

2025 10-Year Assessment Summary

PRESENTED BY:

System Planning

November 17, 2025

- ATC Proprietary -

atcllc.com

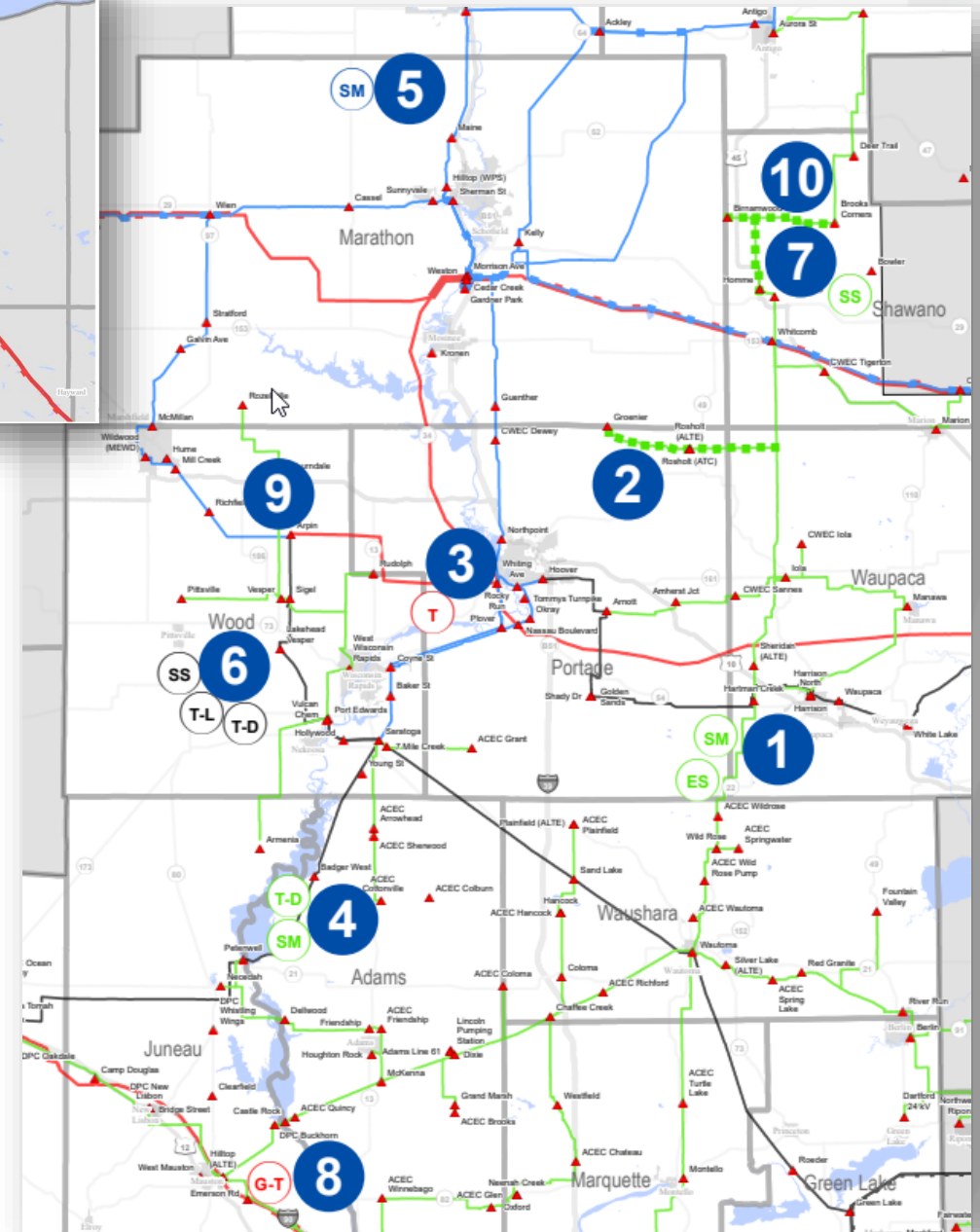
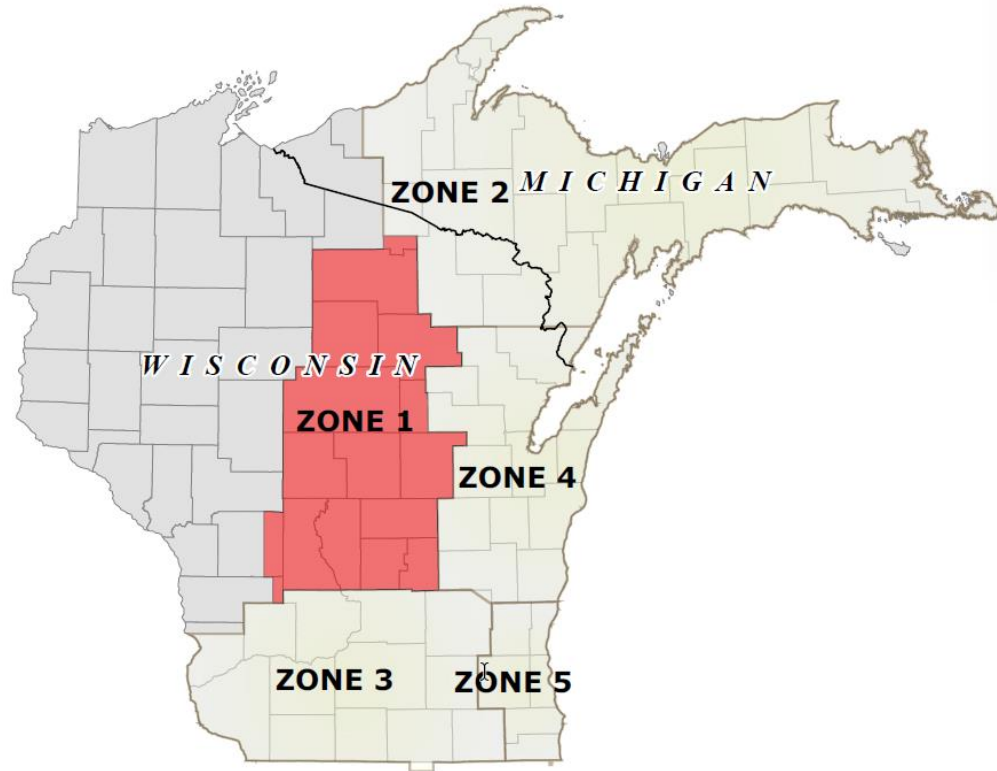
Highlights

- Since the publication of the 2024 10-Year Assessment, we have:
- Made improvements to 13 substations
- Upgraded or rebuilt approximately 12 transmission lines
- Signed 13 new generator interconnection agreements as part of MISO's 2020 Interconnection Queue, which includes approximately 2,150 megawatts of renewable generation
- Supported our local distribution customers through our Load Interconnection Request (LIRF) program for numerous projects, including:
 - Interconnection of new loads
 - Replacement of aging distribution infrastructure
 - Integration of Distributed Energy Resources (DERs)

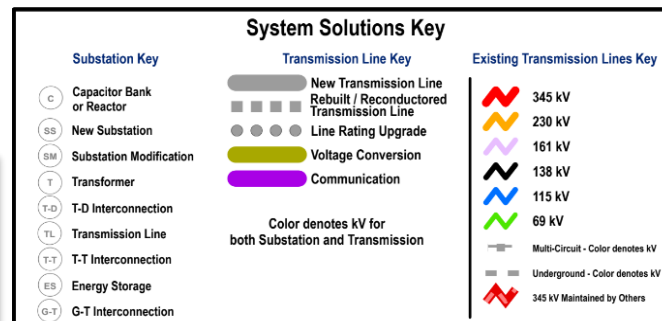
Capital Forecast (10-Year)

	\$ in billions				
	2021	2022	2023	2024	2025
Network	0.3	0.5	1	1.8	1.4
Regional Multi-Benefits Projects	0.2	0.2	0.1	0	0
MISO Long Range Transmission Plan	0	0.9	0.9	1.4	3.4
Asset Renewals	2.2	2.8	3.4	4	4.8
Distribution Interconnection	0.2	0.2	0.7	1.5	3
Generation Interconnection	0.5	0.6	0.6	0.8	0.8
Technology, Facilities, & Inventories	0.2	0.3	0.3	0.3	0.6
Other System Improvements	0.2	0.1	0.2	0.1	0.2
Estimate	3.8	5.7	7.2	9.9	14.2

Zone 1



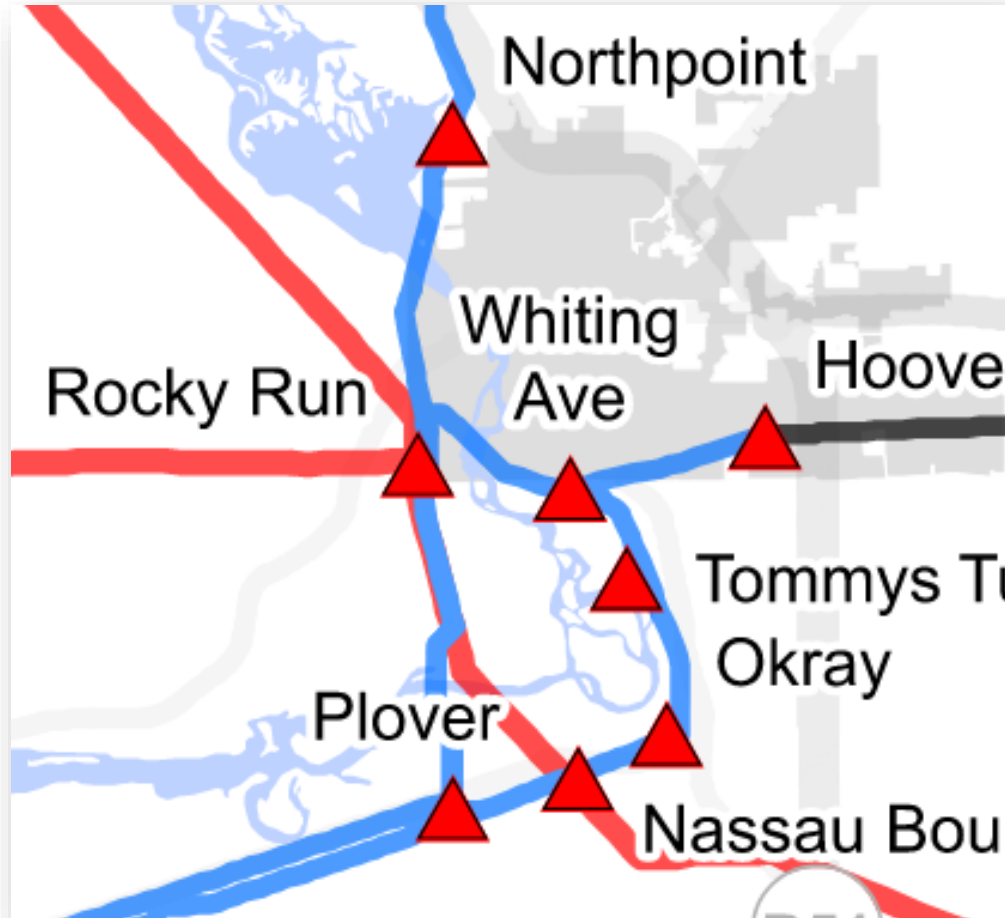
The information presented in this map document is advisory and is intended for reference purposes only. ATC owned and operated facility locations are approximate. Depending on the status of the projects shown, the transmission line additions may be for illustrative purposes only and may not reflect the actual routes.



