Project Name	2021 Est. In-Service Year	ZONE	Need Category	Planned / Proposed / Provisional	MISO MTEP Appendix (BOLD = Certified)	MTEP PRJID	Cost	Explanation
Mackinac - McGulpin 138kV (9901 and 9903), submarine cable replacement	2021	2	Condition and Performance	Planned	A in MTEP18	15145	\$ 105,000,000.00	
Forsyth SS, DIC, Add 1st Transformer	2021	2	T-D Interconnection	Planned	A in MTEP18	14905	\$ 84,000.00	In-Service
Mackinac HVDC, System Control and Monitoring (SCM) Asset Renewal	2022	2	Condition and Performance	Planned	A in MTEP20	18020	\$ 5,750,000.00	Updated Cost
NLKG31 Tap - Greenstone 138kV, construct new transmission line	2022	2	Condition and T-D Interconnection	Planned	A in MTEP19	15933	\$ 5,200,000.00	
Atlantic SS, 138/69kV Bus Reconfiguration and Transformer Addition	2022	2	Dperational Flexibility and Condition and Performanc	Planned	A in MTEP19	7586	\$ 11,600,000.00	
Presque Isle - Tilden 138kV, Loop and Uprate	2022	2	Reliability	Planned	A in MTEP19	15345	\$ 15,300,000.00	
Masonville SS, DIC, Substation Rebuild and Transformer Additions	2022	2	T-D Interconnection	Planned	A in MTEP19	14906	\$ 2,244,500.00	
J849, Chandler SS, Interconnection Facilities and Network Upgrades	2023	2	G-T Interconnection	Planned	A in MTEP19	16492	\$ 3,036,785.00	
Tilden SS, Control House Replacement and Breaker & Relay Asset Renewal  Central UP, new DIC	2023	2	Condition and Performance	Planned	A in MTEP20	16488	\$ 5,880,000.00	
Western U.P. Stability Enhancement	2023 2023	2	T-D Interconnection Reliability	Proposed	A in MTEP18 B in MTEP22	15133 21903	\$ 6,200,000.00 \$ 20,000,000.00	Target B in MTEP22
Winona - Atlantic 69kV (Winona69), rebuild	2023	2	Reliability	Provisional Planned	A in MTEP22	4727	\$ 13,900,000.00	Proposed to Planned
Ontonagon – Victoria Hy 69kV (Ontonagon69) Reinsulate	2024	2	Condition and Performance	Planned	A in MTEP20	21346	\$ 4,750,000.00	Target A in MTEP22
Marquette County Reactive Power Project	2024	2	Reliability	Proposed	A in MTEP21	19965	\$ 24,200,000.00	Expected MTEP21 Target A Approval
Eastern UP, new DIC	2024	2	T-D Interconnection	Proposed	A in MTEP18	15130	\$ 12,593,000.00	Expected Wite 21 Target A Approval
Munising Area Reactive Power Project	2024	2	Reliability	Provisional	A in MTEP22	19966	\$ 10,000,000.00	Updated ISY / Target A in MTEP22/ Updated Cost
Empire SS, Control House Replacement and Breaker & Relay Asset Renewal	2024	2	Condition and Performance	Provisional	A in MTEP21	16489	\$ 9,900,000.00	Updated Cost / Expected MTEP21 Target A Approval
National – Presque Isle (446) Re-Insulate & OPGW	2025	2	Condition and Performance	Planned	A in MTEP22	21345	\$ 8,300,000.00	Target A in MTEP22
North Lake SS – Transformer Asset Renewal	2025	2	Condition and Performance	Planned	A in MTEP22	21627	\$ 4,221,065,00	Target A in MTEP22
9 mile SW STA - Portage (6901/6902), 69kV, Re-insulate	2025	2	Condition and Performance	Provisional	B in MTEP22	18049	\$ 3,000,000,00	
9 Mile SW STA – Pine River 69kV (6921/23) Partial Rebuild	2025	2	Condition and Performance	Provisional	B in MTEP19	16496	\$ 5,900,000.00	Updated Project Name
Blaney Park - Mich Linestone Quarry Tap 69 kV (6914), Partial Rebuild	2025	2	Condition and Performance	Provisional	B in MTEP22	21919	\$ 4,000,000.00	Target B in MTEP22
North Lake - Greenstone 69kV (NLKY11), Rebuild	2026	2	Condition and Performance	Provisional	B in MTEP22	21920	\$ 14,200,000.00	Updated Cost
Chandler - Delta 69 kV (Delta1), Partial Rebuild	2026	2	Condition and Performance	Provisional	B in MTEP22	21985	\$ 6,500,000.00	Target B in MTEP22
Keel Ridge SS, new DIC	2027	2	T-D Interconnection	Proposed	A in MTEP18	13792	\$ 2,600,000.00	
Pine River - Mich Limestone Loading Dock 69 kV (ESE_6906), Rebuild	2027	2	Condition and Performance	Provisional	B in MTEP22	21918	\$ 31,100,000.00	Target B in MTEP22
Conover – Mass 69kV (6530) Partial rebuild	2028	2	Condition and Performance	Provisional	B in MTEP19	16495	\$ 8,600,000.00	Updated Project Name
Distribution Interconnection Current Cycle	2021	various	T-D Interconnection	Planned	A in MTEP18	14904	\$ 6,436,258.00	
