



Evergy Annual and 5-Year Capital Plans

Empowering a Better Future

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Ryan Mulvany

EO-2019-0045 & EO-2019-0047

Public Stakeholder Meeting

March 25, 2025





State Policy Encourages Grid Mod And Renewables

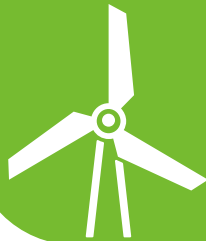
Senate Bill 564 implemented to promote state's transition to cleaner, more advanced grid

Policy Objectives of Missouri Senate Bill 564

**Enhance
reliability,
resiliency, and
security**



**Adapt to a
changing
generation
landscape**



**Improve
customer
service**





Evergy's Capital Investment Plan (2025-2029)

Improves reliability and resiliency

- Replace aged infrastructure
- Deploy enhanced automation and communication

Maintains affordability

- Rate impacts planned to be below SB 564 limits
- Cost increases less than expected inflation

Modernizes Fleet

- Concentration on resource adequacy and fleet modernization
- Deploy technology to enable distributed resources

Improves customer experience

- Technology investment enables expanded digital, automated communications
- Investments in core systems maximizes benefit to customers

Enhances economic development

- Improved cost competitiveness, reliability and sustainability to attract companies to the state
- Grid modernization capital expenditures drive economic growth

Capital Plan Highlights

- Planning \$7.4B of infrastructure investment in Missouri 2025-2029
- More than 45% of 2025 spend will go directly to grid modernization
- 2025-2029 spend will include investment in new generation, including renewables, as informed by Evergy's Integrated Resource Plan

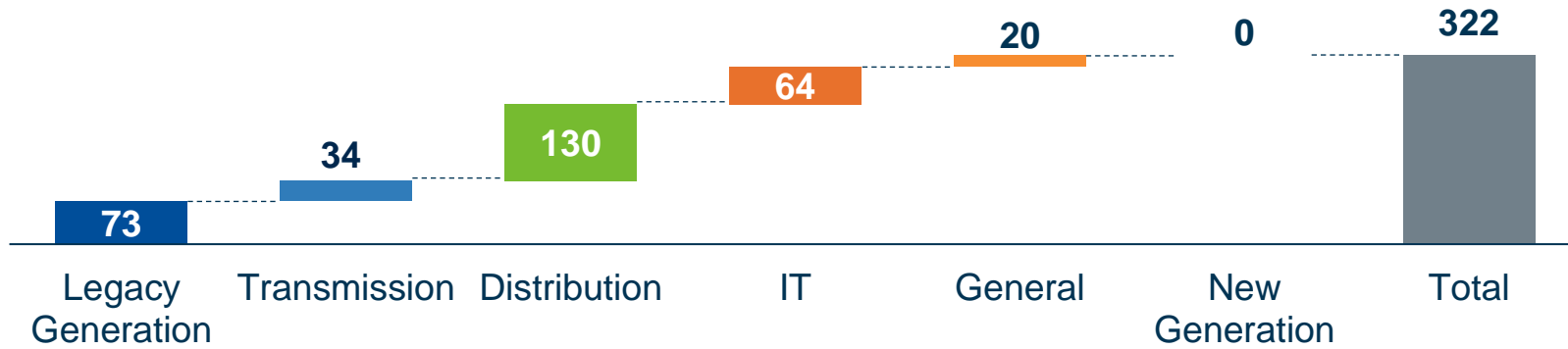
2024 Progress

- Invested about \$700 million in Missouri assets
- 43% spent on grid modernization projects

