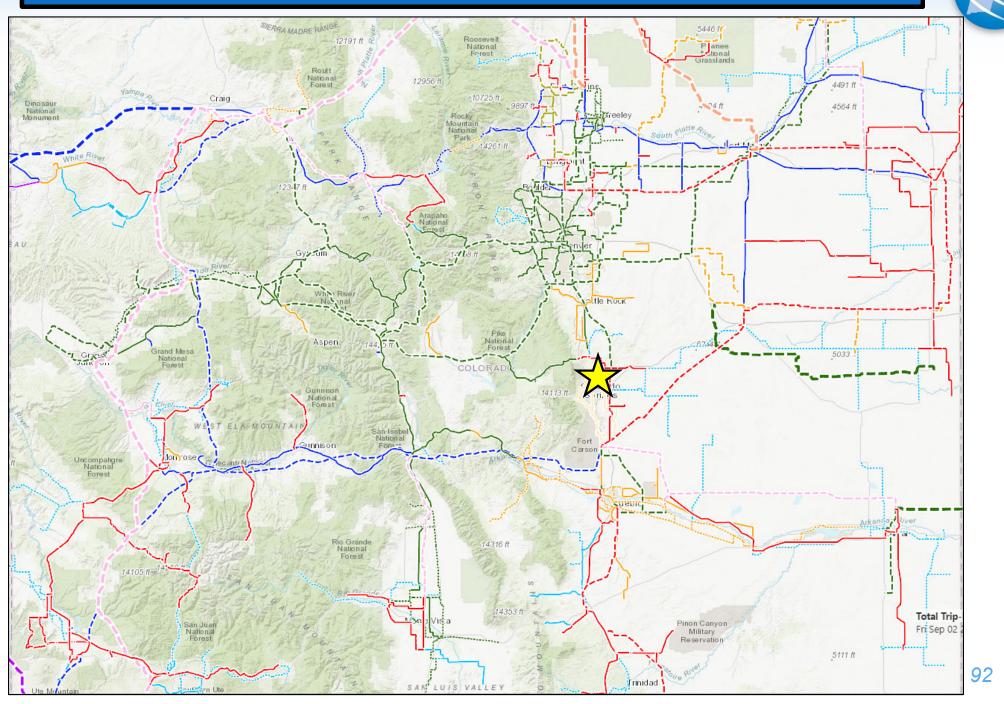




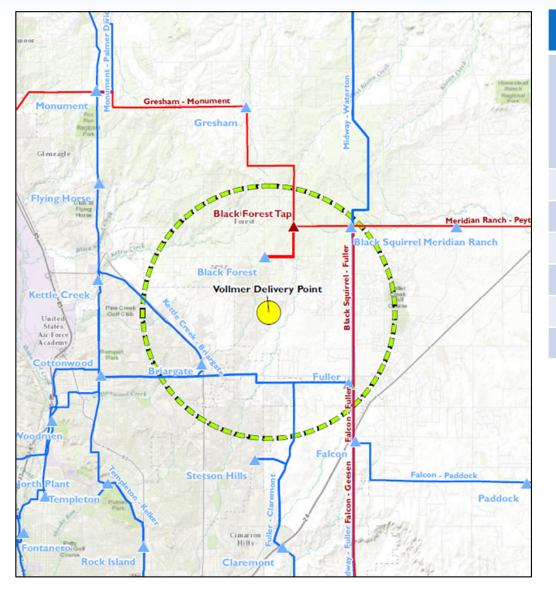
Spanish Peaks Solar Interconnect

| Description: | Construct new 230 kV Valent Switching Station along Walsenburg – Gladstone 230 kV line to accommodate Spanish Peaks Solar |
|--------------|------------------------------------------------------------------------------------------------------------------------------------|
| Voltage: | 230 kV |
| Location | ~28 Miles Southeast of Walsenburg |
| Туре: | Substation |
| Status: | Under Construction |
| Planned ISD: | 2024 |
| Purpose: | Generation Addition |