Zone 1 Projects

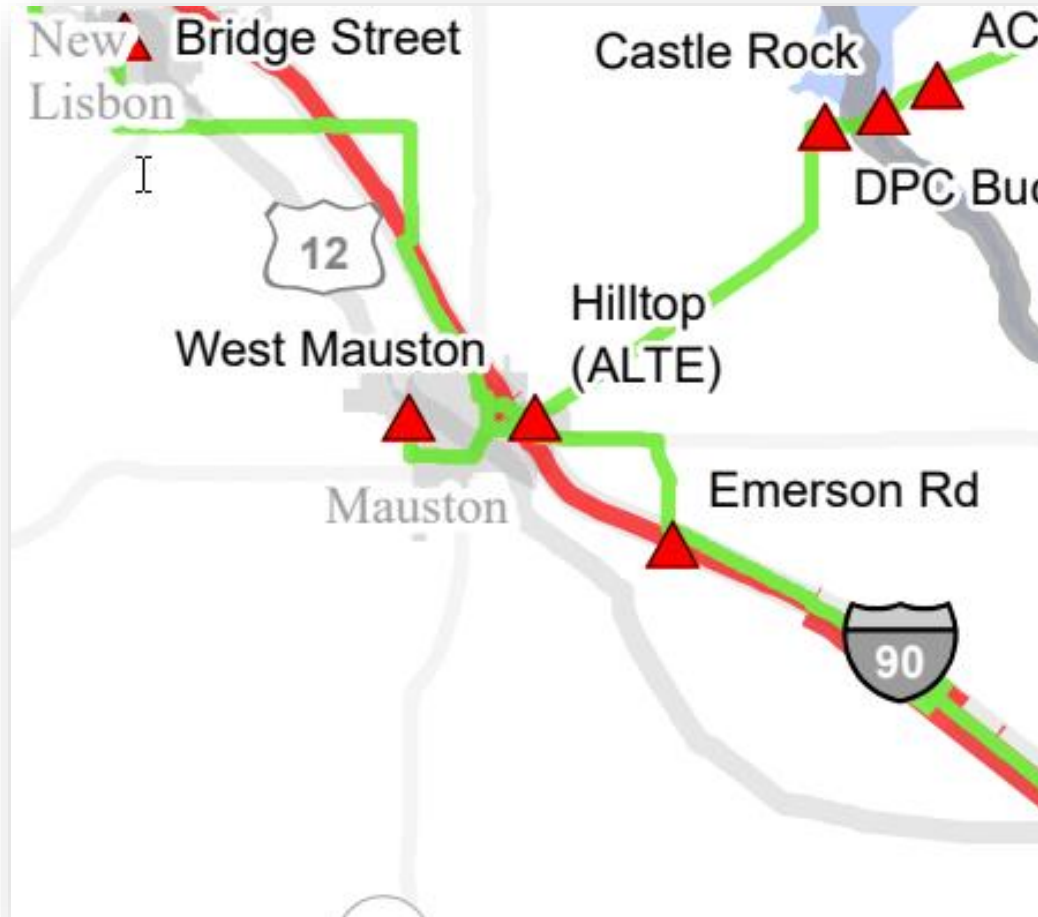
Project Description	Project #	In-service year	Need Driver	Status	Regulatory Update	Zone
Waupaca Area Energy Storage Project	1	2025	Operational flexibility	Planned	CA Approved in 2024	1
Groenier – Rosholt (ALTE) Tap 69 kV (Y-71), Partial Rebuild and Rerate	2	2025	Condition and Performance	Planned	N/A	1
Rocky Run SS T2 and T4 Power Transformer Replacement	3	2027	Reliability, Asset Renewal	Planned	CA Filed in 2025	1
Northern Adams County Area Network Improvement Project	4	2027	Reliability, T-D Interconnection	Planned	CA Filed in 2025	1
North Central WI Reliability Project	5	2028	Reliability	Planned	CPCN Filed in 2025	1
Pittsville Area Reliability Project	6	2028	Reliability, T-D Interconnection	Proposed	CPCN targeted filing 2026	1
Birnamwood Area Reliability Project	7	2028	Reliability	Proposed	N/A	1
J1502 Emerson Rd SS Network Upgrades and Interconnection Facilities	8	2028	G-T Interconnection	Proposed	N/A	1
Grid Forward Central Wisconsin (MISO LRTP Tranche 1 Project 6)	9	2030	Regional reliability	Proposed	CPCN Filed in 2024	1
Birnamwood – Brookes Corners 69kV (Y-86), Partial Rebuild	10	2031	Asset Renewal	Provisional	N/A	1

Rocky Run SS T2 and T4 Power Transformer Replacement Project



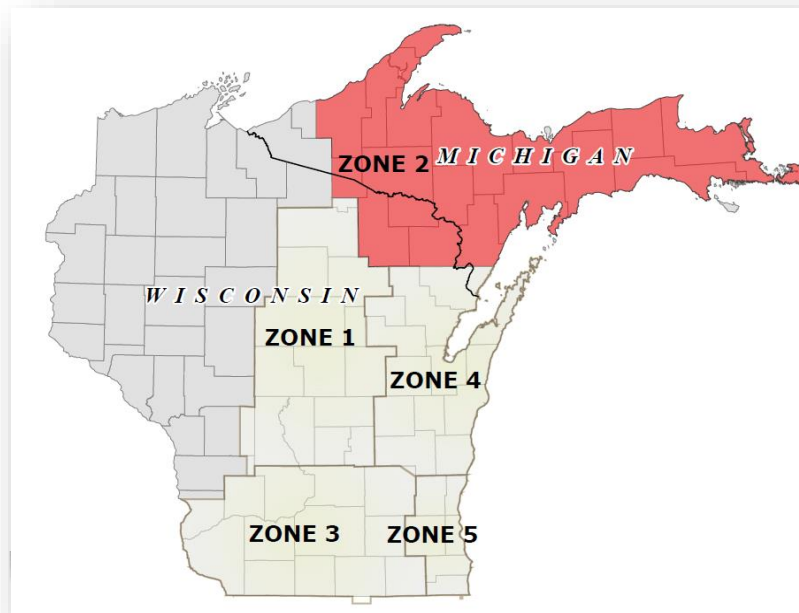
- Need Drivers:
 - NERC TPL reliability requirement identified thermal overload
 - Condition and performance
- Scope of Work:
 - Replace T4 with a new 500 MVA transformer.
 - Retire T2 transformer
- Estimated cost: \$17.6 million.
- Proposed ISD: June 2027
- The project was approved in MTEP 2023 Appendix A and CA was filed in August 2025

J1502 Emerson Road SS Network Upgrades and Interconnection Facilities



- Need Drivers:
 - G-T Interconnection for 225 MW Solar station in Juneau County along Line W-13
- Scope of Work:
 - Construct new 345kV substation between North Madison and Briggs Road
 - W-13 345 kV transmission modifications
 - North Madison substation modifications
 - J1502 Interconnection Facilities
- Estimated cost: \$22.4 million
- Proposed In Service Date: June 2028
- The project is targeted as MTEP 2025 Appendix A and will require a CA filing

Zone 2



System Solutions Key		
Substation Key	Transmission Line Key	Existing Transmission Lines Key
(C) Capacitor Bank or Reactor	— New Transmission Line	345 kV
(SS) New Substation	— Rebuilt / Reconductored Transmission Line	230 kV
(SM) Substation Modification	••• Line Rating Upgrade	161 kV
(T) Transformer	— Voltage Conversion	138 kV
(T-D) T-D Interconnection	— Communication	115 kV
(TL) Transmission Line		69 kV
(T-T) T-T Interconnection		Multi-Circuit - Color denotes kV
(ES) Energy Storage		Underground - Color denotes kV
(G-T) G-T Interconnection		345 kV Maintained by Others
Color denotes kV for both Substation and Transmission		

The information presented in this map document is advisory and is intended for reference purposes only. ATC owned and operated facility locations are approximate. Depending on the status of the projects shown, the transmission line additions may be for illustrative purposes only and may not reflect the actual routes.