2024 Capital Investment Update

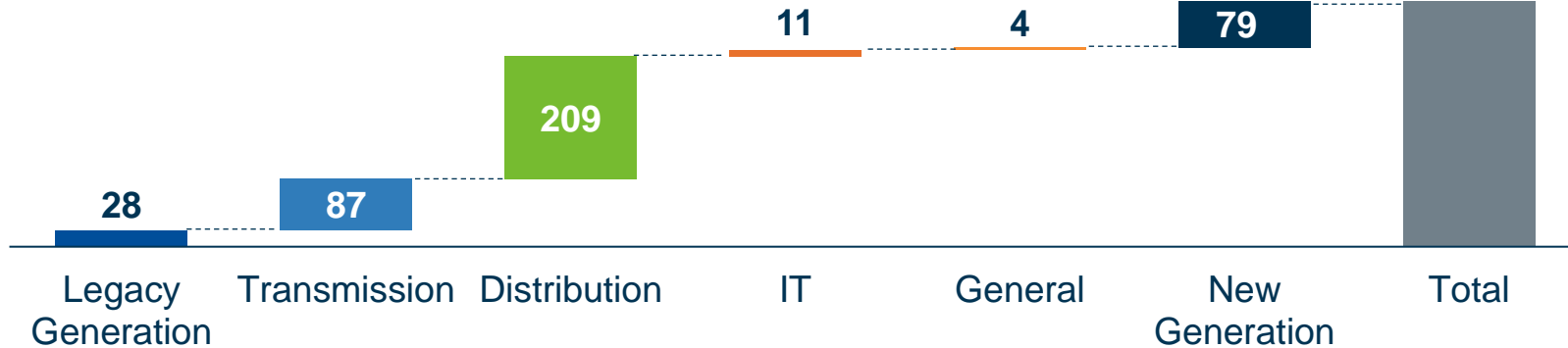
Missouri Metro – Capital Investments

2024 Actuals (\$M)



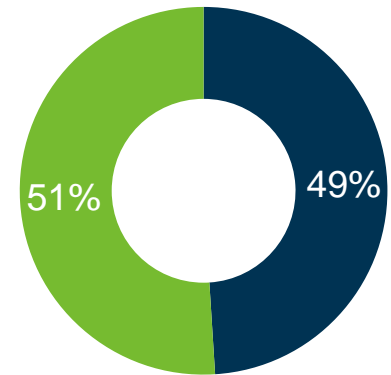
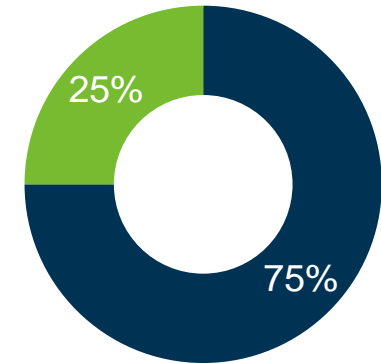
Missouri West – Capital Investments

2024 Actuals (\$M)



Grid Modernization Investment

% of 2024 Actuals¹



 Grid Modernization  Other

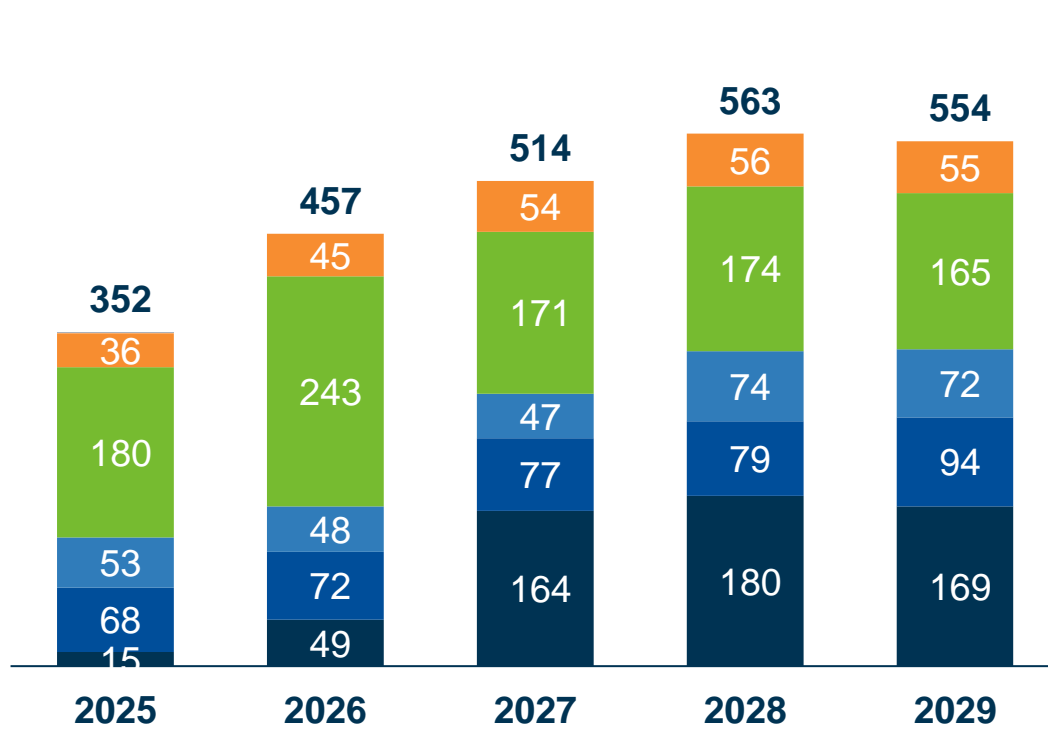
¹ No adjustment made for removal or nuclear fuel purchases as reflected in the Capital Investment Plan filings



