



MTEP26 Project Information ITC Transmission (ITCT)

**CORRECTION: Slide 16, 50841 Rebuild
Navarre-DBGEN Tap-Waterman 230kV Line
CORRECTION: Slide 25, Baseline Reliability
Projects (BRPs) Summary**

3rd East Subregional Planning Meeting
Thursday, September 3, 2026

Purpose & Key Takeaway

Purpose

Review and discuss recommended MTEP26 projects

Key Takeaways

- The [MTEP Portal](#) was used to gather information and develop SPM materials. All data was pulled on August 19, 2026. To view all MTEP project details, please visit the [MTEP Portal](#).
- Additionally, quarterly status reports are available on the [MTEP website](#) under *Project Tracking and Monitoring*.

ITC Transmission (ITCT) East Region Overview

*Snapshot of MTEP26 Appendix A
projects recommended for Board
approval*



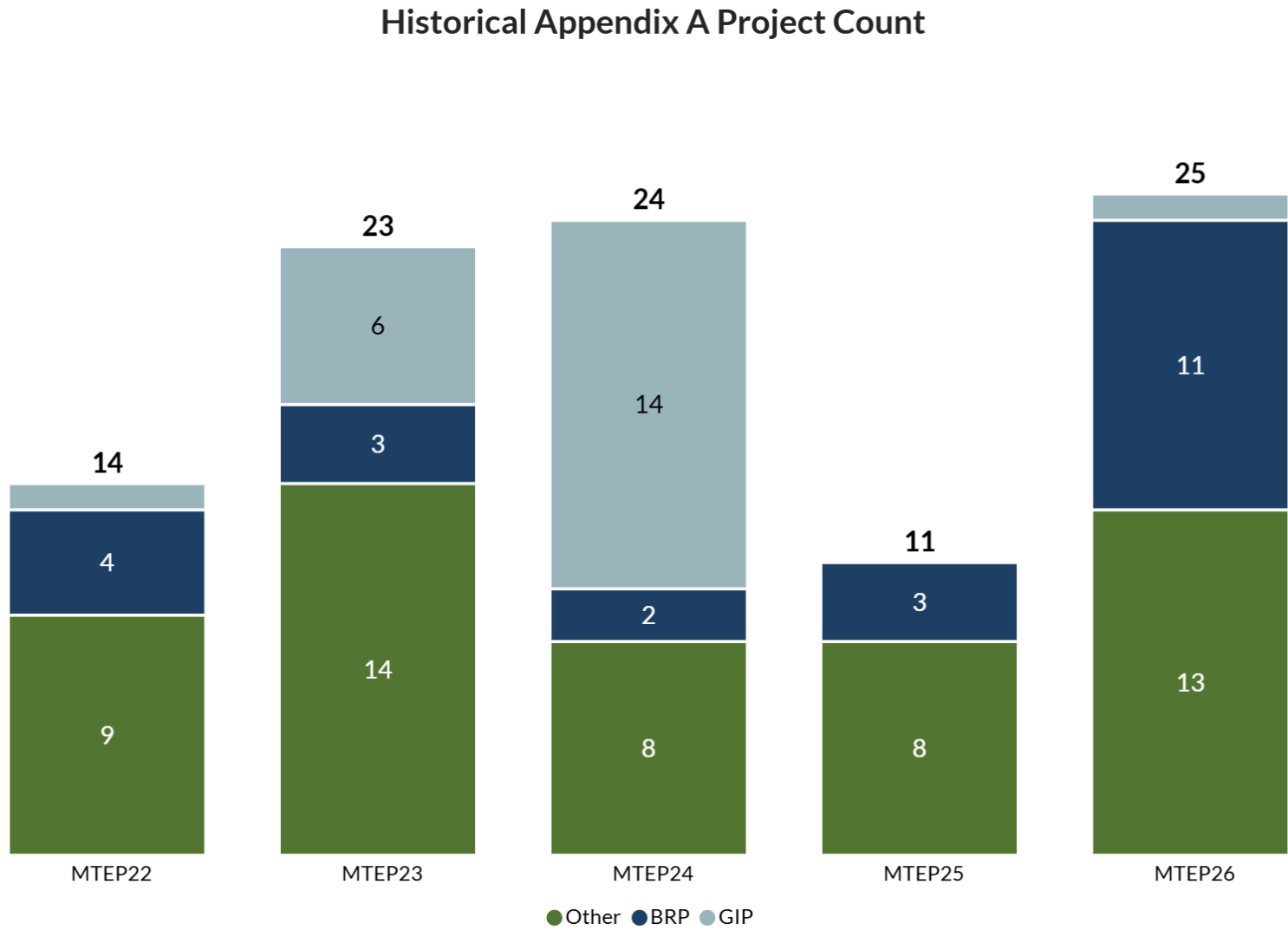
The details of the ITC Transmission (ITCT) projects and their costs are shown below:

- 25 submitted projects at an estimated cost of \$813 million

Update on Current Cycle Projects since SPM2

MTEP Project ID	Project Name	Project Type	Project Change
50851	Rebuild Toll Road - Vital 120kV Line	Other – Age and Condition	Project cost decreased from \$26M to \$19M