Zone 2 Projects

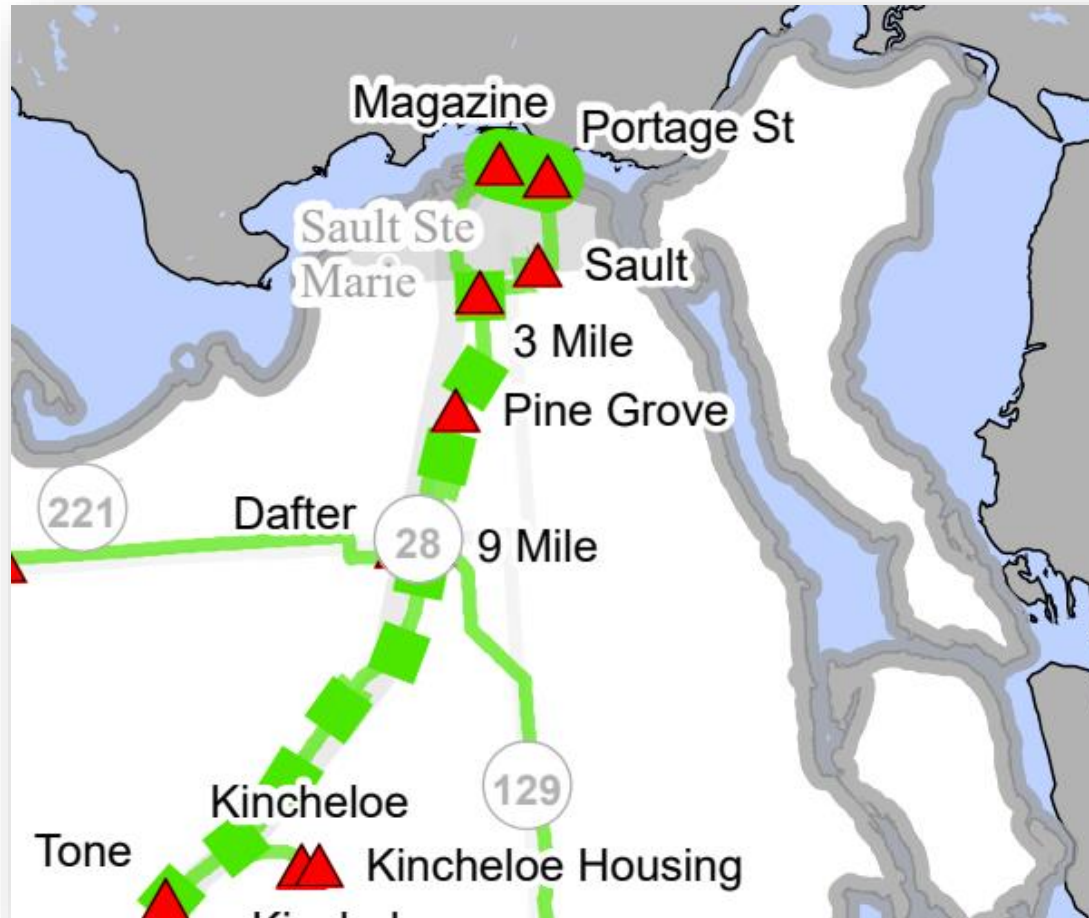
Project Description	Project #	In-service year	Need Driver	Status	Regulatory Update	Zone
Chandler – Delta 69 kV (Delta1), Rebuild and OPGW	1	2026	Condition and Performance	Planned	N/A	2
Munising Area Reactive Power Project	2	2027	Reliability	Planned	N/A	2
Empire Mine – Huron 138 kV (X-119), OPGW Addition	3	2027	Communication	Proposed	N/A	2
Cornell Tap – Watson Tap 69kV (Chandler), Partial Rebuild	4	2028	Condition and Performance	Planned	N/A	2
Pine River – Mich Limestone Loading Dock 69 kV (ESE_6906), Rebuild	5	2028	Condition and Performance	Planned	N/A	2
9 Mile SW STA - Pine River 69 kV (6921/23), Rebuild	6	2028	Condition and Performance	Provisional	N/A	2
J1750 Grace Lake SS Network Upgrades and Interconnection Facilities	7	2028	G-T Interconnection	Proposed	N/A	2
3 Mile - 9 Mile 69 kV (ESE_6903/ESE_6902/6901), Rebuild and Reconfigure	8	2029	Condition and Performance	Provisional	N/A	2
Magazine - Portage St., New 69 kV Line	9	2029	Reliability	Provisional	N/A	2
Hiawatha SS Control Building , Relays and Breaker Asset Renewal	10	2029	Condition and Performance	Provisional	N/A	2
Western UP Reliability Project	11	2030	Reliability, Condition and Performance	Provisional	Filing Requirement TBD	2
Silver River – North Lake 138 kV (NLKG31), Rebuild	12	2032	Condition and Performance	Provisional	N/A	2

Western UP Reliability Project

- Need Driver:
 - NERC TPL thermal and voltage limitations
 - Condition and performance
 - Other Benefits
 - Operational flexibility
 - Economic benefit
- Scope of Work:
 - Rebuild the Conover – Mass 69 kV line and Mass – Winona 69 kV line to double circuit 138/69 kV from Lakota Rd to Winona
 - Substation expansion at Winona
 - Terminate 138 kV line at Lakota Rd
- Estimated cost: \$236 million
- Proposed In Service Date: December 2030
- The project is included in MTEP26 Target Appendix B

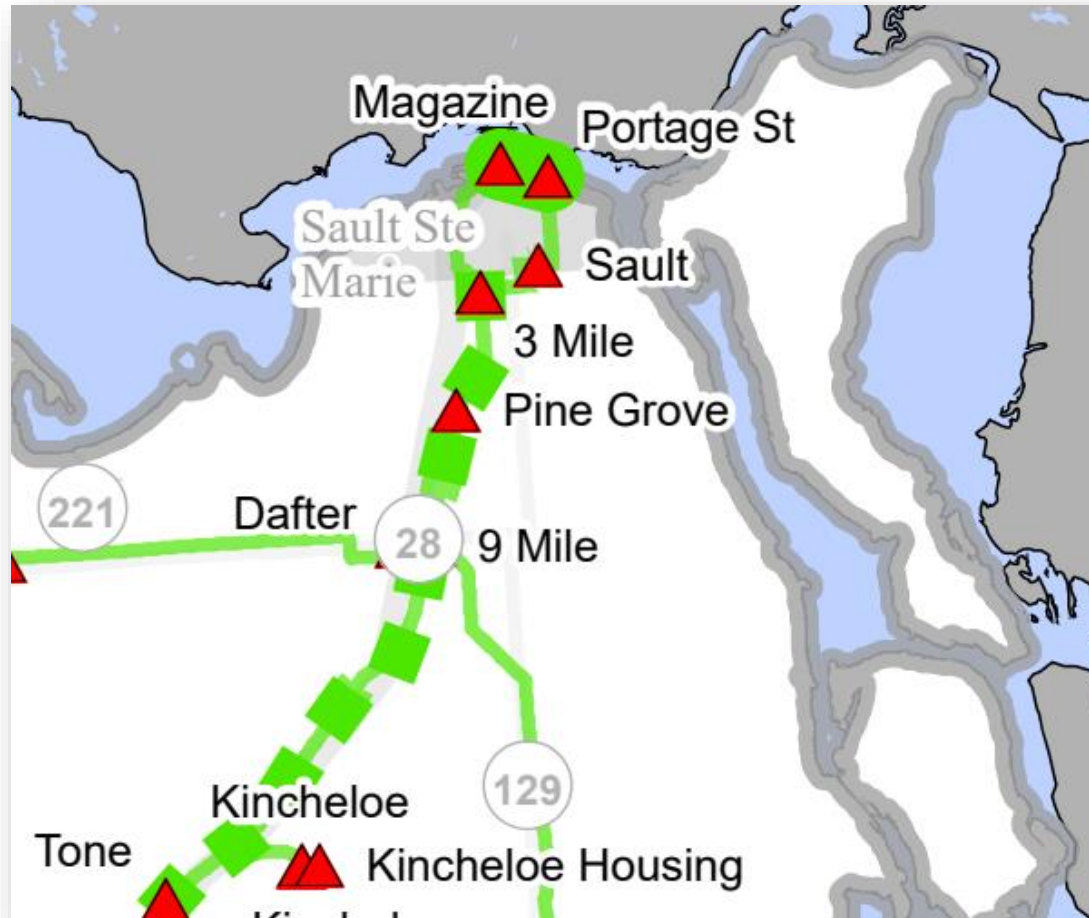


Magazine – Portage St. New 69 kV Line



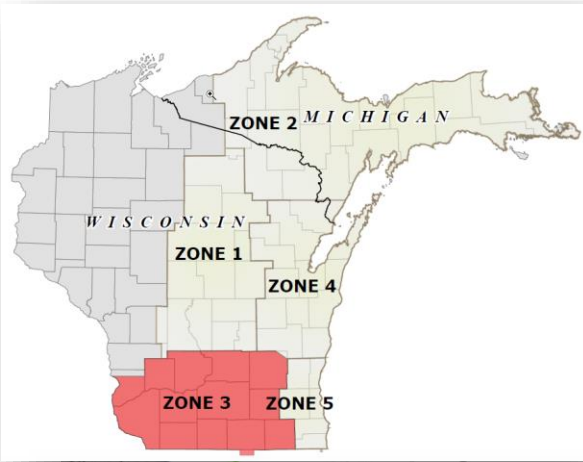
- Need Driver:
 - Additional Source Initiative to provide network service to Sault Ste. Marie area
 - Benefits: Improve operational flexibility and position for future asset renewal projects
- Scope of Work:
 - Construct a new 69 kV line from Magazine to Portage St. (1.7 miles)
 - Expand Portage St. to add a line terminal
 - Rebuild Magazine with a straight bus
- Estimated cost: \$21 million
- Proposed In Service Date: February 2029
- The project is included in MTEP26 Target Appendix B

3 Mile – 9 Mile 69 kV (ESE_6903/ESE_6902/6901), Rebuild and Reconfigure

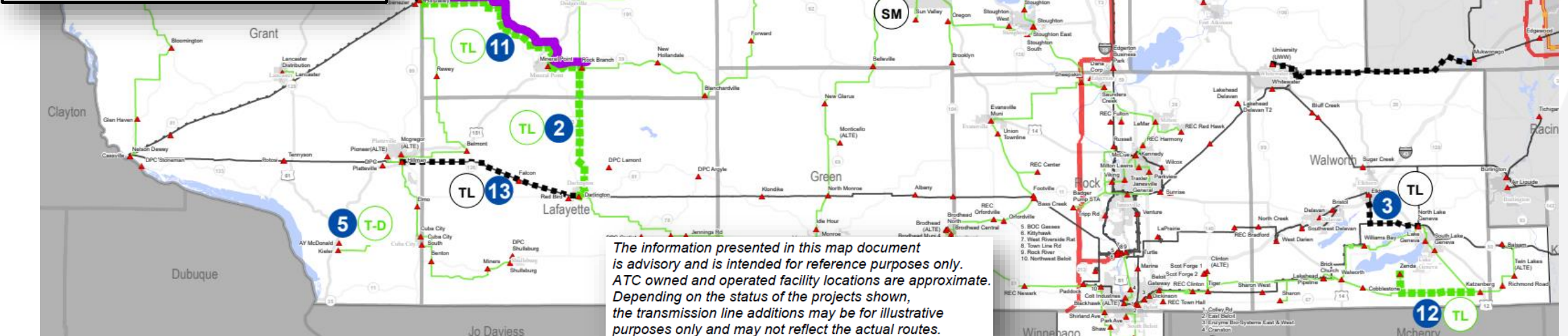


- Need Driver:
 - Condition and performance, structure usages
 - Other benefits:
 - Extend fiber path
 - Improve switching capabilities with Motor Operated Disconnect Switches
- Scope of Work:
 - Rebuild ESE_6903 as double circuit ESE_6903/6902
 - Reconfigure existing double circuit as single circuit
 - Install new conductor, fiber, and Install Motor Operated Disconnect Switches
- Estimated cost: \$36 million
- Proposed In Service Date: December 2029
- The project is included in MTEP26 Target Appendix B

Zone 3



System Solutions Key		
Substation Key	Transmission Line Key	Existing Transmission Lines Key
C Capacitor Bank or Reactor	New Transmission Line	345 kV
SS New Substation	Rebuilt / Reconductored Transmission Line	230 kV
SM Substation Modification	Line Rating Upgrade	161 kV
T Transformer	Voltage Conversion	138 kV
T-D T-D Interconnection	Communication	115 kV
TL Transmission Line	Color denotes kV for both Substation and Transmission	69 kV
T-T T-T Interconnection		Multi-Circuit - Color denotes kV
ES Energy Storage		Underground - Color denotes kV
G-T G-T Interconnection		345 kV Maintained by Others