Evergy's Five-Year Capital Plan

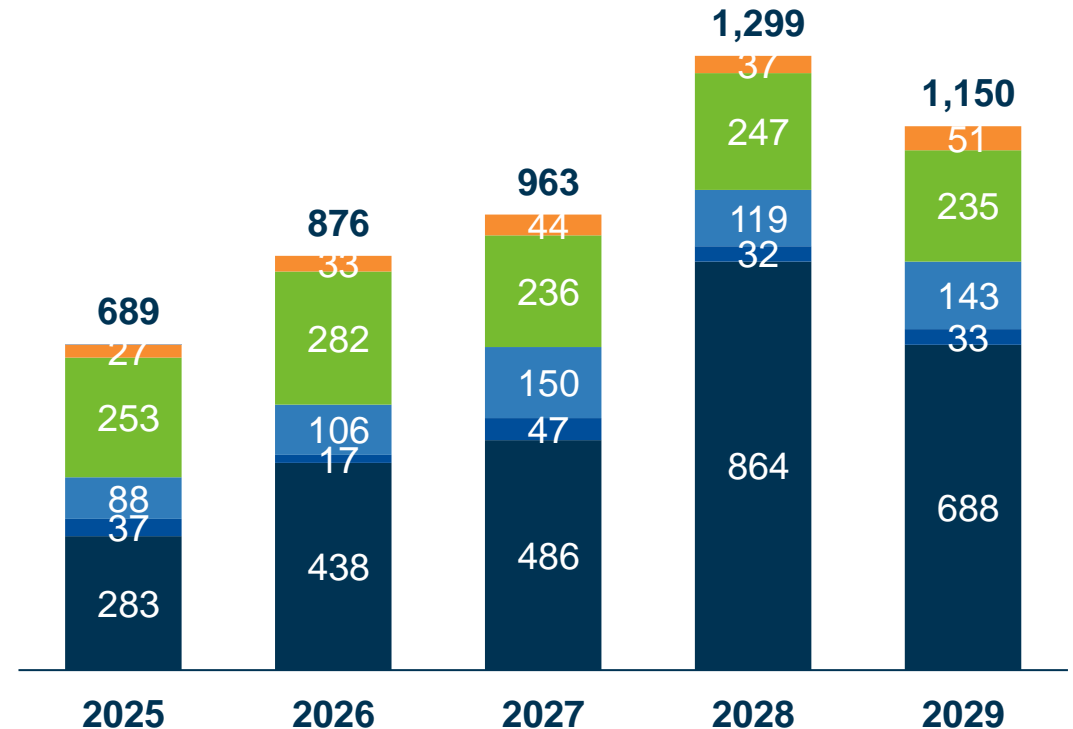
Continued investment in Missouri, focus on grid modernization and new dispatchable generation

Missouri Metro (\$M)



38% Grid Modernization in 2025

Missouri West (\$M)