ITC Transmission (ITCT) Historical Appendix A data, including submitted MTEP26



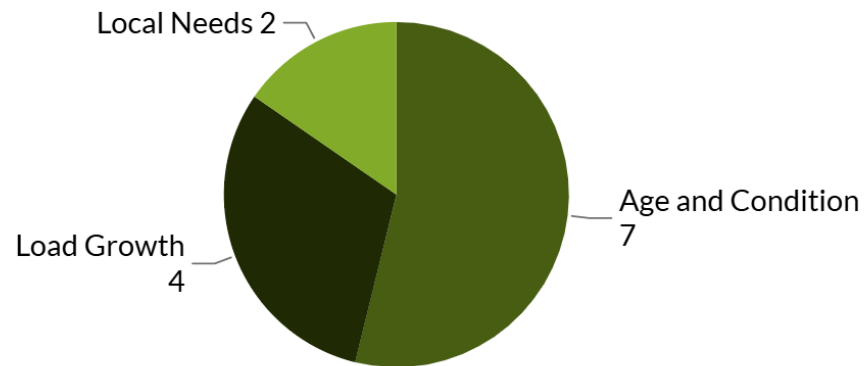
ITC

MTEP26 Projects

25
Total Projects

\$813M
Investment

Breakdown of Other Project Types By Project Count



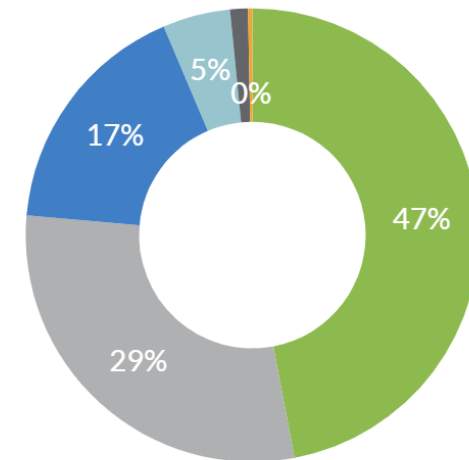
Line Miles by Voltage Level

● ≤161 kV ● 230 kV ● 345 kV

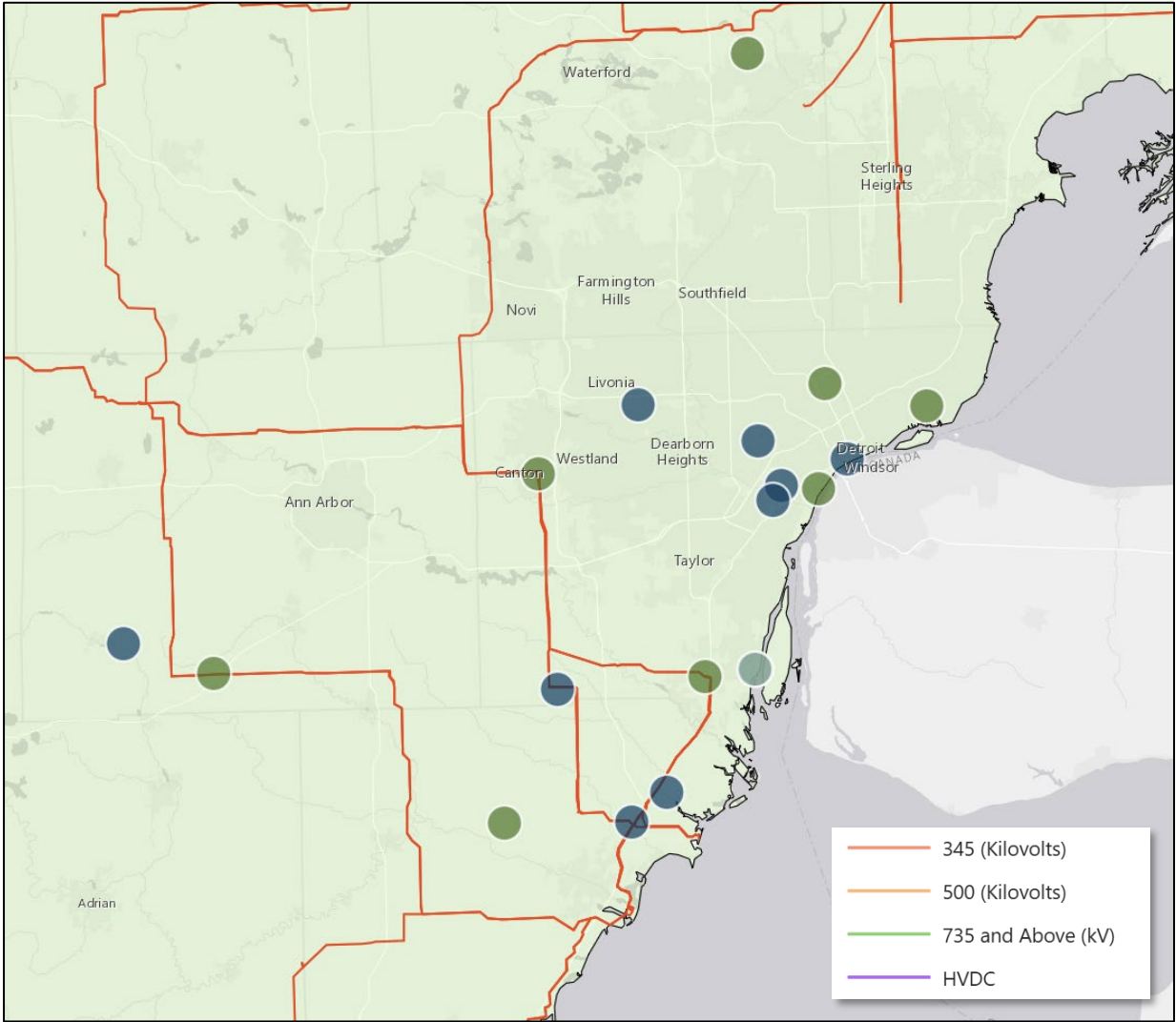
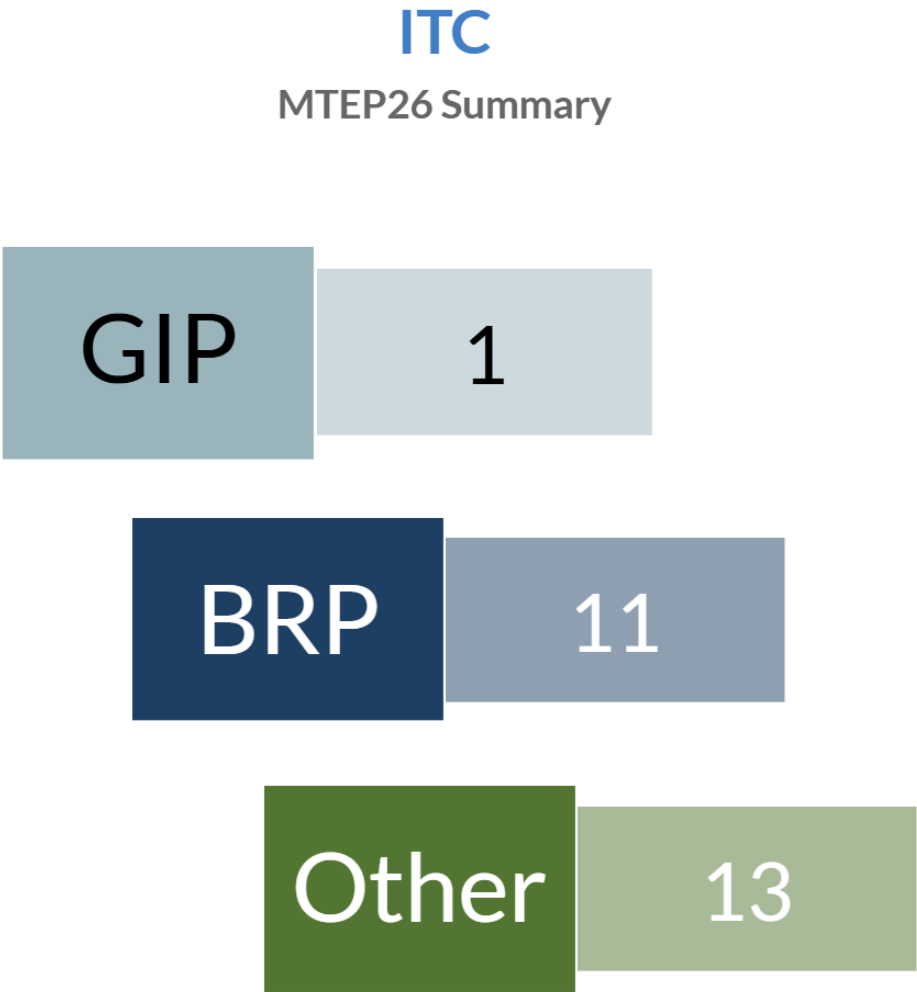