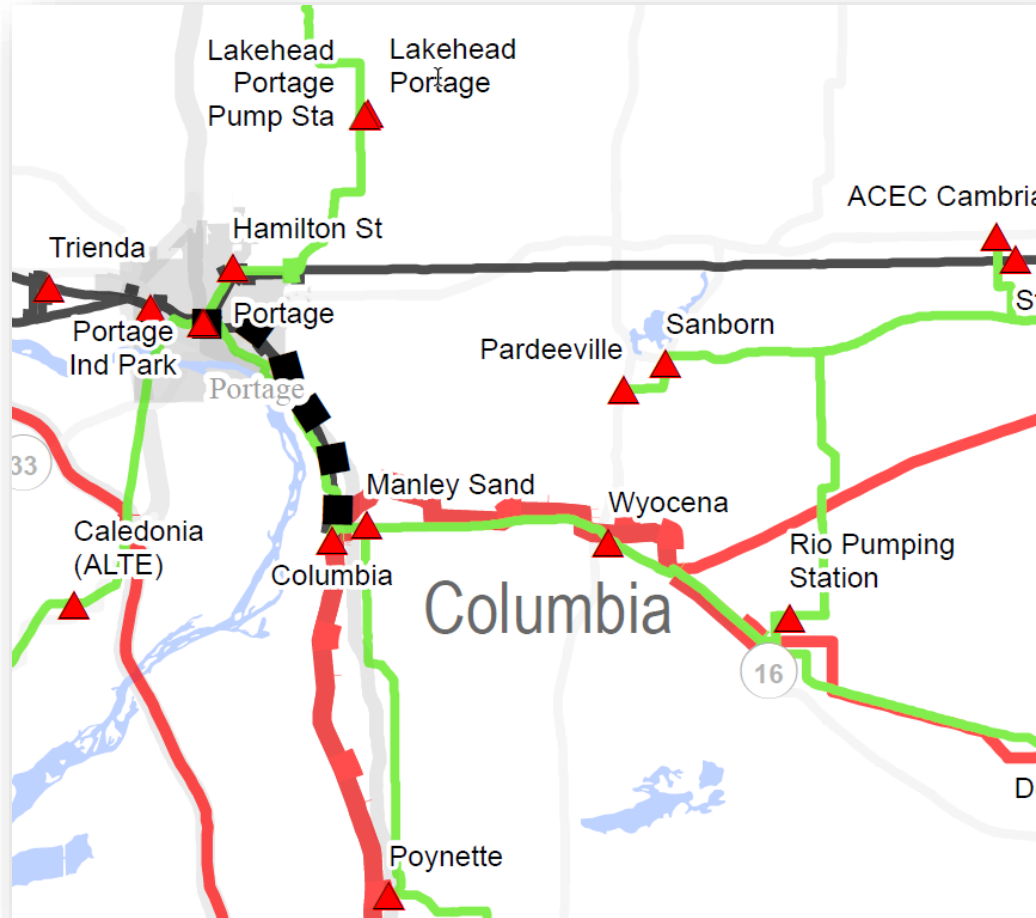


The information presented in this map document is advisory and is intended for reference purposes only. ATC owned and operated facility locations are approximate. Depending on the status of the projects shown, the transmission line additions may be for illustrative purposes only and may not reflect the actual routes.

Zone 3 Projects

Project Description	Project #	In-service year	Need Driver	Status	Regulatory Update	Zone
J1410 J1411 North Arlington Swt St MPFCA & Network Upgrades	1	2026	G-T Interconnection	Planned	CA Approved in 2023	3
Darlington – Rock Branch 69kV (Y-109), Rebuild	2	2026	Condition and Performance	Planned	n/a	3
North Lake Geneva – Elkhorn 138 kV (X-55), Rebuild	3	2026	Reliability	Planned	n/a	3
Dodge County, DIC, New Substation	4	2027	T-D Interconnection	Planned	CPCN Approved in 2025	3
Grant County, DIC, New Substation	5	2027	T-D Interconnection	Planned	CA Filed in 2024	3
Portage – Columbia 138 kV (X-13/X-20), Reconductor	6	2027	Reliability	Proposed	n/a	3
Highland – Hill Valley 138 kV, Construct New Line	7	2026	Reliability	Proposed	n/a	3
Columbus SS, DIC, Reconfiguration	8	2028	T-D Interconnection	Planned	CA Targeted filing 2026	3
Dane County, DIC, New Substation	9	2029	T-D Interconnection	Proposed	CA Targeted filing 2026	3
Sun Prairie Area Reliability Project	10	2029	Reliability	Proposed	CA Targeted filing 2026	3
Eden – Rock Branch 69kV (Y-106), Rebuild & OPGW	11	2028	Economic, Condition and	Planned	n/a	3
Zenda – Katzenberg 69 kV (Y-51 ALE), Partial Rebuild	12	2028	Condition and Performance,	Provisional	n/a	3
Hillman - Falcon - Darlington 138 kV (X-14/X-101), Double Circuit Rebuild	13	2031	Condition and Performance, Reliability	Provisional	n/a	3
Fitchburg SS Control Building, Relay, Breaker and Remote Ends Asset Renewal	14	2029	Condition and Performance	Provisional	n/a	3

Portage – Columbia 138 kV (X-13/X-20), Reconductor



- Need Driver:
 - MTEP thermal overloads
- Project scope:
 - Reconductor both X-13 and X-20 138 kV lines with a High-Temp Low-Sag (HTLS) conductor
- Estimated cost: \$17.3 million
- Proposed In Service Date: Q2 2027
- The project is targeted as MTEP 2025 Appendix A and is expected to qualify for an exemption from the PSCW

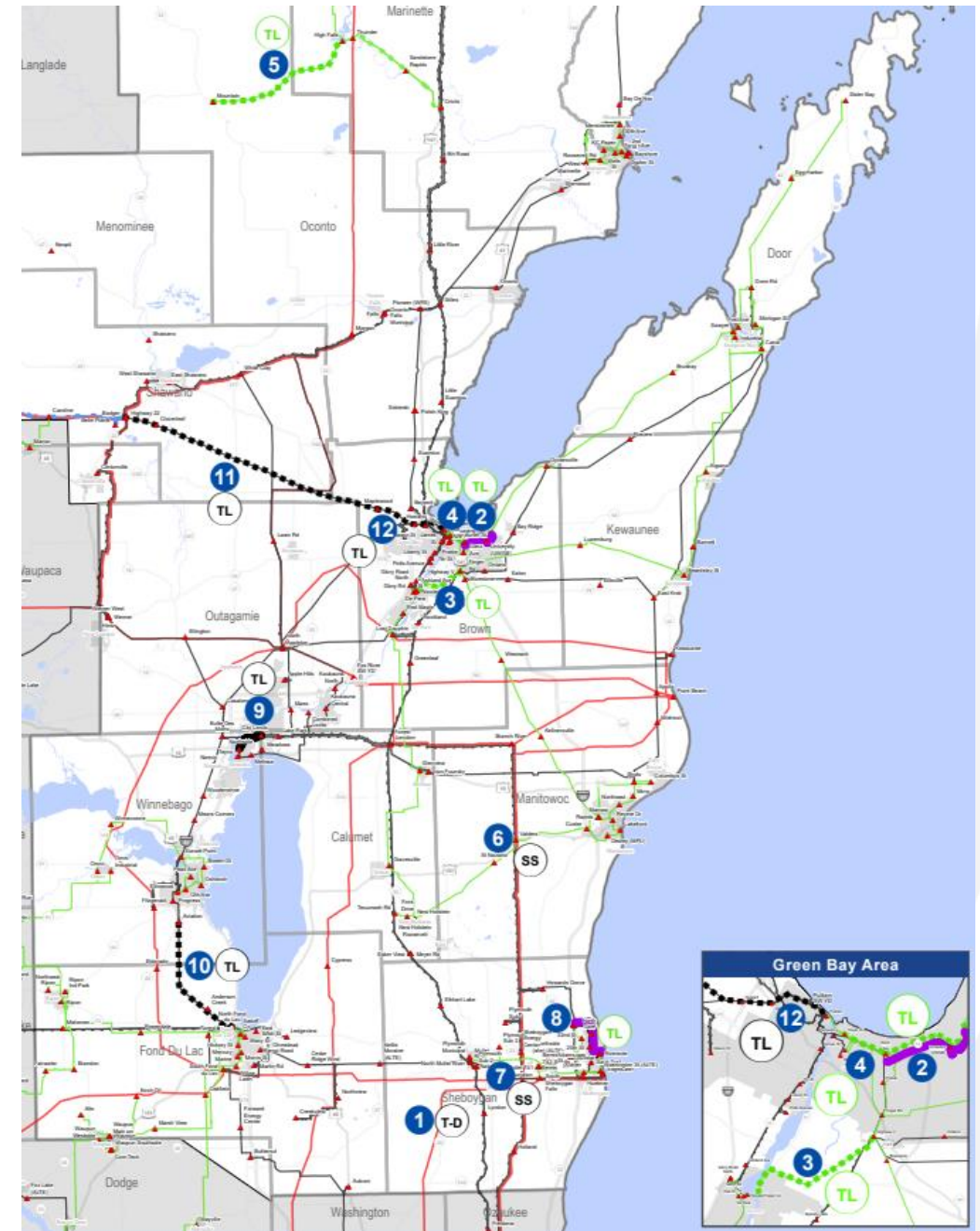
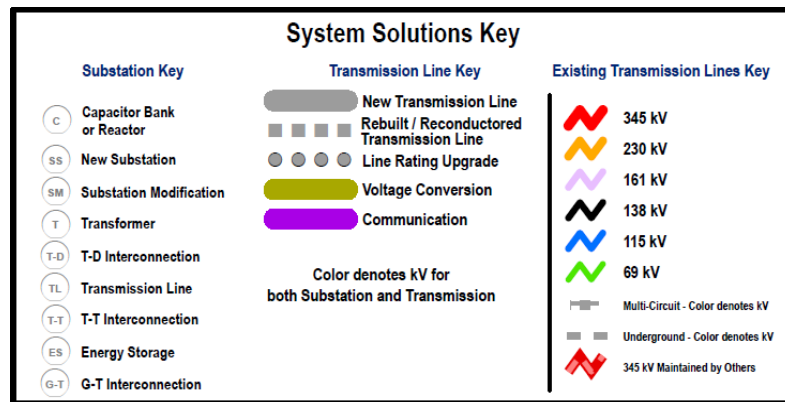
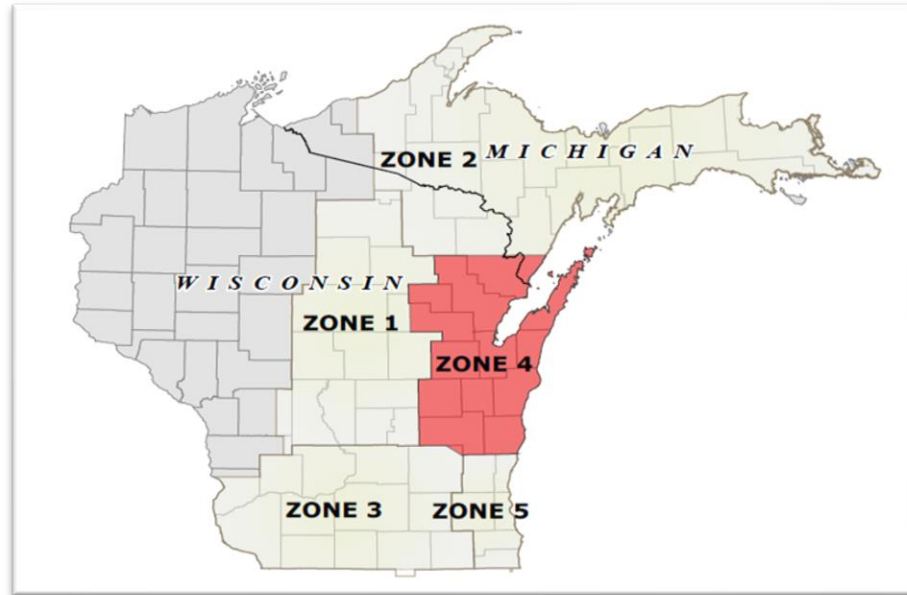
Dane County Distribution Interconnection