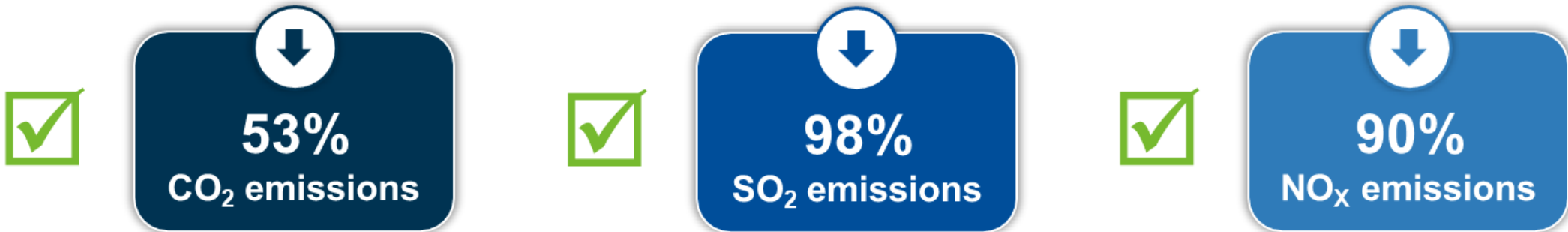
45% Grid Modernization in 2025

New Generation
 Legacy Generation
 Transmission
 Distribution
 IT and General



Emissions Reductions

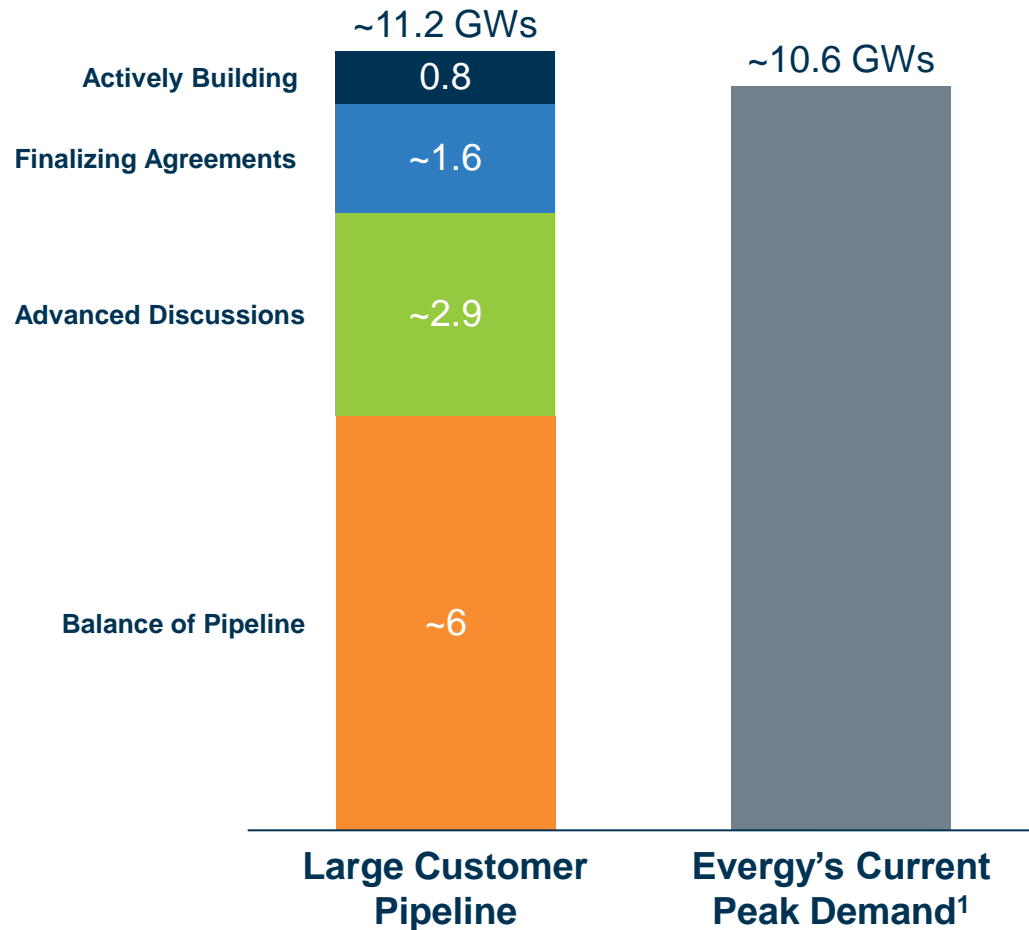
Achieved Emissions Reductions Since 2005