Project Facility Types As a Percentage of Cost

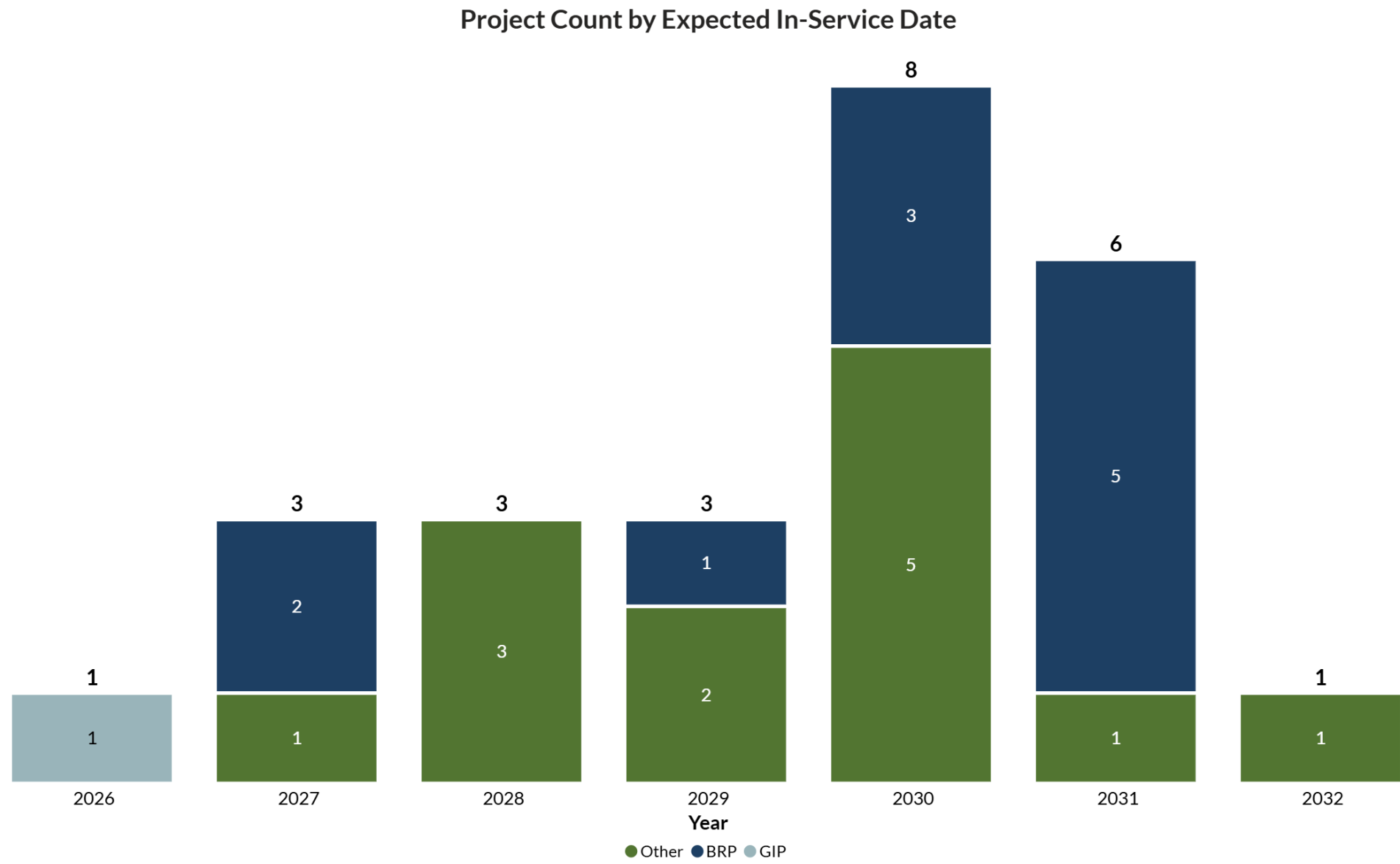
● Line New ● Substation ● Line Upgrade ● Transformer ● Voltage Device ● Misc.



ITC Transmission (ITCT) Project Type Breakdown

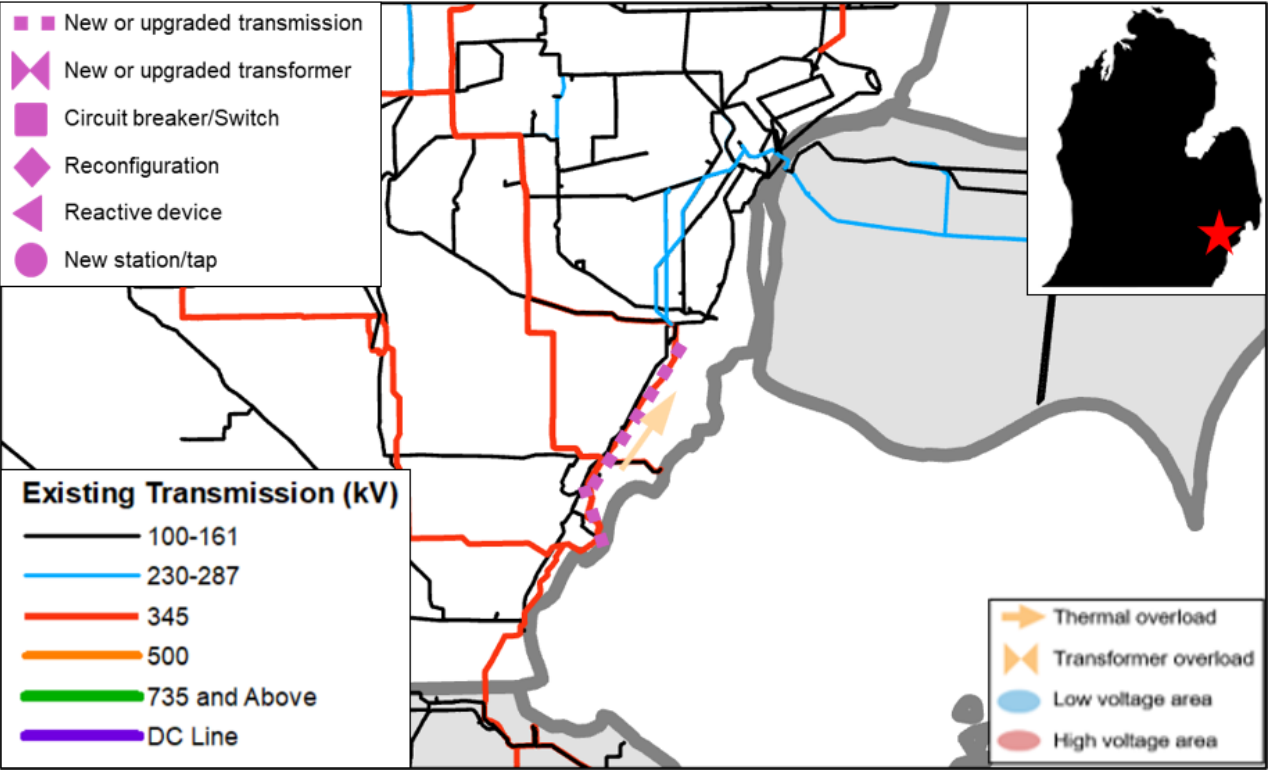


ITC Transmission (ITCT) MTEP26 ISD Breakdown



Baseline Reliability Project

Details for Reconductor Brownstown-Monroe #1 345 kV



MTEP Project ID	15871
Project Name	Reconductor Brownstown-Monroe #1 345 kV
Project Type	BRP
Project Description	Reconductor 7.282 miles of the 2-954 ACSR conductor on the Brownstown – Monroe #1 345 kV circuit to 2-1431 ACSR on double circuit steel structures built to 345 kV construction with OPGW. Remediate the sag on the existing 2-1431 ACSR conductor on the Brownstown – Monroe #1 345 kV circuit to the conductor limit. The reconductor is from structure # 10969 south to Monroe 345 kV. The sag remediation is from structure #10969 north to Brownstown 345 kV.
Current Cost	\$16.1 M
Expected ISD	12/31/2031
Target Appendix	A

Baseline Reliability Project

Details for Reconductor Brownstown-Monroe #1 345 kV

- The [ITCT] Brownstown – [ITCT] Monroe line showed an overload for a previously seen worst P6 contingency. A redispatch was found that resolves the overloads seen in our results. However, this project has also been referenced as a solution to overloads that appeared in multiple NPOA studies for the Fermi plant, including the 2026 NPOA study.