- Need Driver:
 - Load interconnection request in the northern part of Dane County
- Project scope:
 - Expand North Madison Substation 345 kV breaker-and-a-half bus with a +/- 350 Mvar STATCOM, and capacitor banks
 - Interconnection substation #1: ATC to extend four radial 345 kV lines from the North Madison Substation to customer substation
 - Interconnection substation #2: New 345 kV breaker-and-a-half bus owned by ATC. Network the existing Columbia – North Madison 345 kV line and the Emerson Rd – North Madison 345 kV line into the new substation
 - Uprate both Columbia – North Madison 345 kV lines
- Preliminary estimated cost: \$310 million
- Proposed In Service Date: Q3 2029
- The CA filing is targeted for early 2026, and will be submitted for MISO EPR review

Zone 4

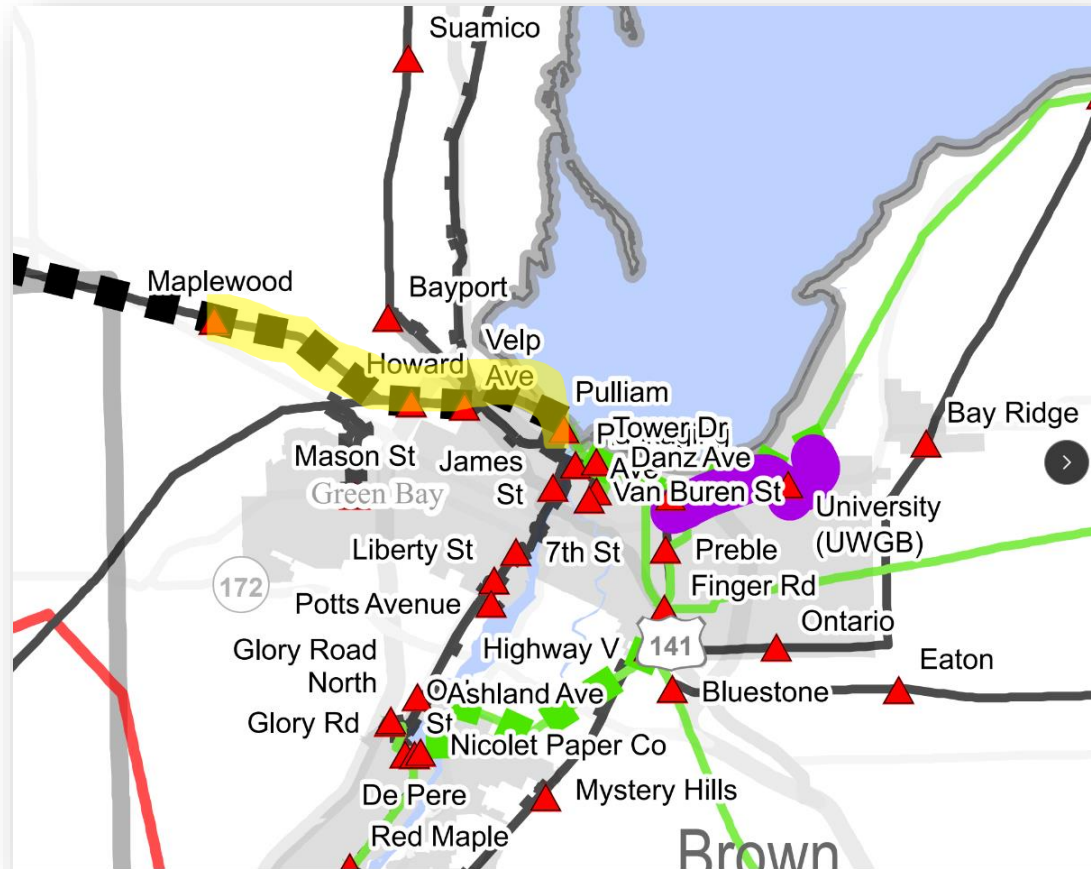
The information presented in this map document is advisory and is intended for reference purposes only. ATC owned and operated facility locations are approximate. Depending on the status of the projects shown, the transmission line additions may be for illustrative purposes only and may not reflect the actual routes.



Zone 4 Projects

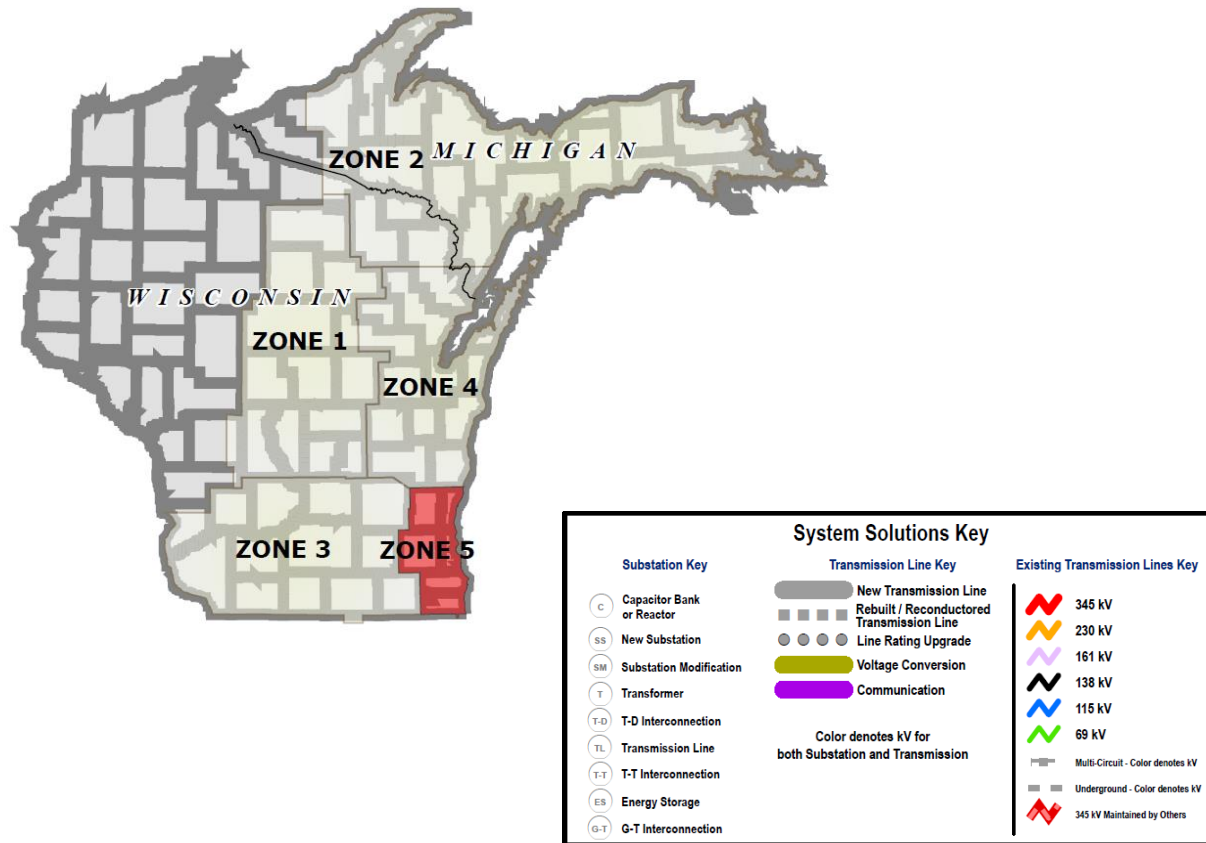
Project Description	Project #	In-service year	Need Driver	Status	Regulatory Update	Zone
Plymouth Reliability Project	1	2026	T-D Interconnection	Planned	CPCN Approved in 2025	4
Danz Ave SW STA – University (WPS) 69kV (O-15), underground rebuild & OPGW	2	2026	Condition and Performance	Planned	N/A	4
Hwy V – Structure 123 69 kV (Z-26), Rebuild	3	2026	Condition and Performance	Planned	N/A	4
Tower Dr – Pulliam (P-16/R-70), Partial Rebuild	4	2028	Condition and Performance	Planned	CA Targeted filing 2025	4
High Falls – Mountain 69kV (Y-77), Partial rebuild	5	2028	Condition and Performance	Planned	Filing Requirement TBD	4
Valders SS, New 138/69 kV Substation	6	2028	Economic, Reliability	Planned	CA Targeted filing 2026	4
Mullet River Area Reliability Project	7	2028	Reliability, Condition and	Planned	CA Targeted filing 2026	4
Erdman - Riverside (ALTE) 69 kV (Y-82 / X-64 / X-37), Rebuild	8	2028	Condition and Performance	Provisional	Filing Requirement TBD	4
Appleton Area Reliability Project	9	2029	Reliability	Proposed	Filing Requirement TBD	4
Aviation - North Fond Du Lac 138 kV (G-111), Partial Rebuild	10	2029	Condition and Performance	Provisional	Filing Requirement TBD	4
Maplewood - Badger 138 kV (W-75), Rebuild	11	2029	Condition and Performance	Provisional	Filing Requirement TBD	4
Maplewood - Pulliam SW YD 138 kV (X-76), Rebuild	12	2029	Condition and Performance	Provisional	Filing Requirement TBD	4

Maplewood - Badger 138 kV (W-75), Rebuild; Pulliam SW YD - Maplewood 138 kV (X-76/MSNG41/D-82), Rebuild