Vollmer 115 kV Substation







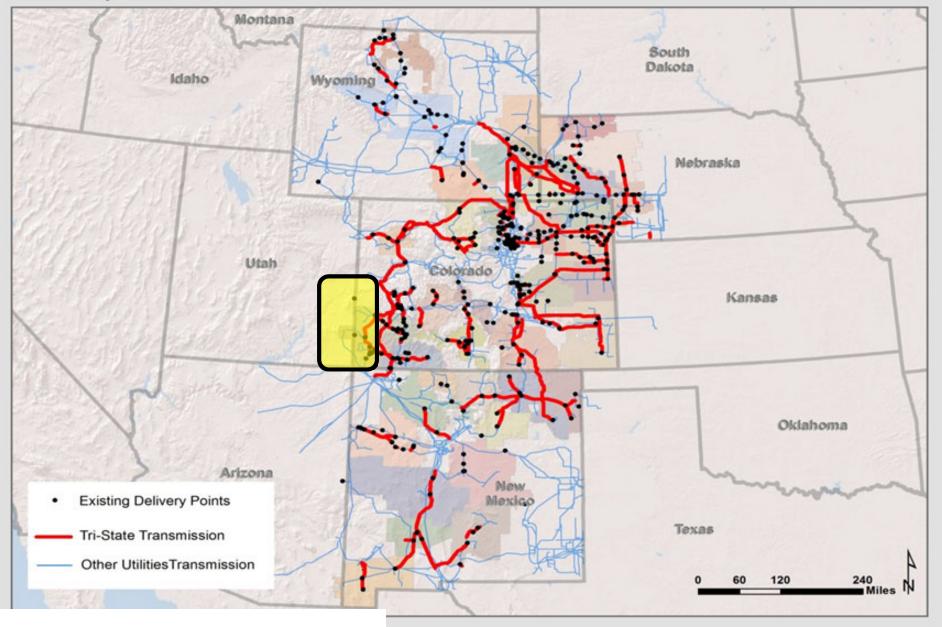
Vollmer 115 kV Substation

| Description: | Extend a new 115 kV single circuit line approximately 2 miles on wood H frame structures from the existing 115 kV Jackson Fuller-Black Squirrel line to Vollmer. Construct new 115 kV Vollmer substation. |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Voltage: | 115/12.47 kV |
| Length: | 2 miles |
| Туре: | Line and Substation |
| Status: | Under Construction |
| ISD: | 2022 |
| Purpose: | Load Serving |
| | |

Projects: Utah (1)