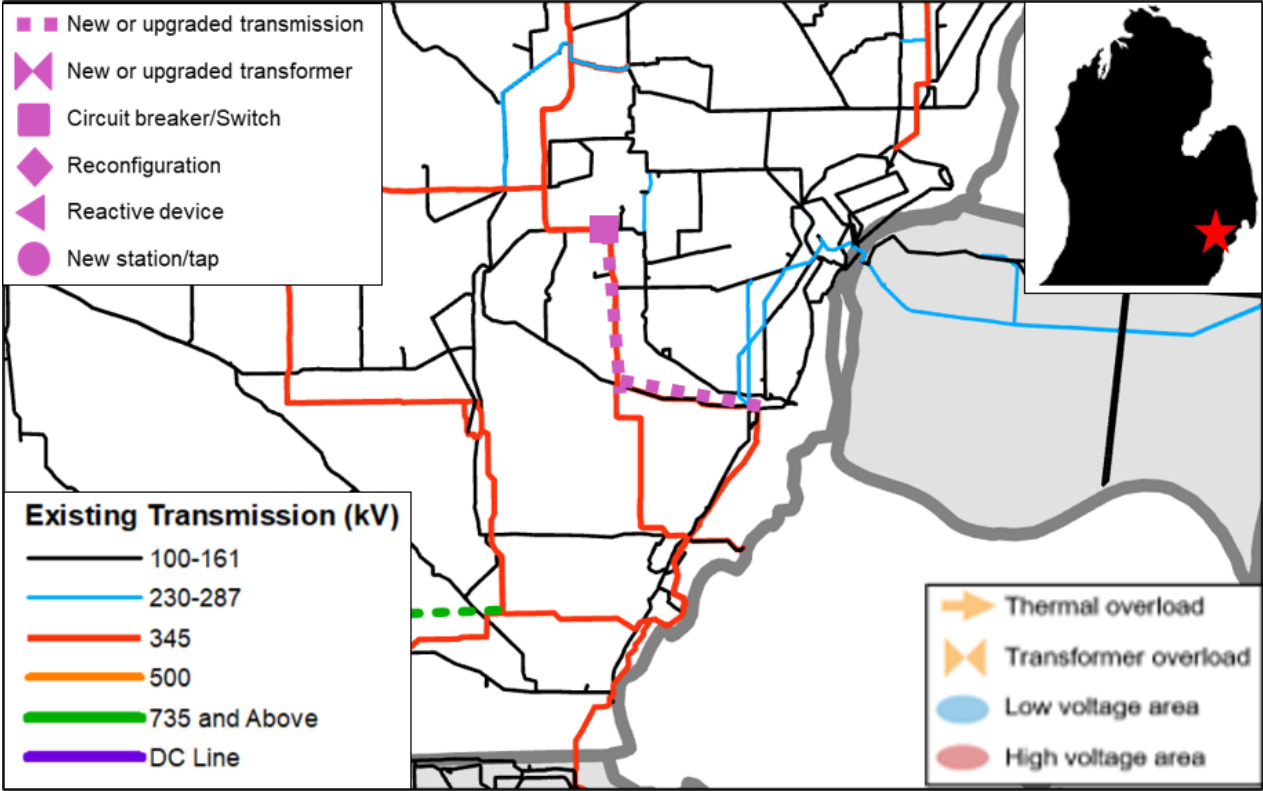
MTEP26 (Thermal/Voltage) Violations

Cont. Type	Model	Limiting Element	Pre-project (post-cont.) Loading (%)	Post-project (post-cont.) Loading (%)
N-1-1	MISO26_2028_SUM__AA_EPequivalent	[ITCT] Brownstown–[ITCT] Monroe 345 kV line	101	72

Recommendation: Move to Appendix A

Baseline Reliability Project

Details for Upgrade Brownstown - Wayne #2 345 kV Station Equipment & Sag Remediation



MTEP Project ID	15873
Project Name	Upgrade Brownstown - Wayne #2 345 kV Station Equipment & Sag Remediation
Project Type	BRP
Project Description	Upgrade the station equipment at Brownstown 345 kV position "FT". Upgrade the station equipment at Wayne 345 kV positions "DF" and "DM". Raise the sag on Brownstown-Wayne 345kV line. Adjust CTs at both Wayne DF and DM breakers. All upgrades to a minimum summer emergency of 1585MVA (2653A).
Current Cost	\$9.7 M
Expected ISD	12/31/2030
Target Appendix	A

Baseline Reliability Project

Details for Upgrade Brownstown - Wayne #2 345 kV Station Equipment & Sag Remediation

- The highest loading of the [ITCT] Brownstown – [ITCT] Wayne line is 90% in the 2028 SUM AA model for a N-1-1 contingency.

