Project Name	2021 Est. In-Service Year	ZONE		Planned / Proposed / Provisional	MISO MTEP Appendix (BOLD = Certified)	MTEP PRJID	Cost	Explanation
Caroline SS, Transformer (T31) 69kV Breaker and Relay Asset Renewals Whitcomb SS, Transformer (T31) 69kV Breaker Asset Renewals	2021	1	Condition and Performance	Planned	A in MTEP18	14986	\$ 4,500,000.00	
Whitcomb SS, Transformer (131) 69KV Breaker Asset Renewals	2021	1	Condition and Performance	Planned	A in MTEP18	14987	\$ 5,500,000.00	
Birnamwood SS, DIC replace transformer and substation rebuild	2021	1	T-D Interconnection	Planned	A in MTEP18	15128	\$ 130,000.00	
Pine SS, DIC, Transformer Replacement	2021	1	T-D Interconnection	Planned	A in MTEP20	14907	\$165,000.00	
Brooks Corners SS, DIC, Transformer Addition Hilltop SS, Install 69kV Breakers	2021	1	T-D Interconnection	Planned	A in MTEP20	14907	\$ 478,000.00	In-Service
Waupaca Area Energy Storage Project	2022 2022	1	Condition and Performance Operational Flexibility	Planned Planned	A in MTEP17 A in MTEP19	12031 15947	\$ 1,200,000.00 \$ 8,071,000.00	
Waupaca SS, DIC, transformer addition	2022	1	T-D Interconnection	Planned	A in MTEP19	18053	\$ 5,200,000,00	
Winneconne SS, Relay and Breaker Replacement	2022	1	Condition and Performance	Planned	A in MTEP18	13243	\$ 2,900,000.00	
Maine - Hilltop 115kV line (U-11), uprate	2022	1	Reliability	Planned	A in MTEP20	14909	\$ 835,000.00	
J986 7 Mile Creek SS, Generator Interconnection Facilities and Network Upgrades Wittenburg SS, DIC Substation Retirement	2022	1	G-T Interconnection T-D Interconnection	Planned	A in MTEP21 A in MTEP20	20625 14907	\$ 17,564,028.00 \$ 89,000.00	Provisional to Planned / Expected MTEP21 Target A Approval / Updated Cost
Port Edwards SS, DIC, Transformer Retirement	2022	1	T-D Interconnection	Planned	A in MTEP21	14968	\$ 1,120,000.00	
Petenwell - Saratoga 138kV (X-43), Line Rebuild	2023	1	Reliability, Economic	Planned	A in MTEP20	18017	\$ 24,500,000.00	
Chaffee Creek - Lincoln Pump Station 69kV (Y-18), Rebuild	2023	1	Condition and Performance	Planned	A in MTEP18	10486	\$ 9,600,000.00	
Wautoma - Chaffee Creek 69kV (Y-49), Rebuild J732 Superior SS Generator Interconnection Facilities and Network Upgrades	2023 2023	1	Condition and Performance G-T Interconnection	Planned Planned	A in MTEP18 A in MTEP21	7764 19729	\$ 14,500,000.00 \$ 21,245,605.00	Expected MTEP21 Target A Approval
Weston - Sherman Street, 115kV line (Z-52), uprate	2023	1	Reliability	Planned	A in MTEP21	19729	\$ 21,245,605.00	
Chaffee Creek SS Grounding Improvements	2023	1	G-T Interconnection	Planned	A in MTEP22	21814	\$ 220,000.00	Target A in MTEP22
Hancock SS Grounding Improvements	2023	1	G-T Interconnection	Planned	A in MTEP22	21814	\$ 220,000.00	Target A in MTEP22
Hollywood SS Grounding Improvements	2023	1	G-T Interconnection	Planned	A in MTEP22	21814	\$ 696,730.00	Target A in MTEP22
J1002 Wautoma SS Network Upgrades and Interconnection Facilities Roeder SS Grounding Improvements	2023 2023	1	G-T Interconnection G-T Interconnection	Planned Planned	A in MTEP22 A in MTEP22	21812 22048	\$ 3,246,667.00 \$ 220,000.00	Target A in MTEP22 Target A in MTEP22
Sand Lake SS Grounding Improvements	2023	1	G-T Interconnection	Planned	A in MTEP22	21814	\$ 220,000.00	Target A in MTEP22
Saratoga SS Grounding Improvements	2023	1	G-T Interconnection	Planned	A in MTEP22	21814	\$ 672,154.00	Target A in MTEP22
Wautoma SS - Port Edwards SS, 138kV (X-11), uprate	2023	1	G-T Interconnection	Planned	A in MTEP22	21814	\$ 519,783.00	Target A in MTEP22