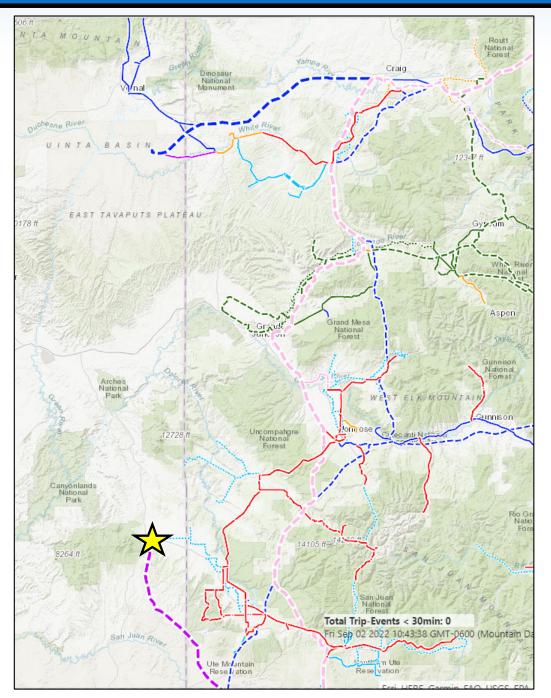


Tri-State System

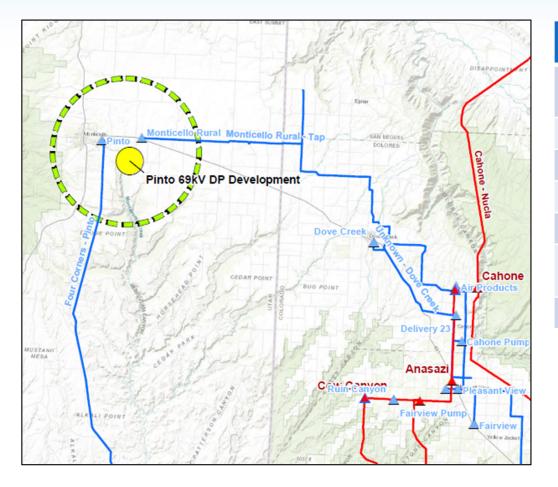


Pinto 69 kV Delivery Point









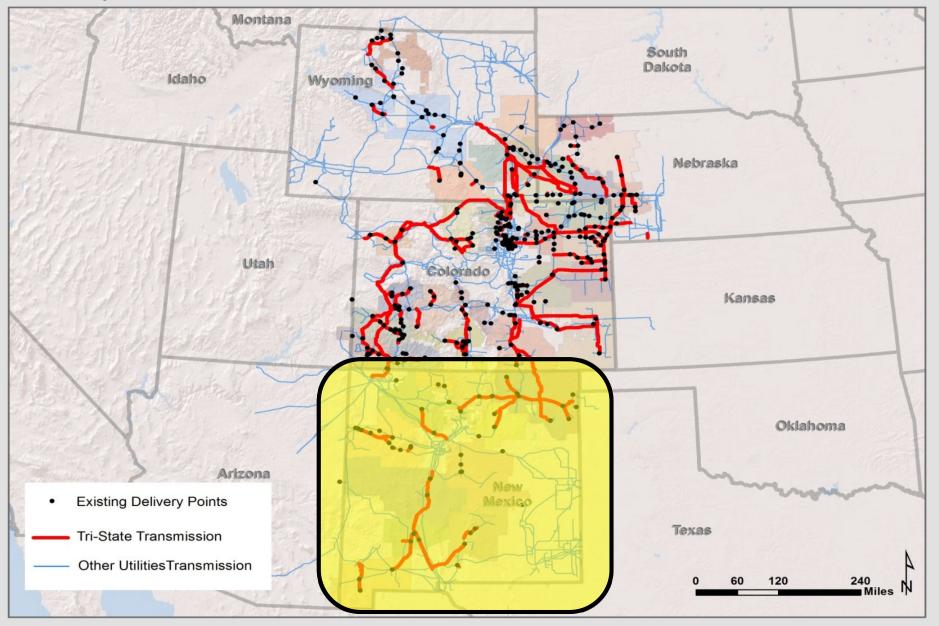
Pinto 69 kV Delivery Point

| Description: | Add 69 kV line bay and delivery point to PacifiCorp's Pinto Substation |
|-----------------|---------------------------------------------------------------------------|
| Voltage: | 69 kV |
| Length: | 0 miles |
| Туре: | Substation |
| Status: | Under Construction |
| Planned ISD: | 2022 |
| Purpose: | Reliability |