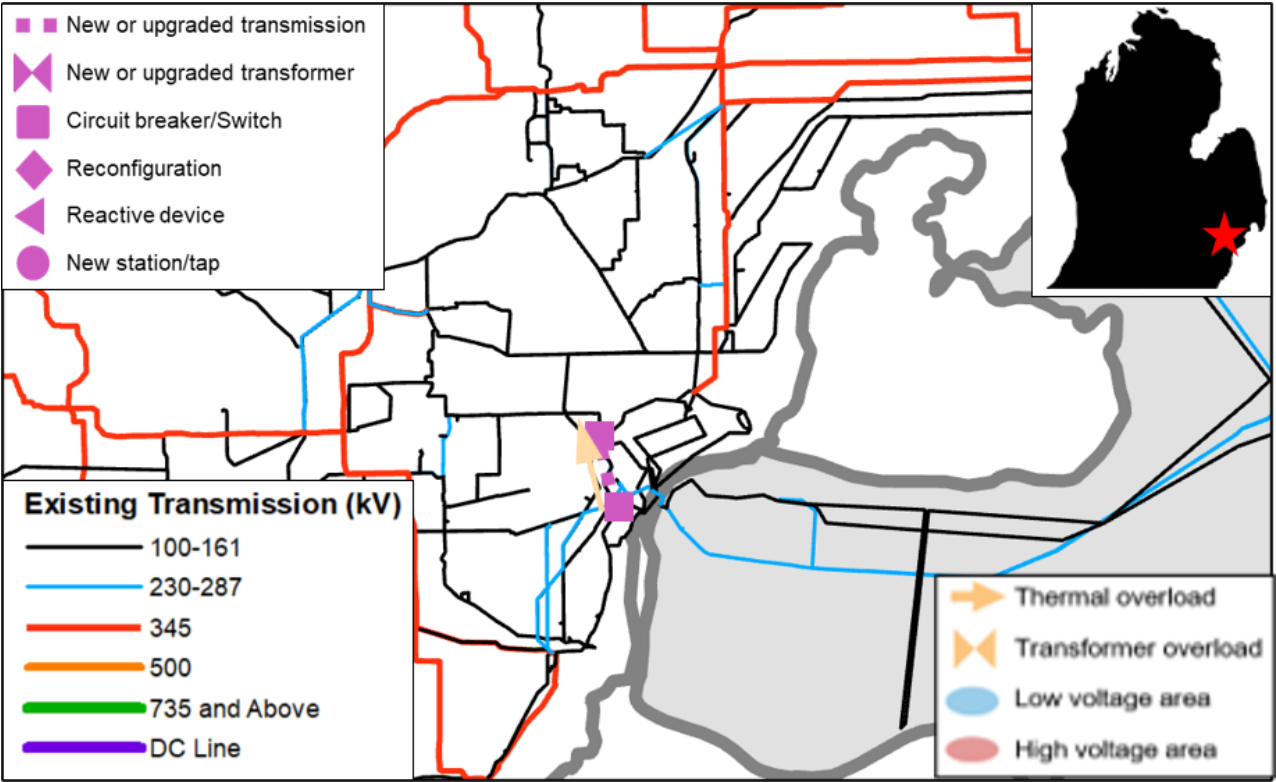
MTEP26 (Thermal/Voltage) Violations

Cont. Type	Model	Limiting Element	Pre-project (post-cont.) Loading (%)	Post-project (post-cont.) Loading (%)
N-1-1	MISO26_2028_SUM__AA_EPequivalent	[ITCT] Brownstown–[ITCT] Wayne 345 kV line	90	-

Recommendation: Move to Appendix B

Baseline Reliability Project

Details for Rebuild Baxter-Warren 230kV Line



MTEP Project ID	50839
Project Name	Rebuild Baxter-Warren 230kV Line
Project Type	BRP
Project Description	Rebuild ~4 miles of 1431 ACSR conductor of Warren-Baxter 230kV line. Upgrade Warren station switches “CD” and “CH”. Upgrade BUS 1590 SAC and 1431 ACSR line drop at Warren station. Upgrade Baxter switch “HI” and 1431 ACSR line drop. All upgrades to a minimum SE of 955MVA (2399A)
Current Cost	\$17.1 M
Expected ISD	06/01/2031
Target Appendix	A

Baseline Reliability Project

Details for Rebuild Baxter-Warren 230kV Line

- The [ITCT] Baxter – [ITCT] Warren line is loaded at 97% in the 2031 SUM and 2031 SHAW models for N-1-1 contingencies. A redispatch was found that serves as mitigation for this near overload.

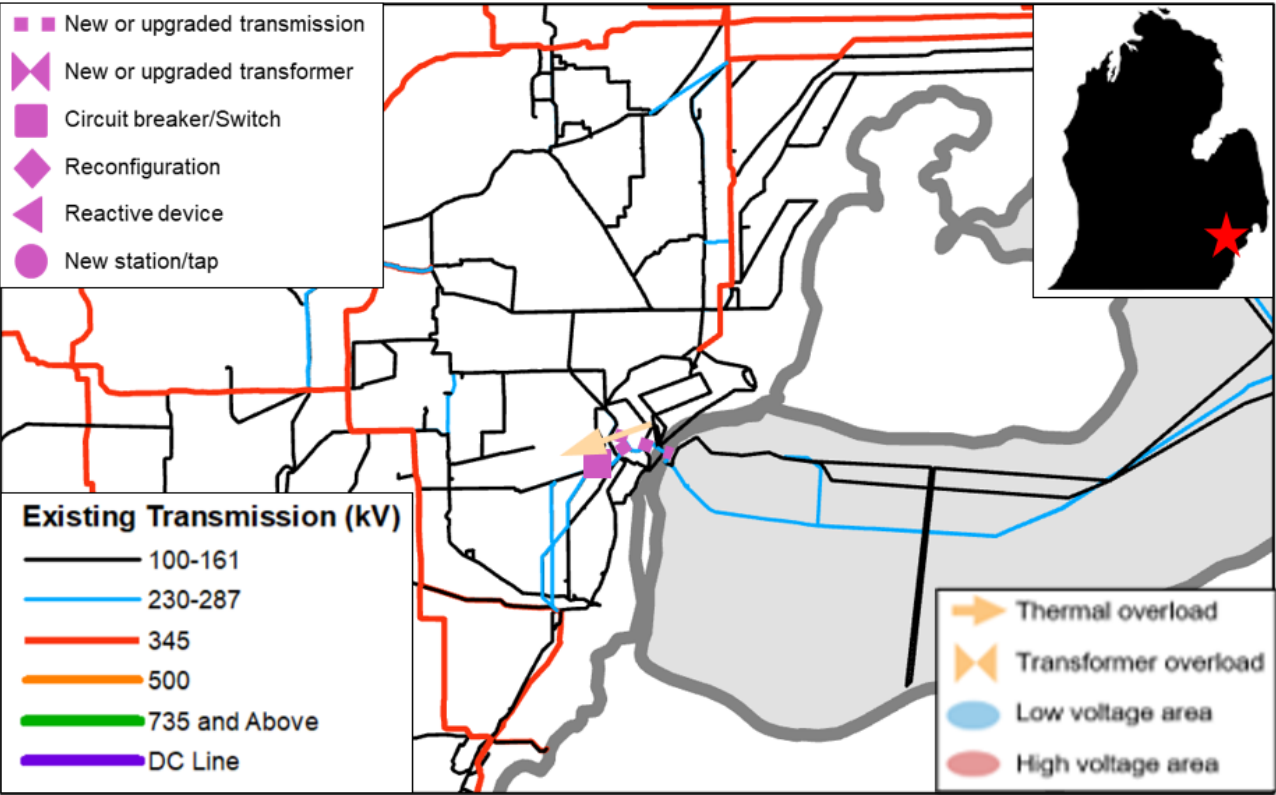
MTEP26 (Thermal/Voltage) Violations

Cont. Type	Model	Limiting Element	Pre-project (post-cont.) Loading (%)	Post-project (post-cont.) Loading (%)
N-1-1	2031_SP_I1400_L100_W18_G6	[ITCT] Baxter—[ITCT] Warren 230 kV line	97	-

Recommendation: Move to Appendix B

Baseline Reliability Project

Details for Rebuild Navarre-DBGEN Tap-Waterman 230kV Line



MTEP Project ID	50841
Project Name	Rebuild Navarre-DBGEN Tap-Waterman 230kV Line
Project Type	BRP
Project Description	Rebuild Navarre – DBGEN TAP – Waterman 230kV line. Rebuild with 230kV double circuit structure. Rebuild line drops at both Navarre and Waterman stations. All rebuild to a minimum SE of 1311 MVA.
Current Cost	\$31.0 M
Expected ISD	06/01/2031
Target Appendix	A

Baseline Reliability Project

Details for Rebuild Navarre-DBGEN Tap-Waterman 230kV Line

- The [ITCT] Navarre – [ITCT] DBGEN 230 kV line is overloaded in 2031 SUM and 2031 SHAW AA models for N-1-1 contingencies. A redispatch was found that serves as mitigation for these overloads.