Small Capital Project and Asset Renewal Current Cycle	2022	various	Condition and Performance	Planned	A in MTEP18	13821	\$ 38,457,451.00	
Communication Reliability Upgrades 2019	2022	various	Communication	Planned	A in MTEP18	13829	\$ 1,422,500.00	
Small Capital Project and Asset Renewal 2019	2022	various	Condition and Performance	Planned	A in MTEP18	13822	\$ 8,007,814.00	
Line Clearance Mitigation Project 2019	2022	various	Line Clearance	Planned	A in MTEP18	13825	\$ 5,832,204.00	
Physical Security 2019	2022	various	Physical Security	Planned	A in MTEP18	13828	\$ 3,000,000.00	
Distribution Interconnection 2019	2022	various	T-D Interconnection	Planned	A in MTEP18	14905	\$ 10,570,000.00	
Communication Reliability Upgrades 2020	2023	various	Communication	Planned	A in MTEP19	14910	\$ 11,344,615.00	
Small Capital Project and Asset Renewal 2020	2023	various	Condition and Performance	Planned	A in MTEP19	14908	\$ 35,906,079.00	
Line Clearance Mitigation Project 2020	2023	various	Line Clearance	Planned	A in MTEP19	14912	\$ 12,062,247.00	
Physical Security 2020	2023	various	Physical Security	Planned	A in MTEP19	14914	\$ 21,603,965.00	
Load Interconnection 2020	2023	various	T-D Interconnection	Planned	A in MTEP19	14906	\$ 26,774,954.00	
Physical Security Current Cycle	2024	various	Physical Security	Planned	A in MTEP18	13826	\$ 67,198,396.00	
Communication Reliability Program 2021	2024	various	Communication	Planned	A in MTEP20	14911	\$ 10,927,208.00	
Small Capital Project and Asset Renewal Program 2021	2024	various	Condition and Performance	Planned	A in MTEP20	14909	\$ 38,913,412.00	
Line Clearance Mitigation Program 2021	2024	various	Line Clearance	Planned	A in MTEP20	14913	\$ 3,791,502.00	
Physical Security Program 2021	2024	various	Physical Security	Planned	A in MTEP20	14915	\$ 17,908,909.00	
Load Interconnection Program 2021	2024	various	T-D Interconnection	Planned	A in MTEP20	14907	\$ 20,124,594.00	
Communication Reliability Program 2022	2025	various	Communication	Planned	A in MTEP21	14965	\$ 19,252,066.00	Proposed to Planned/ Expected MTEP21 Target A Approval/ Updated Cost
Small Capital Project and Asset Renewal Program 2022	2025	various	Condition and Performance	Planned	A in MTEP21	14964	\$ 52,320,773.00	Proposed to Planned/ Expected MTEP21 Target A Approval/ Updated Cost
Line Clearance Mitigation Program 2022	2025	various	Line Clearance	Planned	A in MTEP21	14966	\$ 2,832,841.00	Proposed to Planned/ Expected MTEP21 Target A Approval/ Updated Cost
Physical Security Program 2022	2025	various	Physical Security	Planned	A in MTEP21	14967	\$ 11,797,871.00	Proposed to Planned/ Expected MTEP21 Target A Approval/ Updated Cost
Load Interconnection Program 2022	2025	various	T-D Interconnection	Planned	A in MTEP21	14968	\$ 27,586,994.00	Proposed to Planned/ Expected MTEP21 Target A Approval/ Updated Cost
Communication Reliability Program 2023	2026	various	Communication	Provisional	A in MTEP22	16767	\$ 7,000,000.00	Target A in MTEP22
Small Capital Project and Asset Renewal Program 2023	2026	various	Condition and Performance	Provisional	A in MTEP22	16766	\$ 65,000,000.00	Target A in MTEP22
Line Clearance Mitigation Program 2023	2026	various	Line Clearance	Provisional	A in MTEP22	16768	\$ 6,000,000.00	Target A in MTEP22
Physical Security Program 2023	2026	various	Physical Security	Provisional	A in MTEP22	16769	\$ 1,800,000.00	Target A in MTEP22
Load Interconnection Program 2023	2026	various	T-D Interconnection	Provisional	A in MTEP22	16770	\$ 37,000,000.00	Target A in MTEP22

## LEGEND

No Shading = No change to project since previous Assessment Green Shading = Project In-Service (Interim Updates Only)

Orange Shading = new project, was not in previous Assessment project list
Gray Shading = Some Change has happened since the last posted list

COMMONLY USED DEFINITIONS
DIC - Distribution Interconnection
GIA - Generator Interconnection Agreement

GIC - Generator Interconnection MPFCA - Multi-Party Facility Agreement

MISO MTEP Appendix - Indicates MTEP Cycle, Cycles MTEP20 and prior are Certified in MISOs' Regional Plan for A projects (BOLDED), MTEP21 and future cycles are not yet certified at the time of publication (10/2021).