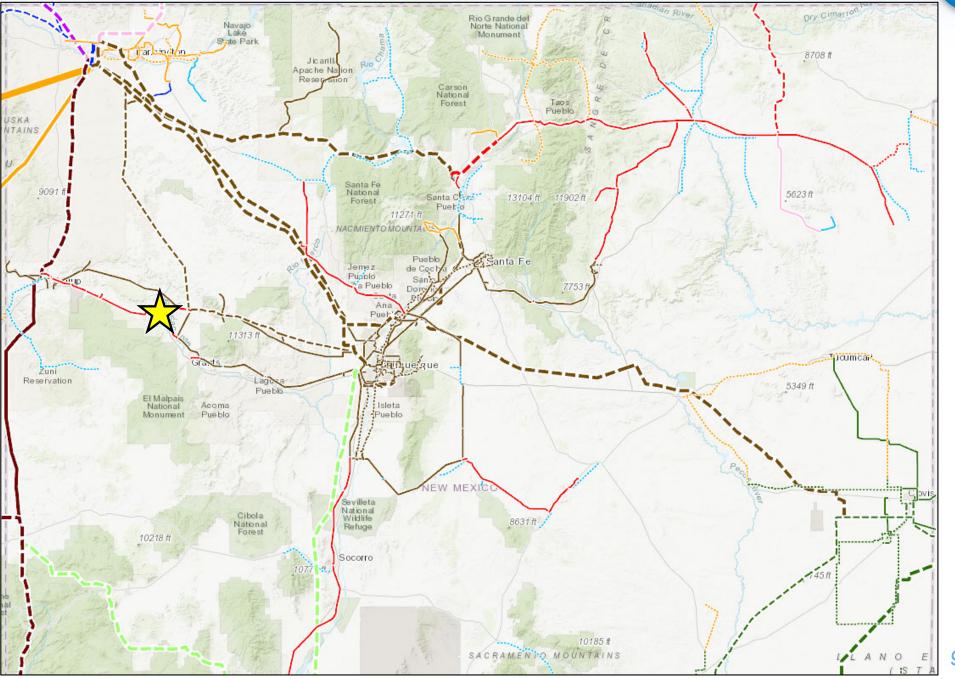
Projects: New Mexico (5)