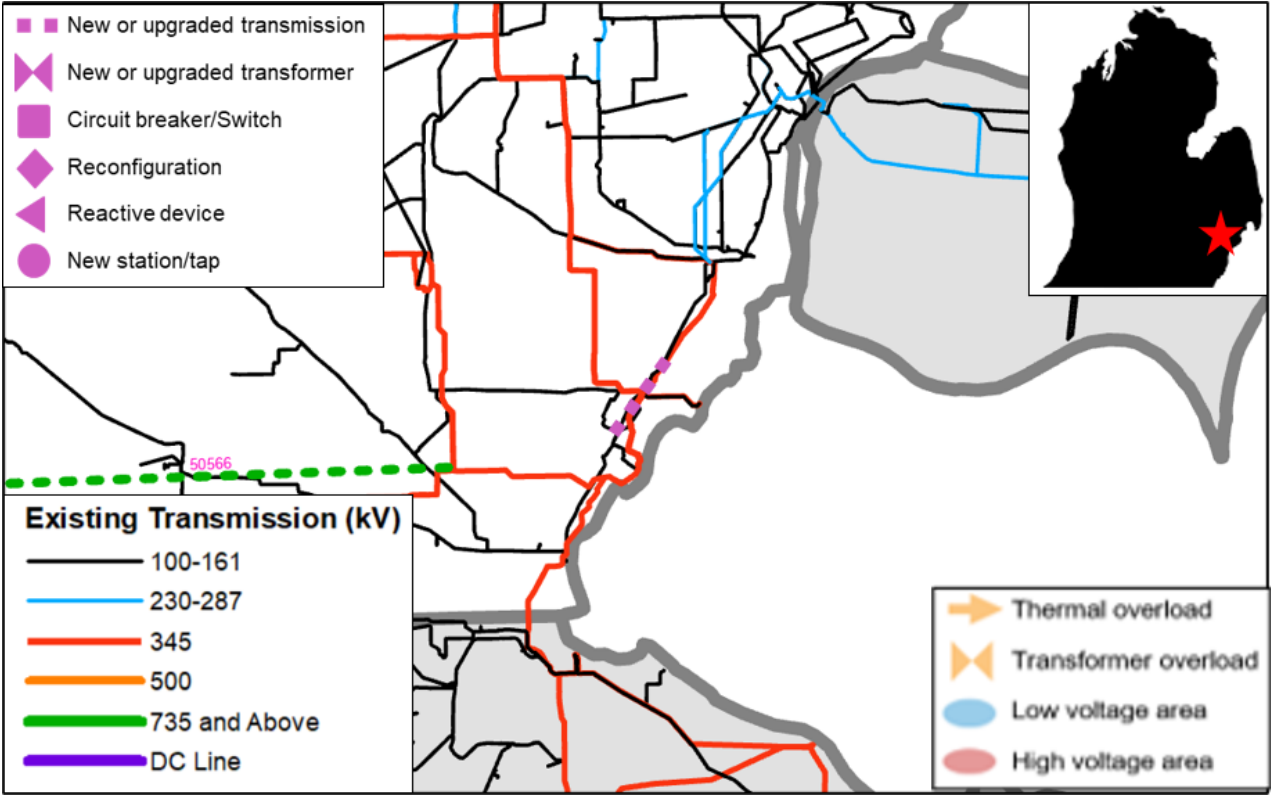
MTEP26 (Thermal/Voltage) Violations

Cont. Type	Model	Limiting Element	Pre-project (post-cont.) Loading (%)	Post-project (post-cont.) Loading (%)
N-1-1	2031_P70_I1600_L65_W27_P6	[ITCT] Navarre—[ITCT] DBGEN 230 kV line	113	-

Recommendation: Move to Appendix B

Baseline Reliability Project

Details for Rebuild Swan Creek - Toll Road 120kV Line



MTEP Project ID	50852
Project Name	Rebuild Swan Creek - Toll Road 120kV Line
Project Type	BRP
Project Description	Rebuild ~2.63 miles of 477 ACSR Swan Creek - Toll Road 120kV line from STR#1282A to STR#1263 with 954 ACSR conductor. Rebuild with 120kV double circuit structures.
Current Cost	\$6.1 M
Expected ISD	06/01/2031
Target Appendix	A

Baseline Reliability Project

Details for Rebuild Swan Creek - Toll Road 120kV Line

- The highest loading of the [ITCT] Swan Creek – [ITCT] Toll Road 120 kV line is 93% in the 2028 SUM AA model for N-1-1 contingencies.

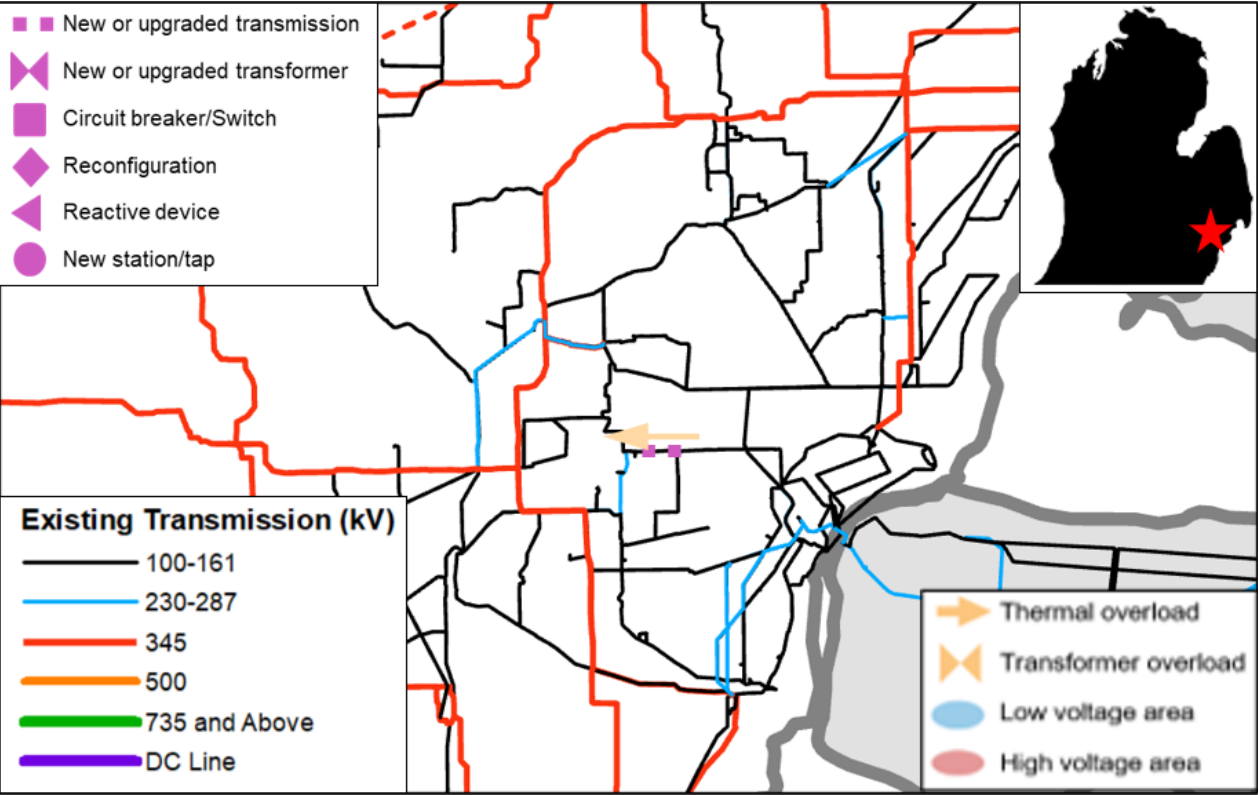
MTEP26 (Thermal/Voltage) Violations

Cont. Type	Model	Limiting Element	Pre-project (post-cont.) Loading (%)	Post-project (post-cont.) Loading (%)
N-1-1	MISO26_2028_SUM__AA_EPequivalent	[ITCT] Swan Creek—[ITCT] Toll Rd 120 kV line	93	-