Wautoma SS Grounding Improvements	2023	1	G-T Interconnection	Planned	A in MTEP22	21814	\$ 220,000.00	Target A in MTEP22
Wautoma SS Transformer Replacement Rocky Run Transformer Replacement	2023	1	G-T Interconnection Reliability	Planned	A in MTEP22 A in MTEP22	21814 21286	\$ 4,738,573.00 \$ 5,408,000.00	Target A in MTEP22
Birnamwood SS, DIC new substation	2023 2024	1	T-D Interconnection	Planned Planned	A in MTEP18	15128	\$ 4,500,000.00	Target A in MTEP22
Petenwell - Council Creek (X-40), OPGW Installation	2024	1	Communication	Planned	A in MTEP21	19587	\$ 9,000,000.00	Expected MTEP21 Target A Approval
Lincoln Pump Station - McKenna 69kV (Y-145), Rebuild	2024	1	Condition and Performance	Planned	A in MTEP18	7765	\$ 9,000,000.00	
Kelly SS, Replace Transformer	2024	1	T-D Interconnection	Provisional	A in MTEP20	14907	\$ 150,000.00	
McKenna - Castle Rock 69kV (Y-47), Rebuild Saratoga SS - Control House and Breaker Asset Renewal	2025	1	Condition and Performance Condition and Performance	Planned	A in MTEP18 A in MTEP22	7763 19525	\$ 10,740,000.00 \$8,200,000.00	Under al Cont
Pittsville - Sigel 69 kV (Y-108), Rebuild	2025	1	Condition and Performance	Proposed Provisional	B in MTEP22	219525	\$ 10.000.000.00	Updated Cost Target B in MTEP22
Rosholt (ATC) Tap - Rosholt (ALTE) SW STR 69 kV (Y-71), Partial Rebuild	2026	1	Condition and Performance	Provisional	B in MTEP22	21921	\$ 8,100,000.00	Target B in MTEP22
Mudwater SS, DIC, New Substation	2030	1	T-D Interconnection	Planned	A in MTEP19	14906	\$391,500.00	Updated ISY
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 Mackinac HVDC, System Control and Monitoring (SCM) Asset Renewal	2021	2	T-D Interconnection	Planned	A in MTEP18	14905	\$ 84,000.00	In-Service
NLKG31 Tap - Greenstone 138kV, construct new transmission line	2022 2022	2	Condition and Performance Condition and T-D Interconnection	Planned Planned	A in MTEP20 A in MTEP19	18020 15933	\$ 5,750,000.00 \$ 5,200,000.00	Updated Cost
Atlantic SS, 138/69kV Bus Reconfiguration and Transformer Addition	2022	2	Operational Flexibility and Condition and Performance		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 Tilden SS, Control House Replacement and Breaker & Relay Asset Renewal	2023 2023	2	G-T Interconnection Condition and Performance	Planned	A in MTEP19 A in MTEP20	16492 16488	\$ 3,036,785.00 \$ 5.880.000.00	
Central UP, new DIC	2023	2	T-D Interconnection	Proposed	A in MTEP20	15133	\$ 5,880,000.00	
Western U.P. Stability Enhancement	2023	2	Reliability	Provisional	B in MTEP22	21903	\$ 20,000,000.00	Target B in MTEP22
Winona - Atlantic 69kV (Winona69), rebuild	2024	2	Reliability	Planned	A in MTEP20	4727	\$ 13,900,000.00	Proposed to Planned
Ontonagon – Victoria Hy 69kV (Ontonagon69) Reinsulate Marquette County Reactive Power Project	2024	2	Condition and Performance	Planned	A in MTEP22	21346	\$ 4,750,000.00	Target A in MTEP22
Eastern UP, new DIC	2024 2024	2	Reliability T-D Interconnection	Proposed Proposed	A in MTEP21 A in MTEP18	19965 15130	\$ 24,200,000.00 \$ 12,593,000.00	Expected MTEP21 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 9 mile SW STA – Portage (6901/6902), 69kV, Re-insulate	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 9 Mile SW STA – Pine River 69kV (6921/23) Partial Rebuild	2025	2	Condition and Performance	Provisional Provisional	B in MTEP22 B in MTEP19	18049 16496	\$ 3,000,000.00 \$ 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 Pine River - Mich Limestone Loading Dock 69 kV (ESE_6906), Rebuild	2027 2027	2	T-D Interconnection Condition and Performance	Proposed	A in MTEP18	13792	\$ 2,600,000.00 \$ 31,100.000.00	Tarrat D in MTEDDD