Evergy has a track record of significant emissions reductions



Economic Development Pipeline

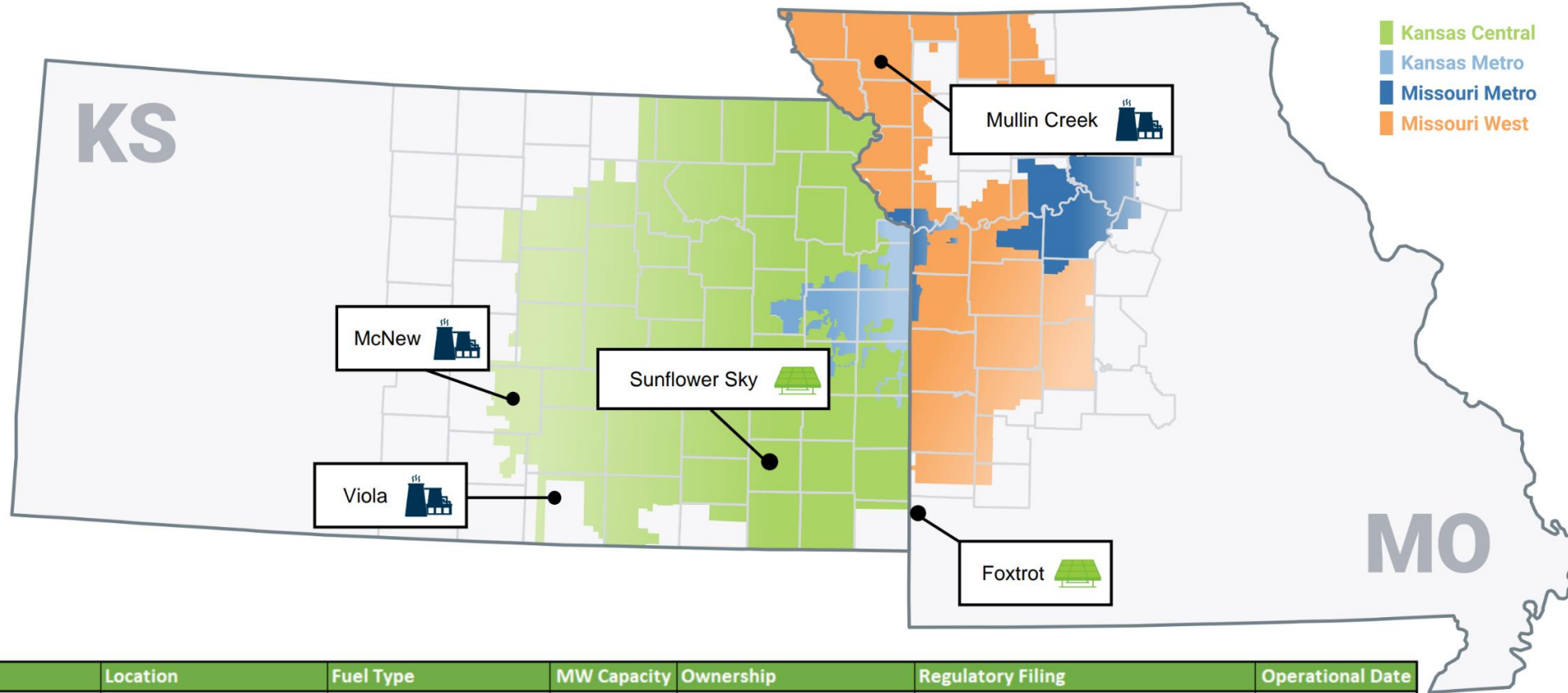


- **Actively Building:** 800 megawatts (MW) under active construction
 - ~500 MW included in our 2-3% demand forecast through 2029
- **Finalizing Agreements:** ~1.6 GWs from three data center projects, reflecting one project in Kansas and the expansion of an existing data center customer in Missouri
 - Not yet included in 2-3% demand forecast through 2029
- **Advanced Discussions:** ~2.9 GWs reflecting large customers that have acquired land, signed letters of agreement, and preliminary transmission and generation capacity studies are underway
- **Balance of Pipeline:** ~6 GWs in various stages of preliminary discussions

Economic development pipeline remains robust, with additional projects representing more than 10 gigawatts of incremental demand actively considering our service territories



Certificates of Convenience and Necessity (CCN) Project Map



Project	Location	Fuel Type	MW Capacity	Ownership	Regulatory Filing	Operational Date
Sunflower Sky	Wilson County (KS)	Solar	65	EMW	CCN (MO)	2027
Foxtrot	Jasper County (MO)	Solar	100	EMW	CCN (MO)	2027
Viola	Sumner County (KS)	Natural Gas	705	EMW (50%) / EKC (50%)	CCN (MO) & Predetermination (KS)	2029
Mullin Creek #1	Nodaway County (MO)	Natural Gas & Fuel Oil	425	EMW	CCN (MO)	2030
McNew	Reno County (KS)	Natural Gas	705	EMW (50%) / EKC (50%)	CCN (MO) & Predetermination (KS)	2030

Foxtrot and Sunflower Sky Solar (EA-2024-0292)



Overview of Projects

- 2024 Triennial Integrated Resource Plan identified ~150MWac need for solar by 2027
- Evergy Missouri West filed for a Certificate of Convenience and Necessity (CCN) on October 25, 2024, for two solar sites that would fulfill this need
- Foxtrot is a 100MWac site located in Jasper County, MO
- Sunflower Sky 65MWac site located in Wilson County, KS

Project Milestones

- Summer of 2025 – Requested CCN Approval
- Summer of 2025 – Begin Construction
- Before Summer of 2027 – Projected Commercial Operation Date

Evergy Missouri West has requested approval for the addition of 165 MWac of Solar



50% stake in Viola & McNew Gas Generating Plants (EA-2025-0075)



Overview of Projects

- The 2024 Triennial Integrated Resource Plan identified a need for 325 MW of firm dispatchable thermal energy in 2029
- Evergy Missouri West filed for Certificates of Convenience and Necessity (CCN) on November 15, 2024
- Viola is 710 MW Combined Cycle Gas Turbine located in Sumner County, KS
- McNew is a 710 MW Combined Cycle Gas Turbine Located in Reno County, KS