Recommendation: Move to Appendix B

Baseline Reliability Project

Details for Eliminate Sag and Upgrade YOST-POLARIS-DIESEL 120kV Lines



MTEP Project ID	50867
Project Name	Eliminate Sag and Upgrade YOST-POLARIS-DIESEL 120kV Lines
Project Type	BRP
Project Description	Upgrade both 954 ACSR conductors from STR#5643 to Polaris station with 1431 ACSR conductor. Upgrade 954 ACSR conductor from STR#5652A to Yost station with 1431 ACSR conductor. Eliminate the sag limit on Yost-Polaris line 477 ACSRx2 conductor section. All upgrades to a minimum SE of 348MVA (1679A).
Current Cost	\$1.6 M
Expected ISD	12/31/2030
Target Appendix	A

Baseline Reliability Project

Details for Eliminate Sag and Upgrade YOST-POLARIS-DIESEL 120kV Lines

- The Yost to Polaris to Diesel lines overloaded in only the 2028 SUM of the AA model set. These facilities did not reach loading near or over the pre project ratings in the TA model set.

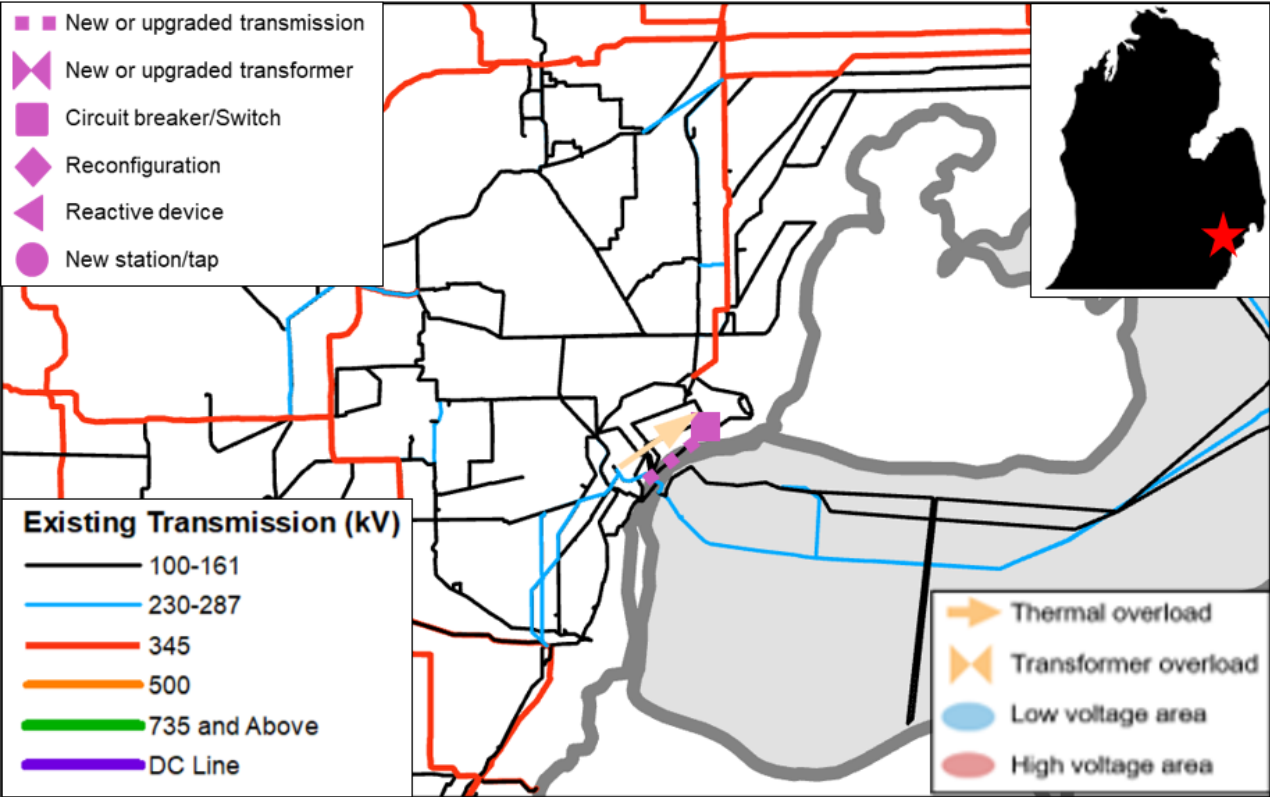
MTEP26 (Thermal/Voltage) Violations

Cont. Type	Model	Limiting Element	Pre-project (post-cont.) Loading (%)	Post-project (post-cont.) Loading (%)
N-1-1	MISO26_2028_SUM_AA_EPequivalent	[ITCT] Yost—[ITCT] Polaris 120 kV line	100	-
		[ITCT] Polaris—[ITCT] Diesel 120 kV line		

Recommendation: Move to Appendix B

Baseline Reliability Project

Details for Install New St.Antoine - Waterman 120kV Circuit



MTEP Project ID	50892
Project Name	Install New St.Antoine - Waterman 120kV Circuit
Project Type	BRP
Project Description	Construct ~5 miles of new St. Antoine - Waterman 120kV underground line utilizing 2500mm ² CU cable. Expand both St. Antoine and Waterman stations. Upgrade BUS 500 CU at Alfred line terminal "HA" and section breaker "HG".
Current Cost	\$117.5 M
Expected ISD	06/30/2031
Target Appendix	A

Baseline Reliability Project

Details for Install New St.Antoine - Waterman 120kV Circuit

- The [ITCT] Cato – [ITCT] Waterman line is overloaded in 2028 SUM, 2031 SUM, 2031 SHHW and 2031 SHAW AA models. [ITCT] Cato – [ITCT] Stonepool line is nearly overloaded for N-1-1 contingencies in the 2031 SHAW AA model. Post project loadings are within limits. A redispatch and phase shifter adjustment has been found that serves as near term mitigation and additional mitigation for long lead contingencies.