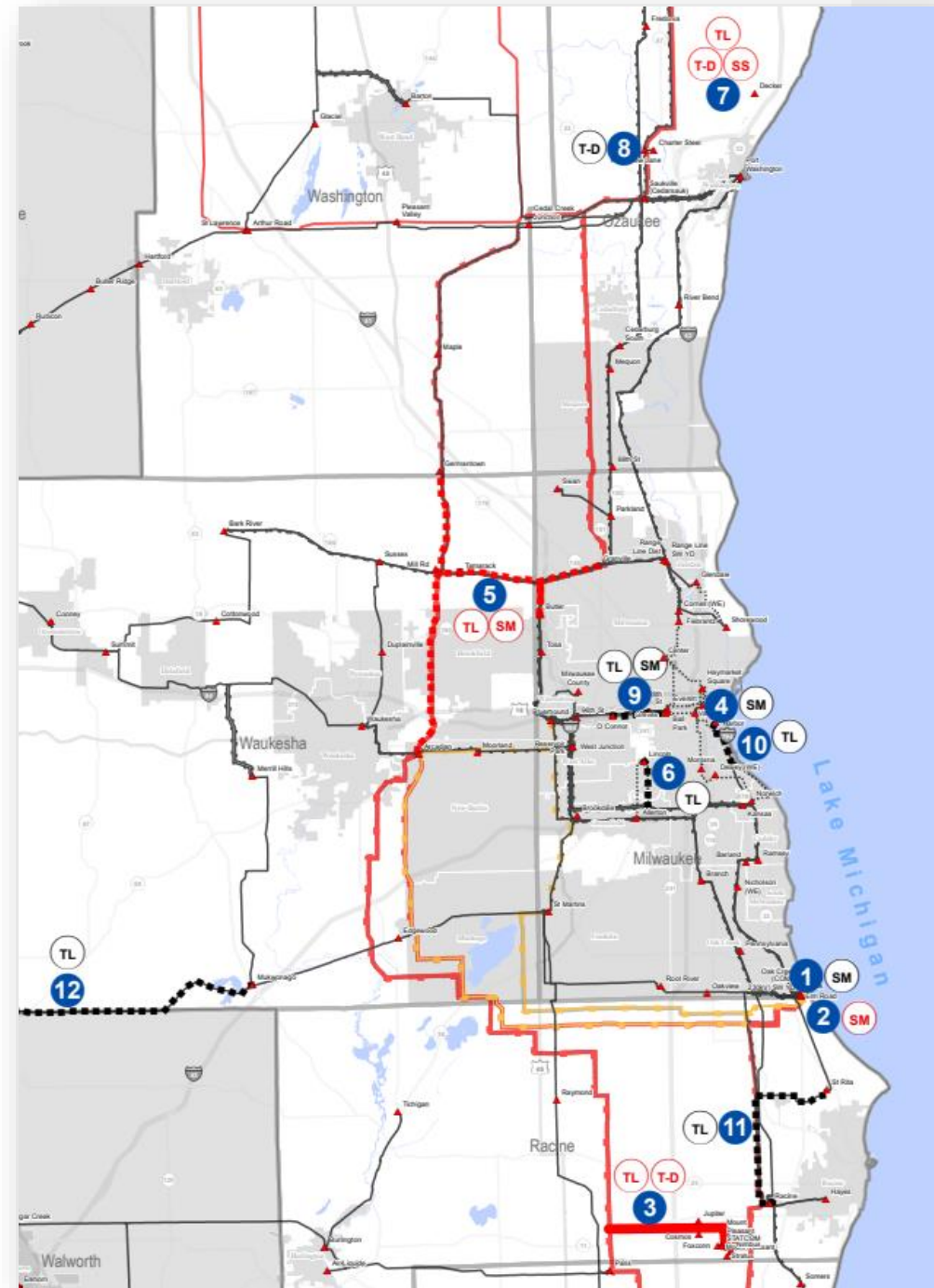


- Need Driver:
 - Condition and performance of assets installed in early 1950s
- Scope of Work:
 - Rebuild ~28 miles of single circuit on W-75
 - Rebuild ~5 miles of single circuit as single circuit and ~8 miles of single circuit as 4 miles of double circuit.
- Estimated Cost: \$40M
- Proposed In Service Date: June 2029
- The projects are target Appendix B MTEP26

Zone 5



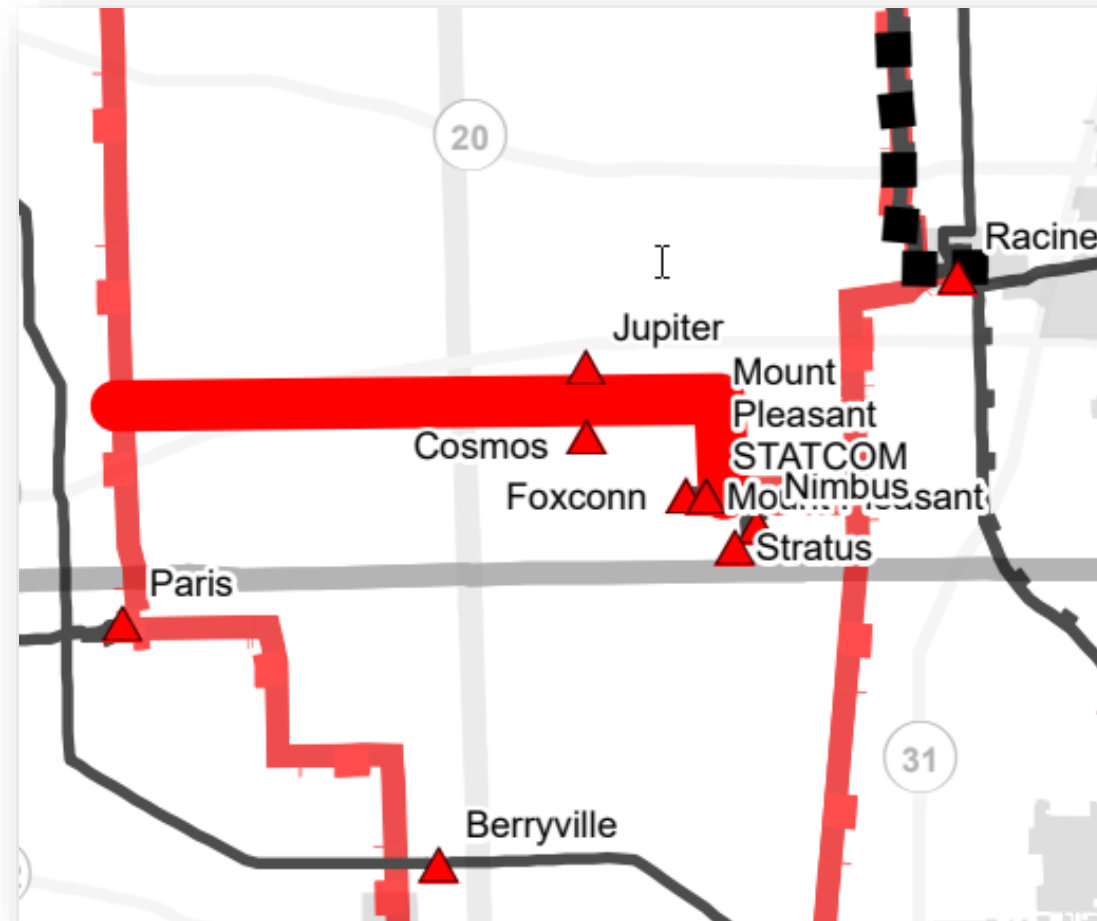
The information presented in this map document is advisory and is intended for reference purposes only. ATC owned and operated facility locations are approximate. Depending on the status of the projects shown, the transmission line additions may be for illustrative purposes only and may not reflect the actual routes.



Zone 5 Projects

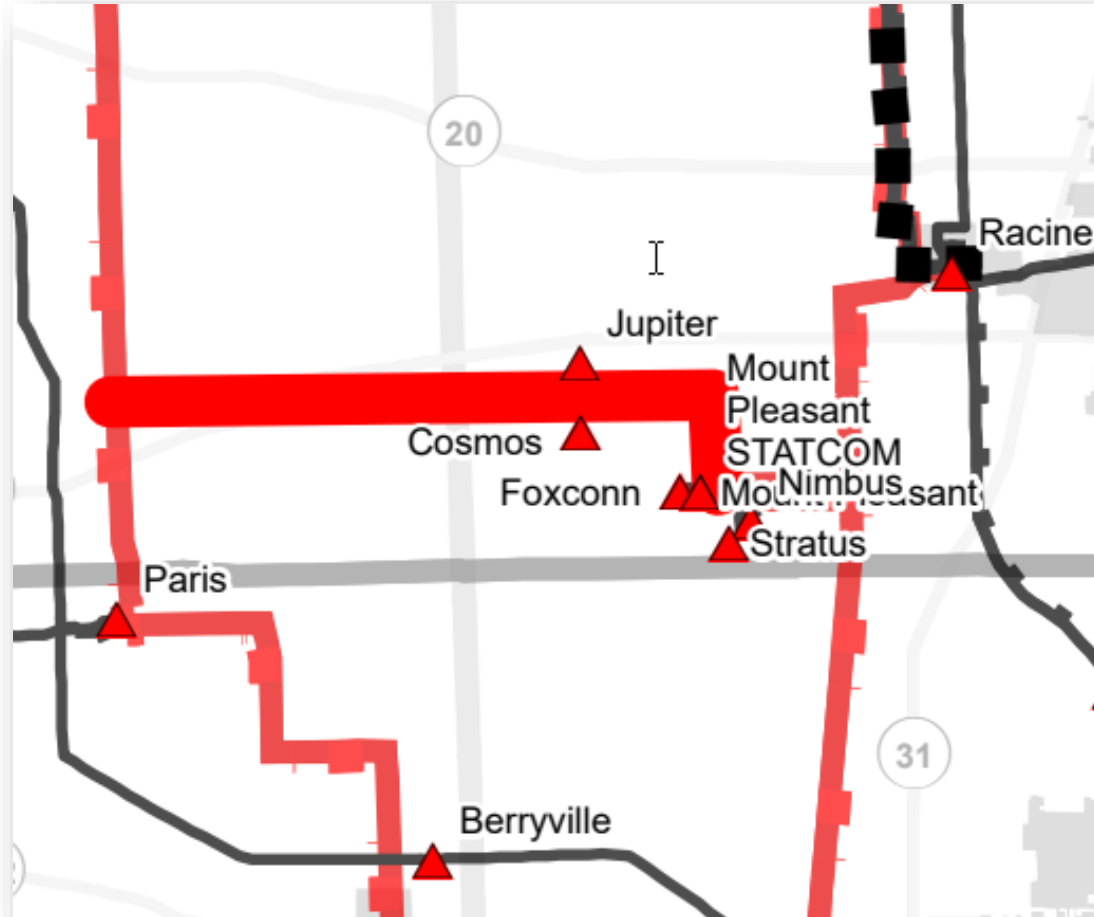
Project Description	Project #	In-service year	Need Driver	Status	Regulatory Update	Zone
Oak Creek, Racine SS and Remote Ends, Control Buildings and Relaying Asset Renewal	1	2026	Condition and Performance	Planned	CA Approved in 2023	5
Elm Road Generation POI Relocation Project	2	2026	G-T Interconnection	Planned	CA Approved in 2025	5
Racine County Distribution Interconnection and Western Feed	3	2025-2028	T-D Interconnection	Planned	CPCN Approved in 2025	5
Everett GIS Asset Renewal	4	2027	Condition and Performance	Planned	CA Approved in 2024	5
Mill Road – Granville Project	5	2027	Reliability	Planned	CPCN Approved in 2025	5
Lincoln – 43rd Street Terminal 138 kV (5053), Replace with double circuit duct bank and XLPE cable	6	2027	Condition and Performance	Planned	N/A	5
Ozaukee County DIC, New Substations	7	2027	T-D Interconnection	Proposed	CPCN filed in 2025	5
North Saukville SS, DIC, New Substation	8	2027	T-D Interconnection	Proposed	CA Targeted filing 2026	5
WisDOT I-94 Stadium Group of Projects	9	2028	Condition and Performance	Planned	N/A	5
Harbor - Russel Terminal 138 kV (893K11), Replace Underground	10	2029	Condition and Performance	Provisional	Filing Requirement TBD	5
Racine - St. Rita 138 kV (8531), Rebuild	11	2030	Reliability, Condition and Performance	Provisional	Filing Requirement TBD	5
Mukwonago – University 138 kV (UNIG52), Rebuild	12	2031	Condition and Performance	Provisional	Filing Requirement TBD	5