Key Milestones

- 1st full week of August – Requested CCN Approval
- Viola Construction begins in 2026, McNew following in 2027
- Viola is projected to be operational for the summer of 2029
- McNew is projected to be operational in the summer of 2030

Evergy Missouri West has requested approval for 710 MW of new Combined Cycle Gas plants



Nodaway County/Mullin Creek #1 Simple Cycle (EA-2025-0075)



Overview of Projects

- 2024 Integrated Resource Plan Triennial update identified ~415 MW need for thermal energy by 2030
- Evergy Missouri West filed the CCN application for Mullin Creek #1 along with the two Combined Cycle Gas Turbine plants on November 15th, 2024
- Mullin Creek #1 is 440MW Simple Cycle Gas Turbine located in Nodaway County, MO

Key Milestones

- 1st full week of August – Requested CCN Approval
- Construction is expected to begin in 2027
- Mullin Creek #1 is expected to be operational for the summer of 2030

Evergy Missouri West has requested approval for a new 440 MW Simple Cycle Gas Turbine plant

Delivering On Grid Modernization Benefits

Evergy's detailed grid modernization plans balance multiple, diverse stakeholder benefits



Based on identified potential benefits, specific projects or programmatic asset replacements are developed to deliver on these benefits

Grid Mod Benefits: Strategic T&D Rebuilds

Improve resiliency of critical assets while replacing aged assets with stronger, newer components



After

Illustrative route shown



Lexington 12kV Circuit Rebuild
Mo West
~6 mile rebuild
Upgraded conductor from 1Ø 266 ACSR to 3Ø 477 AAC

Lexington 161kV to 69kV Substation
MO West
~Removed old 69kV Substation to rebuild 161/69kV Substation



Before



After

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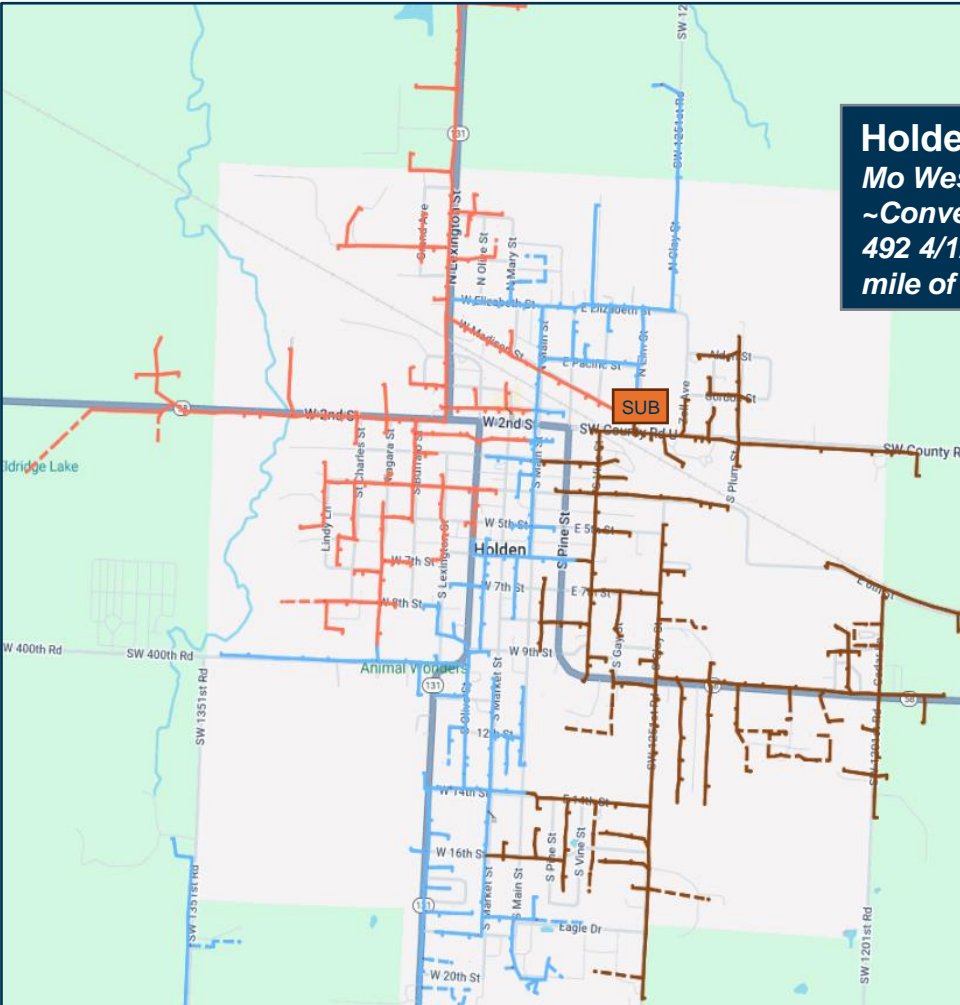
Before