Tri-State System

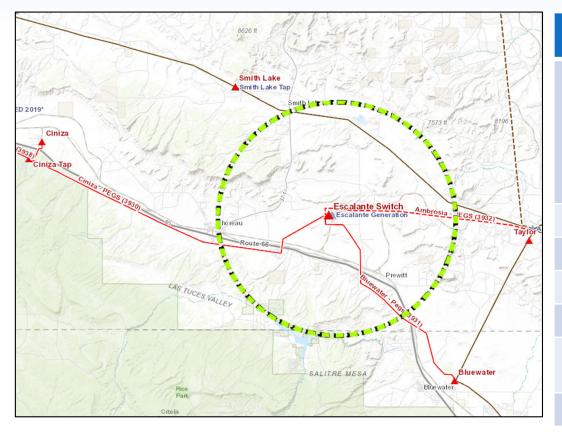


Casamero Draw





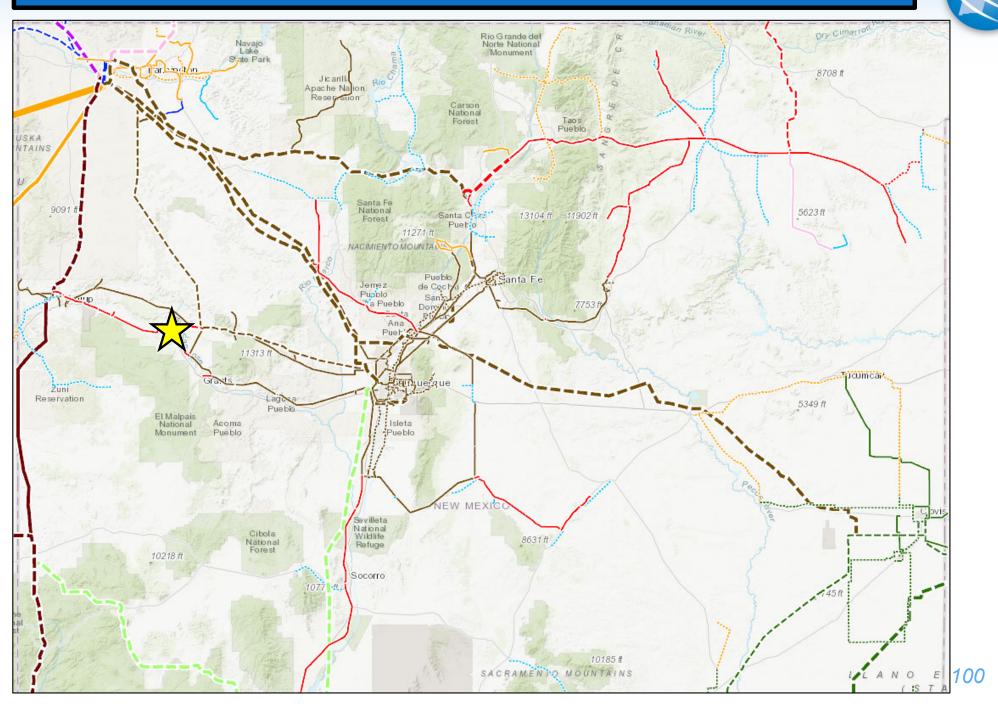




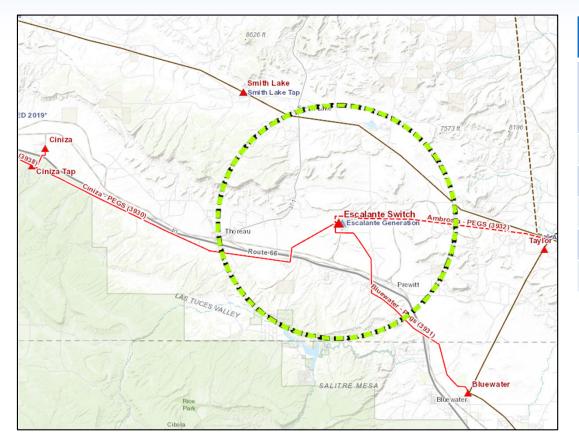
Casamero Draw

| Description: | Install 115 kV metering at Tri-State's Escalante substation to meter 115 kV service to customer's new 115/34.5kV substation. The "Casamero Draw" substation will accommodate customer load growth. |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Voltage: | 115 kV |
| Length: | N/A |
| Туре: | Substation Metering |
| Status: | Under Construction |
| Planned ISD: | 2022 |
| Purpose: | Load Growth |