Racine County Distribution Interconnection



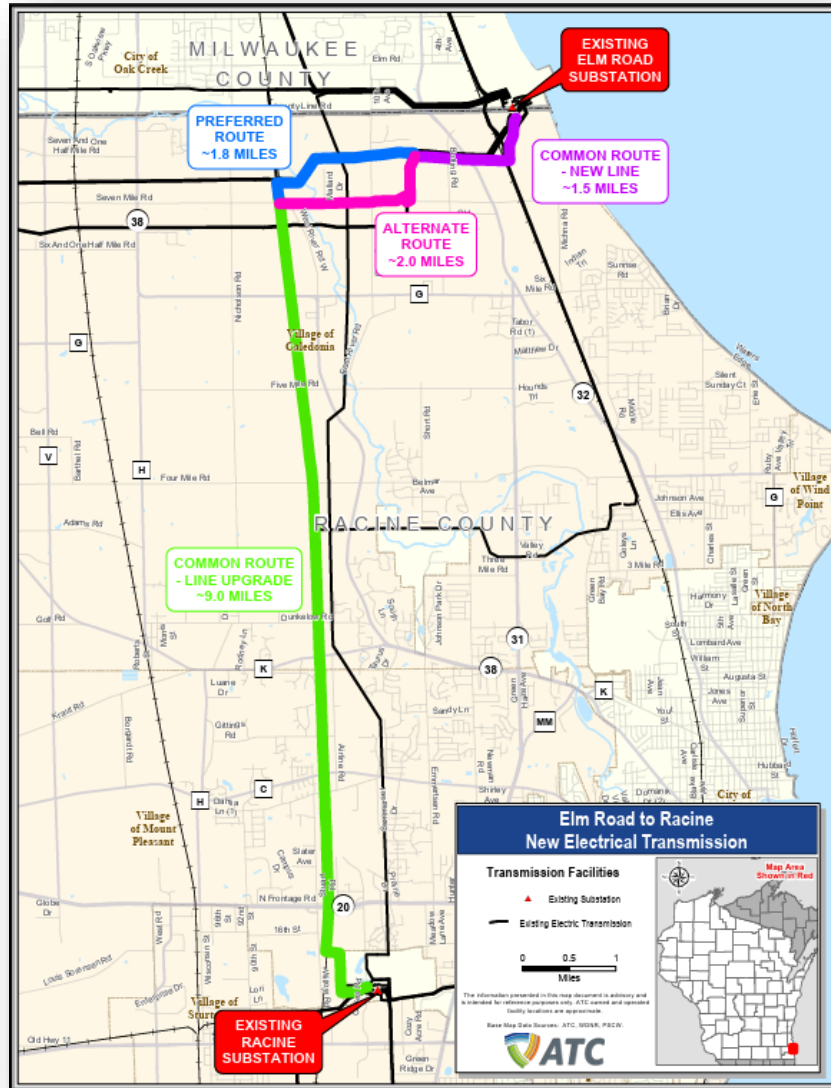
- Need Driver:
 - Load interconnection request in the SE Wisconsin
- Project scope:
 - Nimbus and Stratus Substations - New 138 kV substations
 - Jupiter and Cosmos Substations - New 345/138 kV substations
 - Mount Pleasant Substation – Expand substation bus to connect new 345/138 kV transformer
 - Install +/- 350 Mvar STATCOM at Mount Pleasant and Jupiter
 - Construct a new 138 kV double circuit line between the Mount Pleasant, Nimbus, and Stratus substations
- Estimated cost: \$780.5 million
- Proposed In Service Date: 2025 - 2028
- Projects have either been approved through MISO's EPR or will be approved in MTEP 25

Racine County Western Feed Project



- Need Driver:
 - Load interconnection request in the SE Wisconsin
- Project scope:
 - Construct two new 345 kV double circuit lines from the existing Arcadian – Pleasant Prairie/ Arcadian – Paris 345 kV double circuit line to loop in and out of the Jupiter and Cosmos substations
 - Construct a new 345 kV line between the Jupiter, Mount Pleasant, and Cosmos substations
- Estimated cost: \$124 million
- Proposed In Service Date: Q1 2027
- The project is approved as MTEP 2025 Appendix A via MISO EPR process. CPCN was approved in May 2025

Elm Road – Racine 345 kV Project



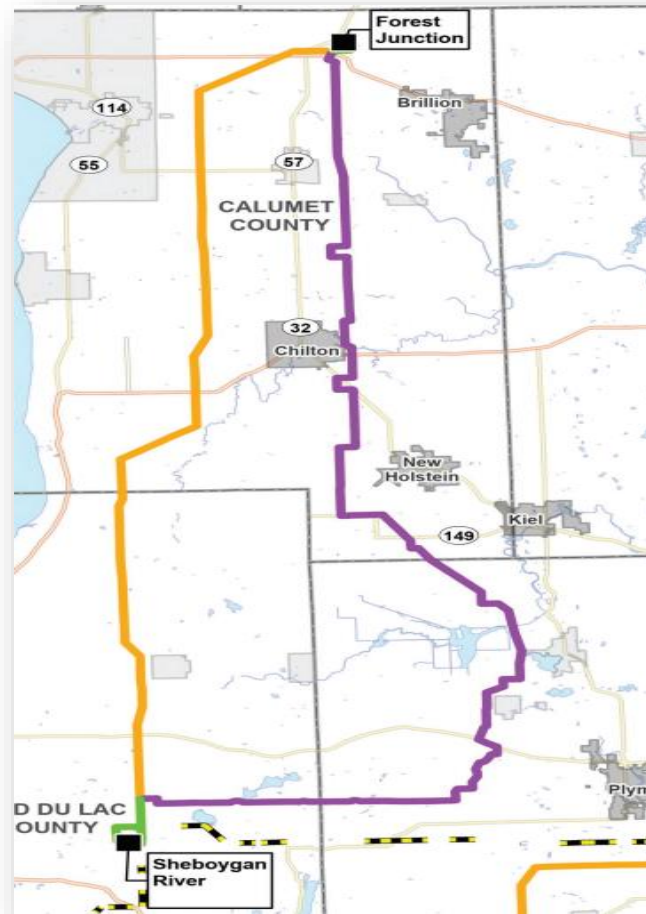
- Need Drivers:
 - Support interconnection of new load
 - Support interconnection of new generation
 - Project is identified as a required network upgrade in MISO's DPP 2020 Cycle
 - MISO identified the Project as a subset of Project 29, in its Long-Range Transmission Plan (LRTP) Tranche 2 portfolio
- Scope of Work:
 - Terminate the new line at the Elm Road 345 kV substation. Expand the 345 kV ring bus to a breaker and a half configuration and terminate the new line at the Racine 345 kV substation
 - Construct the new line on new right-of-way from the Elm Rd 345 kV substation to the intersection with Oak Creek – Racine 138 kV (812) line. Convert line 812 to 345 kV, from the intersection to the Racine 345 kV substation. Retire the remaining portion of line 812
- Estimated cost: \$56.85 million
- Proposed In Service Date: April 2028
- MTEP24 Appendix A, CPCN was filed in August 2025, deemed complete September 2025

Ozaukee County Distribution Interconnection

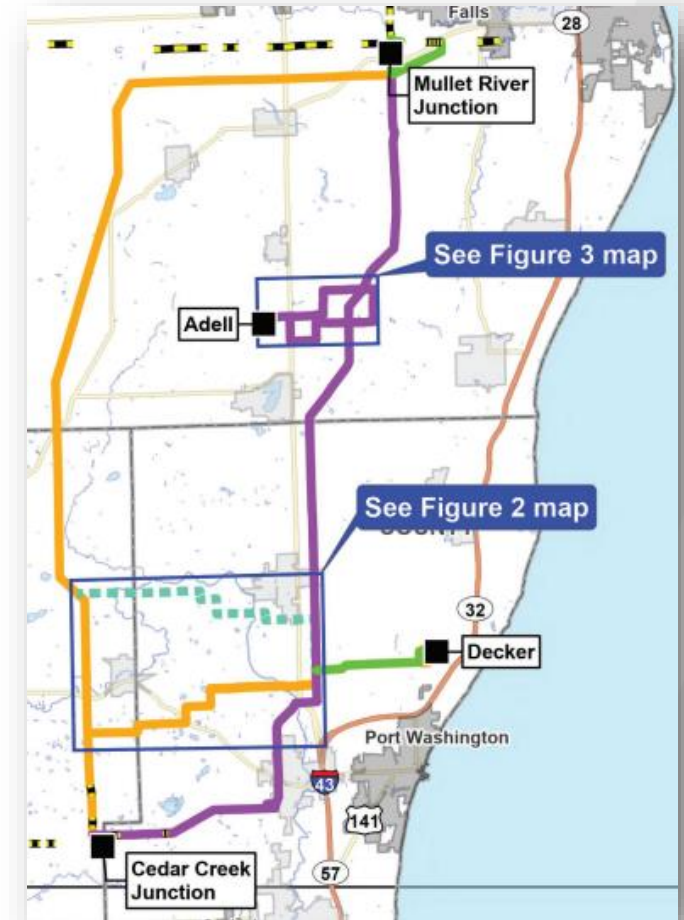
- Need Driver:
 - New load interconnection request in Port Washington area
- Estimated cost: \$1.3 - 1.6 billion depending on routes
- Substation Scope (preferred alternative):
 - Construct four new 345 kV substations: Sheboygan River, Mullet River Junction, Cedar Creek Junction, and Decker substations
 - Decker Substation is the interconnection substation that includes a ± 350 Mvar Static Synchronous Compensator (STATCOM), four 75 Mvar capacitor banks, and end-use customer-owned 345/34.5 kV transformers
 - Expand Forest Junction with 345 kV new line terminal
- T-Line Scope (preferred alternative):
 - Construct three new 345 kV lines:
 - Forest Junction – Sheboygan River,
 - Mullet River Junction – Decker, and
 - Decker – Cedar Creek Junction
 - Rebuild segments of the existing Sheboygan Energy Center – Granville 345 kV line as double-circuit between the new Mullet River Junction, Decker, and Cedar Creek Junction substations
 - Rebuild segments of the existing Forest Junction – Arcadian 345 kV line as double-circuit between the Forest Junction, Cypress, and Sheboygan River substations
 - Network the existing Edgewater – Saukville 345 kV line into the Decker Substation
 - Uprate several 345 kV lines for additional capacity
- Proposed In Service Date: December 2027
- Currently in MISO Expedited Project Review, CPCN was submitted in September 2025