Holden 69kV Substation Rebuild
Mo West
~Convert current 69/4kV substation to 69/12kV
492 4/12kV dual voltage transformers replaced and 0.1 mile of new 477 ACC conductor added



After



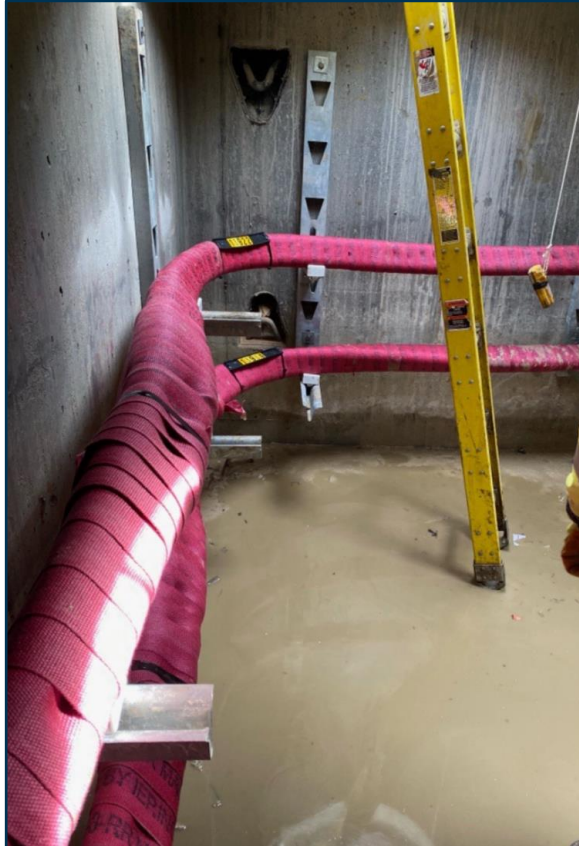
Illustrative route shown



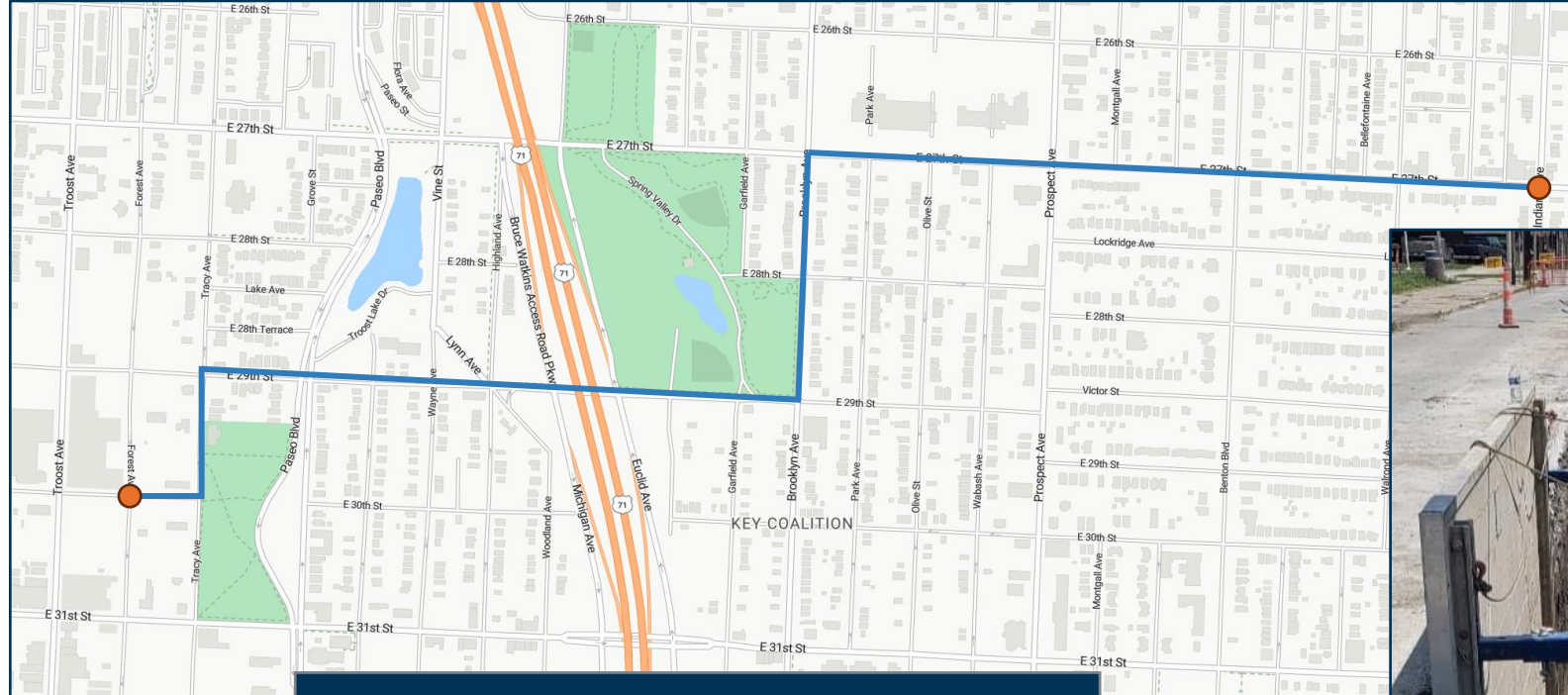
Grid Mod Benefits: Distribution Urban Underground