Escalante Solar Interconnect



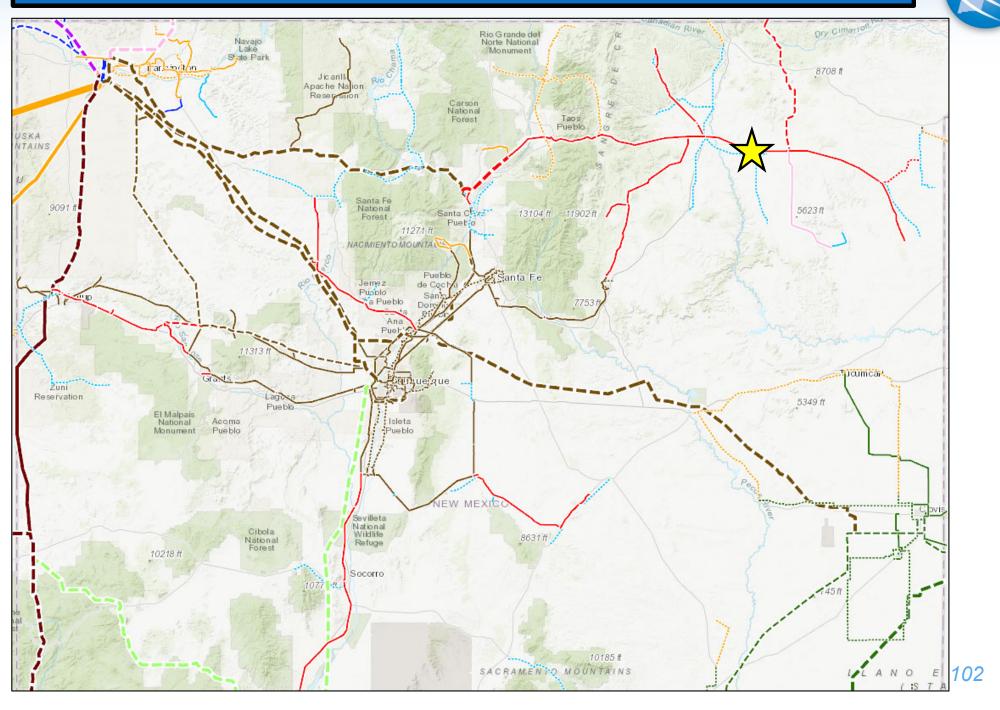




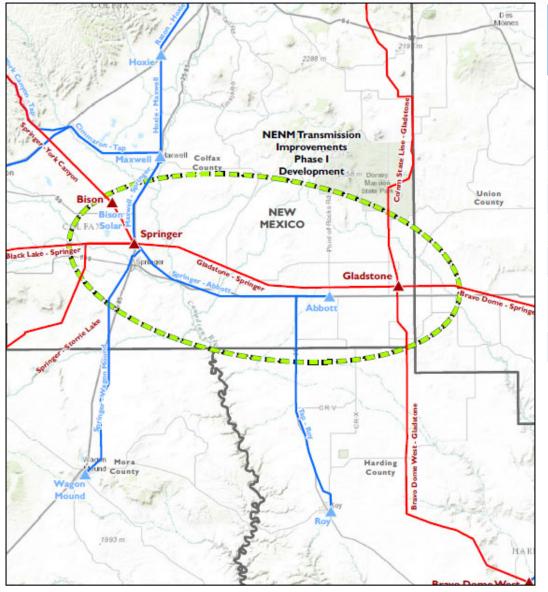
Escalante Solar Interconnect

| Description: | Construct a 230 kV line bay at the existing Escalante Substation to accommodate solar interconnection |
|--------------|-------------------------------------------------------------------------------------------------------|
| Voltage: | 230 kV |
| Туре: | Substation |
| Status: | Under Construction |
| Planned ISD: | 2023 |
| Purpose: | Generation Addition |