Ozaukee County Distribution Interconnection

North Power Line Routes

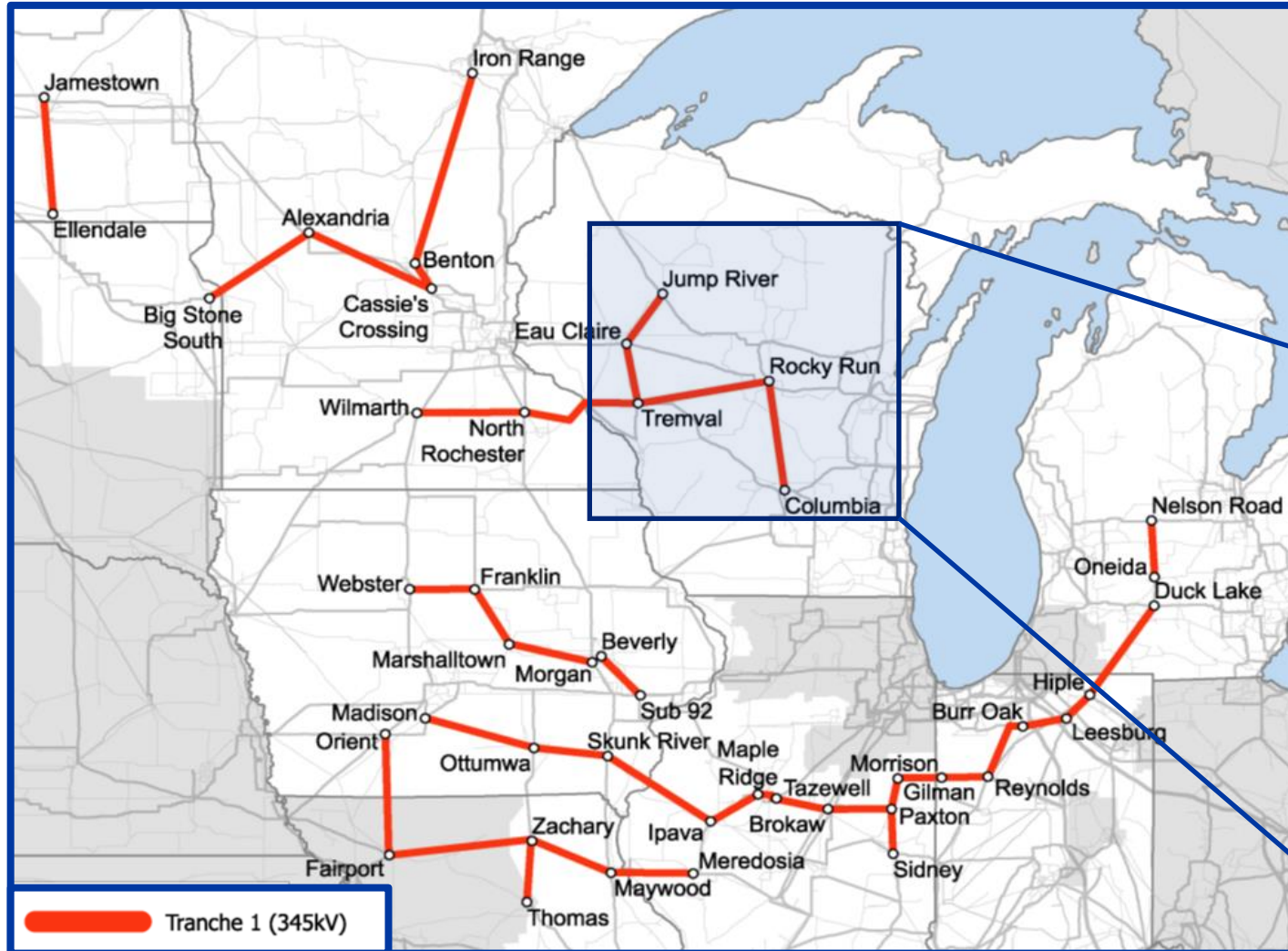


South Power Line Routes



Subject to change depending on CPCN filing decision and further investigation

MISO's Long Range Transmission Plan – Tranche 1



MISO LRTP – Tranche 1

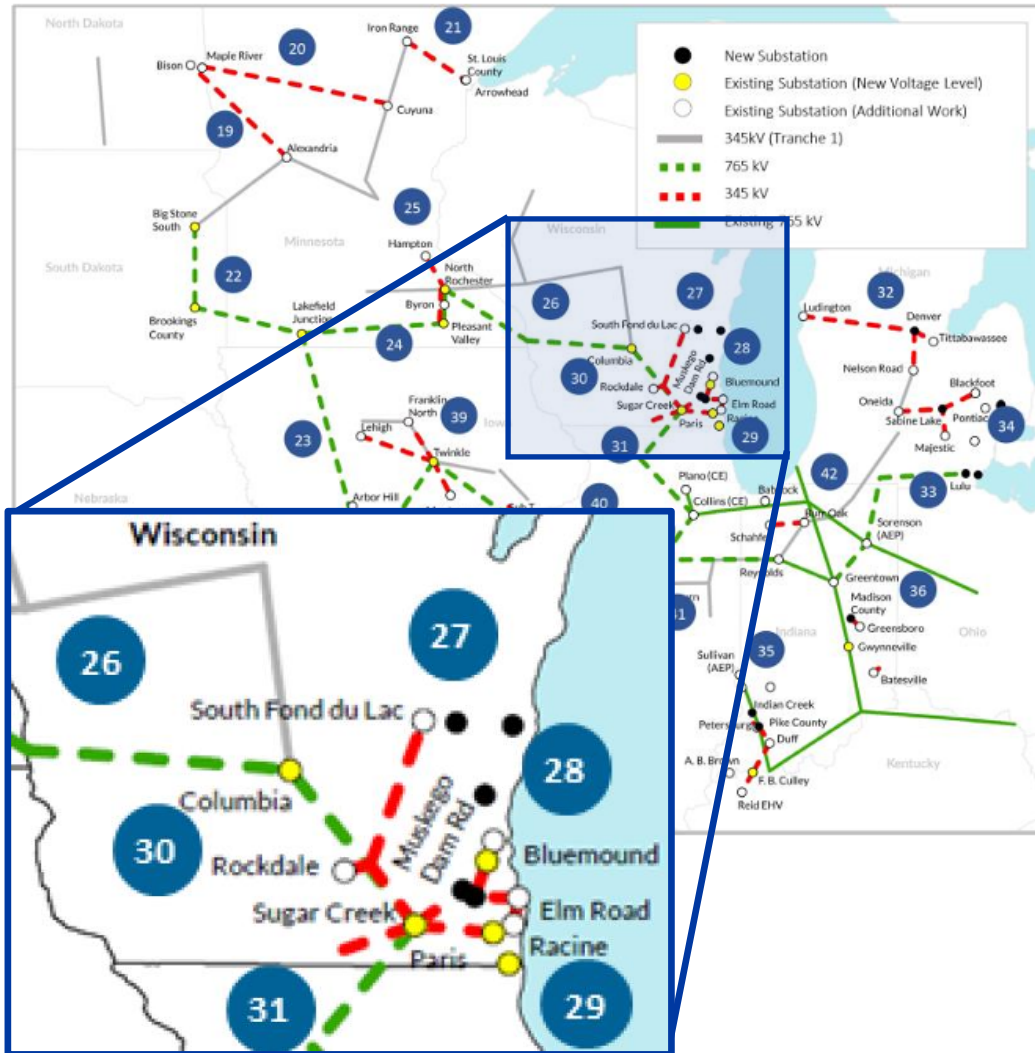
- Approved in July 2022
- 18 x 345 kV projects in nine states
- Two projects impacting ATC service territory
- Regionally cost shared across MISO north

ATC Service Territory Impacts:



LRTP Tranche 2 – Approved Dec. 2024

Over \$3.5B in investment in ATC's service territory,
With ~ \$2.0B directly assigned to ATC.



ID	Project Name	Predominate kV	Targeted ISD	Est. Cost (\$M, 2024)
19	Bison – Alexandria	345	2032	\$216
20	Maple River – Cuyuna	345	2033	\$908
21	Iron Range – Arrowhead	345	2032	\$428
22	Big Stone South - Brookings County - Lakefield Junction	765	2034	\$1,459
23	Lakefield Junction - East Adair	765	2034	\$1,375
24	Lakefield Junction - Pleasant Valley - North Rochester	765	2034	\$1,195
25	Pleasant Valley - North Rochester - Hampton Corner	345	2032	\$222
26	North Rochester - Columbia	765	2034	\$1,924
27	Rocky Run - Werner - North Appleton	345	2032	\$212
28	South Fond du Lac - Rockdale - Big Bend - Sugar Creek - Kitty Hawk	345	2033	\$1,102
29	Bluemond - Arcadian - Waukesha - Muskego - Elm Road - Racine	345	2032	\$731
30	Columbia - Sugar Creek	765	2034	\$743
31	Sugar Creek - Collins	765	2034	\$733
32	Ludington - Denver - Tittabawassee & Nelson Road	345	2032	\$1,553
33	Greentown - Sorenson - Lulu	765	2033	\$1,310
34	Oneida - Sabine Lake - Blackfoot & Majestic	345	2032	\$600
35	Southwest Indiana-Kentucky	345	2032	\$743
36	Southeast Indiana	345	2032	\$578
37	Maywood - Belleau - MRPD - Sioux - Bugle	345	2032	\$881
38	East Adair - Marshalltown - Sub T	765	2034	\$1,583
39	Lehigh - Marshalltown - Franklin North & Montezuma	345	2032	\$588
40	Sub T - Woodford County - Collins & Reynolds	765	2034	\$2,298
41	Woodford County - Fargo & Radbourn	345	2032	\$422
42	Burr Oak - Schahfer	345	2032	\$68
Total Portfolio Cost			Total	\$21,868

For More Information

Visit the ATC 10-Year Assessment website:
www.atc10yearplan.com



Or contact

Ted Weber

Email: tweber2@atcllc.com



Q & A