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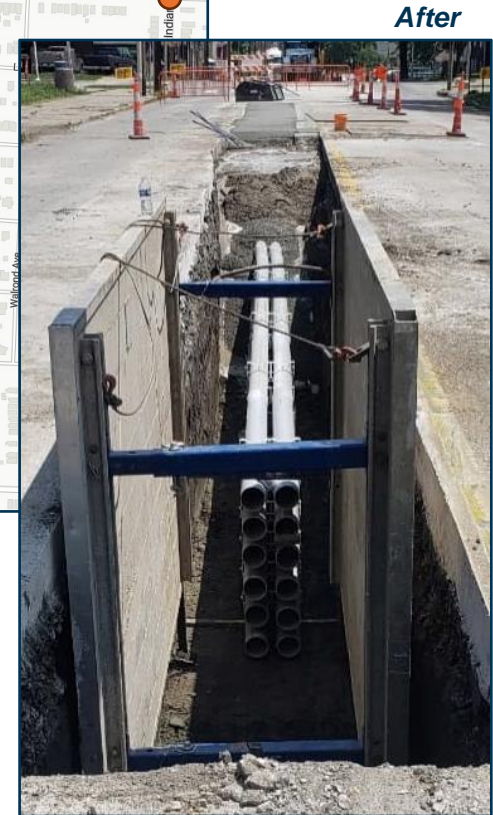
Illustrative route shown



After



Northeast to Troost Load Transfer
*Mo Metro
Kansas City, MO
~1 mile new 12-way duct bank. Multi-year project
scheduled to complete in 2025
Installing 4 new feeder cables to transfer load*



After



Grid Mod Benefits: Distribution Assets Replacement

Programmatic plan improves reliability by upgrading aged equipment in residential, urban areas

“Major” Underground

Underground infrastructure feeding large parts of the system and large commercial customers

\$37.5M
2025-2029
spend



Residential Underground

Underground infrastructure feeding residential customers / neighborhoods

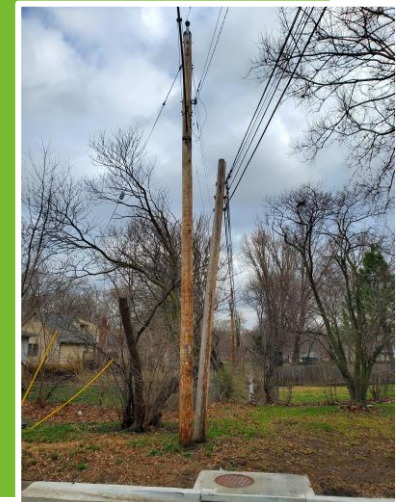
\$151M
2025-2029
spend



Residential Overhead

Overhead infrastructure feeding residential customers / neighborhoods

\$314M
2025-2029
spend



Asset replacements are prioritized based on condition data and likelihood of failure



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Questions And Feedback

We want to hear from you!



- **Chat**

- Submit written questions via the chat option during today's Q&A period
- Presenters will respond to questions as time allows during meeting



- **Raise hand**

- Use the "raise hand" icon at the top of the screen
- When called by meeting facilitator, unmute to ask your question



- **Email us**

- Send questions to regulatory.affairs@evergy.com