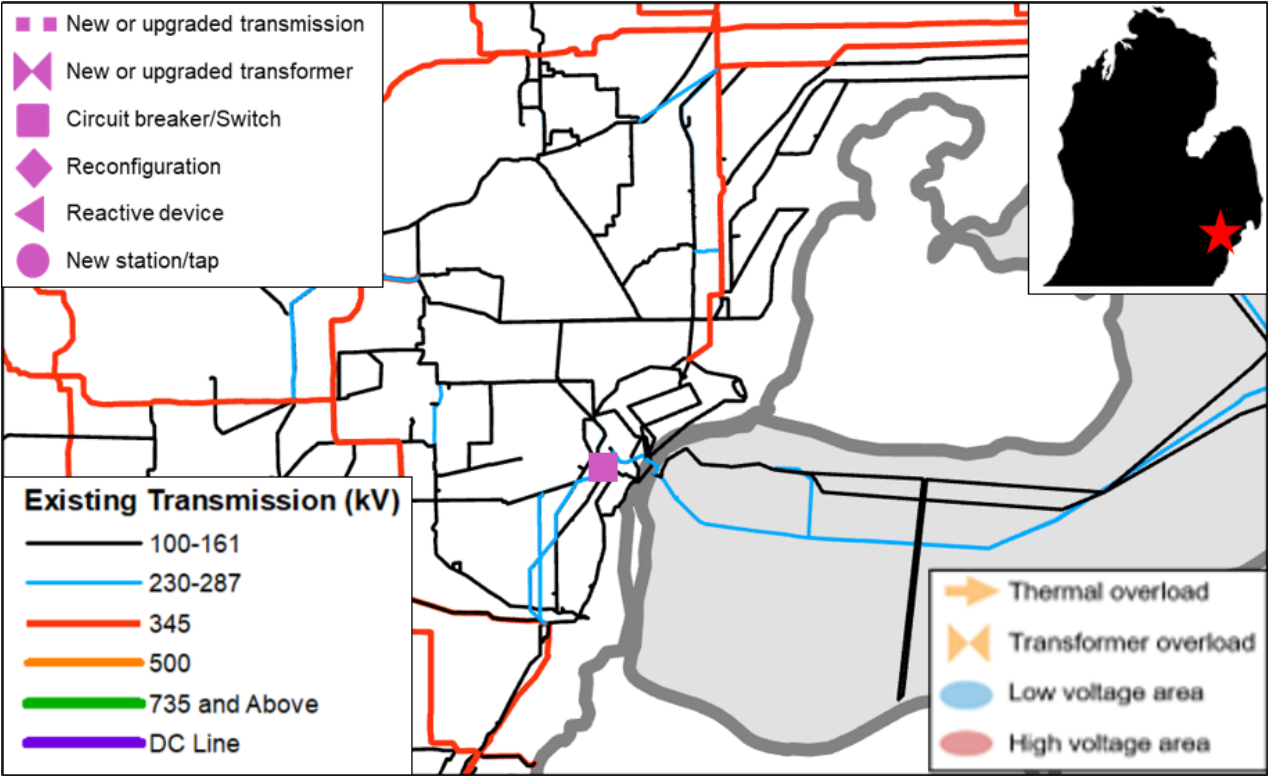
MTEP26 (Thermal/Voltage) Violations

Cont. Type	Model	Limiting Element	Pre-project (post-cont.) Loading (%)	Post-project (post-cont.) Loading (%)
N-1	MISO26_2031_SHAW_AA_EPequivalent	[ITCT] Cato—[ITCT] Waterman 120 kV line	119	46
N-1	MISO26_2031_SHAW_AA_Epequivalent	[ITCT] Cato—[ITCT] Stonepool 120 kV line	99	24
N-1	MISO26_2031_SHAW_AA_EPequivalent	[ITCT] Stant—[ITCT] Corktown 120 kV line	92	31

Recommendation: Move to Appendix A

Baseline Reliability Project

Details for Upgrade Navarre Station Equipment



MTEP Project ID	51019
Project Name	Upgrade Navarre Station Equipment
Project Type	BRP
Project Description	Upgrade Navarre breaker "AB" CT. Upgrade NAVAR "HL" Relay Thermal. All upgrades to a minimum SE of 673MVA.
Current Cost	\$0.3 M
Expected ISD	12/31/2030
Target Appendix	A

Baseline Reliability Project

Details for Upgrade Navarre Station Equipment

- The highest loading of the [ITCT] Navarre – [ITCT] Navarre 230/120 kV transformer is 92% for N-1-1 contingencies in the 2031 SHAW AA model.

MTEP26 (Thermal/Voltage) Violations

Cont. Type		Limiting Element	Pre-project (post-cont.) Loading (%)	Post-project (post-cont.) Loading (%)
N-1-1	MISO26_2031_SHAW_AA_EPequivalent	[ITCT] Navarre—[ITCT] Navarre 230/120 kV Transformer	92	-

Recommendation: Move to Appendix B

Baseline Reliability Projects (BRPs) Summary

MTEP Project ID	Project Name	Expected ISD	Current Cost	Recommendation
15871	Reconductor Brownstown-Monroe #1 345 kV	12/31/2031	\$16.1 M	Appendix A
15873	Upgrade Brownstown - Wayne #2 345 kV Station Equipment & Sag Remediation	12/31/2030	\$9.7 M	Appendix B
<u>18201</u>	<u>Upgrade Hunters Creek - Stratford 120 kV Line</u>	<u>02/01/2029</u>	<u>\$2.5 M</u>	<u>Appendix A</u>
<u>18208</u>	<u>Airport - WDHVN Tap 120 kV Sag Remediation</u>	<u>12/01/2027</u>	<u>\$0.7 M</u>	<u>Appendix A</u>
50839	Rebuild Baxter-Warren 230kV Line	06/01/2031	\$17.1 M	Appendix B
50841	Rebuild Navarre-DBGEN Tap-Waterman 230kV Line	06/01/2031	\$31.0 M	Appendix B
50852	Rebuild Swan Creek - Toll Road 120kV Line	06/01/2031	\$6.1 M	Appendix B
50867	Eliminate Sag and Upgrade YOST-POLARIS-DIESEL 120kV Lines	12/31/2030	\$1.6 M	Appendix B
50892	Install New St.Antoine - Waterman 120kV Circuit	06/30/2031	\$117.5 M	Appendix A
51019	Upgrade Navarre Station Equipment	12/31/2030	\$0.3 M	Appendix B
<u>51167</u>	<u>Upgrade Sag on Lark-Washtenaw Jct. 138 kV</u>	<u>12/01/2027</u>	<u>\$1.6 M</u>	<u>Appendix A</u>

Other Projects Summary

MTEP Project ID	Project Name	Other Type	Expected ISD	Current Cost
<u>50730</u>	<u>Cortland 120 kV Station Expansion</u>	<u>Local Needs</u>	<u>12/31/2030</u>	<u>\$42.7 M</u>
50842	Replace Waterman Transformer #201	Age and Condition	06/01/2030	\$9.8 M
50844	Replace Wayne Transformer #304 345-230kV	Age and Condition	06/01/2030	\$16.2 M
50848	Replace Brownstown Transformer #302 345-230kV	Age and Condition	06/01/2030	\$13.8 M
50849	Decommission Trenton Channel East Mat	Age and Condition	12/15/2029	\$11.9 M
50851	Rebuild Toll Road - Vital 120kV Line	Age and Condition	06/01/2032	\$19.0 M
50869	Rebuild Bloomfield - Sunbird 120 kV	Age and Condition	06/01/2031	\$22.1 M
50890	New 120 kV Substation - Conner Load Interconnection	Load Growth	01/01/2030	\$7.8 M
51028	ITCT Customer Interconnections - 2029	Load Growth	12/31/2029	\$2.5 M
51029	ITCT Line Relocation - 2028	Local Needs	12/31/2028	\$2.5 M
51030	ITCT Asset Replacement Program - 2028	Age and Condition	12/31/2028	\$58.2 M
<u>51134</u>	<u>Project Benton</u>	<u>Load Growth</u>	<u>11/30/2027</u>	<u>\$92.4 M</u>
<u>51220</u>	<u>Project Cannoli</u>	<u>Load Growth</u>	<u>12/05/2028</u>	<u>\$308.0 M</u>

Generator Interconnection Projects (GIPs) Summary

MTEP Project ID	Project Name	Expected ISD	Current Cost
50630	R1041 Generator Interconnection - TOIF	07/01/2026	\$2.0 M

Questions?



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