NENM Transmission Improvements Phase I



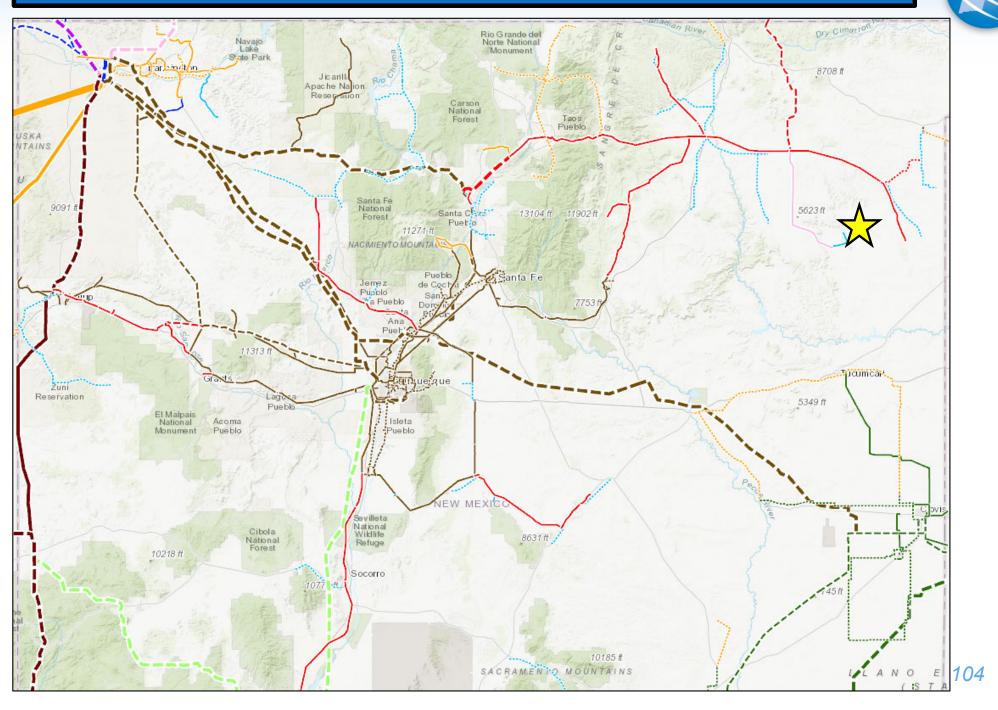




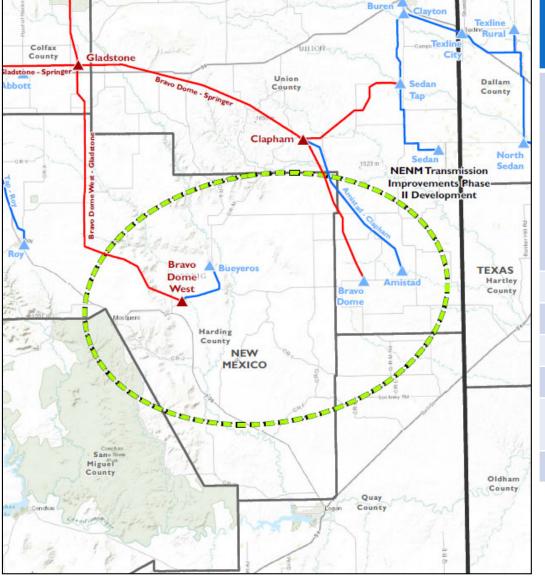
NENM Transmission Improvements Phase I

| Description: | Construct a second 115 kV line from the existing Springer Substation to the existing Gladstone Substation. |
|-----------------|------------------------------------------------------------------------------------------------------------|
| Voltage: | 115 kV |
| Length: | 32 miles |
| Туре: | Line |
| Status: | Conceptual |
| Planned ISD: | TBD |
| Purpose: | Reliability; Load Serving. |

NENM Transmission Improvements Phase II



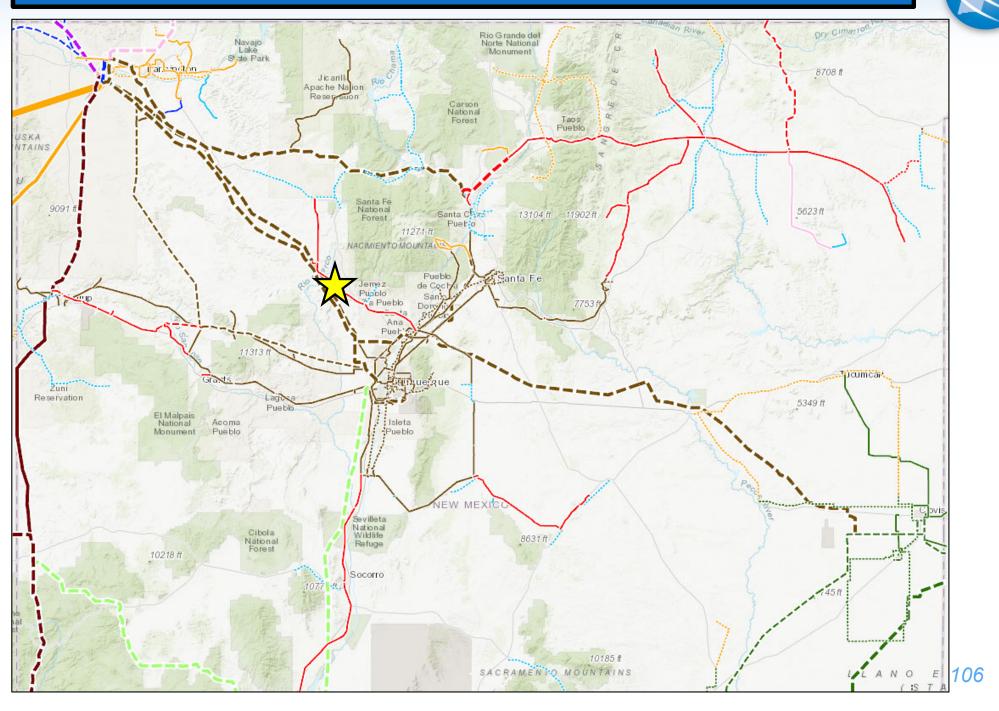




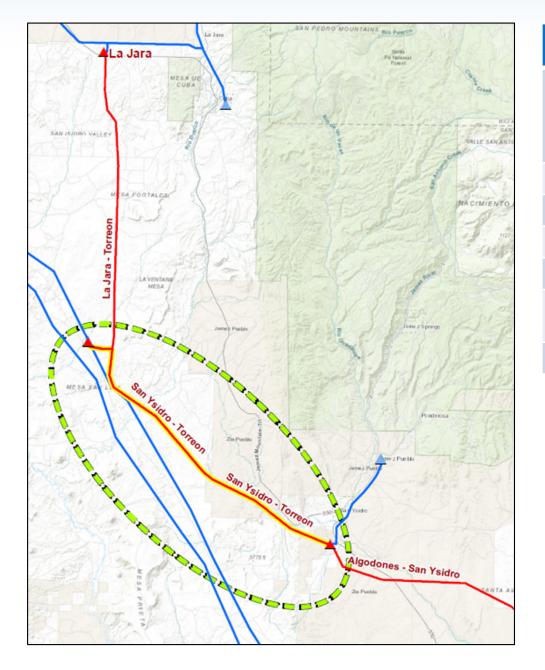
NENM Transmission Improvements Phase II

| Description: | Sectionalize Gladstone – Bravo Dome West (Hess) at the new Antelope Springs Substation; Sectionalize Clapham – Bravo Dome 115 kV at the new Mosquero Substation; Construct a new 115 kV line from the planned Antelope Springs Substation to the planned Mosquero Substation; Convert Gladstone – Antelope Springs 115 kV to 230 kV. |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Voltage: | 115 kV |
| Length: | 29 miles |
| Туре: | Line |
| Status: | Conceptual |
| Planned ISD: | TBD |
| Purpose: | Reliability; Load Serving. |

San Ysidro – Torreon 115 kV to 69 kV







San Ysidro – Torreon 115 kV to 69 kV

| Description: | Decommission San Ysidro Substation. Convert Torreon – San Ysidro line from 115 kV to 69 kV, creating a Torreon – Jemez 69 kV line. |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Voltage: | 115 kV and 69 kV |
| Length: | 24 miles |
| Туре: | Substation and Line |
| Status: | Under Construction |
| Planned ISD: | 2023 |
| Purpose: | Load Serving |



Other Projects

Ongoing Transmission Maintenance (Replacement & Efficiency)



Colorado

Meeker – Rangley (Str. 156) 115 kV line

New Mexico

- Alta Luna Caballo 115 kV line
- Alta Luna Mimbres 115 kV line
- Frontier Picacho 115 kV line

Independent Transmission Projects under Development



- New Mexico
 - SunZia
 - <u>https://patternenergy.com/projects/sunzia-</u> <u>transmission/</u>
 - Lucky Corridor
 - http://www.luckycorridor.com/
 - Includes Mora Project w/ Don Carlos Wind and Vista Trail Project
- Wyoming
 - Transwest Express
 - http://www.transwestexpress.net/

For more information

Tri-State webpage:

https://www.tristate.coop/

click "Operations" then see "Transmission Planning"

Tri-State Email:

transmissionplanning@tristategt.org

<u>CCPG Comment Form (for Colorado projects):</u> <u>http://regplanning.westconnect.com/ccpg_stakeholder</u> <u>opportunities.htm</u>

TRI-STATE G&T

A Touchstone Energy[®] Cooperative