Conover – Mass 69kV (6530) Partial rebuild	2027	2	Condition and Performance Condition and Performance	Provisional Provisional	B in MTEP22 B in MTEP19	21918 16495	\$ 31,100,000.00 \$ 8,600,000.00	Target B in MTEP22 Updated Project Name
Dane - Waunakee 69kV (Y-143), Rebuild	2028	3	Condition and Performance	Planned	A in MTEP17	12177	\$ 7,000,000.00	In-Service
Hillside SS, Relay and Breaker Replacements	2021	3	Condition and Performance	Planned	A in MTEP18	13802	\$ 2,000,000.00	
Eden - Highland (X-147) 138kV, uprate	2021	3	G-T Interconnection	Planned	A in MTEP20	19269	\$ 695,243.00	In-Service
Eden - Lands End 69kV, Loop into Highland SS Highland - Spring Green (X-17) 138kV, Uprate	2021	3	G-T Interconnection	Planned	A in MTEP20	17525	\$ 13,674,246.00	
ringiniano - opintig oreen (A+17) Tooky, opiate	2021	5	G-T Interconnection	Planned	A in MTEP20	17525	\$ 2,981,519.00	

Project Name	2021 Est. In-Service Year	ZONE	Need Category	Planned / Proposed / Provisional	MISO MTEP Appendix (BOLD = Certified)	MTEP PRJID	Cost	Explanation
J855 Ebenezer SS Generator Interconnection Facilities and Network Upgrades	2021	3	G-T Interconnection	Planned	A in MTEP20	18665	\$ 5,526,333.00	In-Service
Cross Country SS, DIC, Install New Breakers	2021	3	T-D Interconnection	Planned	A in MTEP19	14906	\$ 980,000.00	In-Service
Portage Industrial Park SS, DIC, replace transformers and substation rebuild	2021	3	T-D Interconnection	Planned	A in MTEP18	15127	\$ 1,660,000.00	
Waterloo SS, DIC, New 138kV Substation Concord - Cooney (9042) 138kV, Reconductor	2021	3	T-D Interconnection	Planned	A in MTEP19	14906	\$ 1,423,200.00 \$ 3,363.101.00	
J818 Jefferson SS Generator Interconnection Facilities and Network Upgrades	2021 2021	3	G-T Interconnection G-T Interconnection	Planned	A in MTEP20 A in MTEP20	18925 18925	\$ 3,363,101.00 \$ 1,669,458.00	
Bloomington (BLO)-LaPointe Sw Str (LPTT), 69kV, Y43 Rerate	2021	3	Line Clearance	Planned	A in MTEP19	14912	\$ 600,000.00	In-Service
Brodhead Muni 4 SS, DIC, New Substation	2021	3	T-D Interconnection	Planned	A in MTEP20	14907	\$ 400,000.00	
LaMar SS - Sheepskin SS, 69kV (Y-61), rerate	2021	3	Line Clearance	Planned	A in MTEP20	14913	\$ 510,000.00	
Elkhorn - North Lake Geneva (X-55) 138 kV, uprate	2022	3	G-T Interconnection	Planned	A in MTEP20	19146	\$ 372,880.00	
Hillman SS Grounding System Upgrades Spring Green SS Grounding System Upgrades	2022	3	G-T Interconnection	Planned	A in MTEP20	19248	\$ 181,784.00	MPFCA Renegotiated / ISY Updated
Muscoda SS, DIC add 2nd transformer and substation rebuild	2022 2022	3	G-T Interconnection T-D Interconnection	Planned Planned	A in MTEP22 A in MTEP18	22045 15124	\$ 220,000.00 \$ 5,000,000.00	MPFCA Renegotiated / ISY Updated / Target A for MTEP22
McCue SS, Circuit Breaker Asset Renewal	2022	3	Condition and Performance	Planned	A in MTEP18	14908	\$ 1,775,000.00	
Bass Creek - Town Line Road (X-95) 138kV, reconductor	2022	3	G-T Interconnection	Planned	A in MTEP20	19146	\$ 4,445,862.00	
Bristol - Elkhorn (X-81) 138 kV, uprate	2022	3	G-T Interconnection	Planned	A in MTEP20	19146	\$ 790,866.00	
J850 North Creek SS Generator Interconnection Facilities and Network Facilities	2022	3	G-T Interconnection	Planned	A in MTEP20	19146	\$ 6,324,293.00	
J864 Lone Rock SS Generator Interconnection Facilities and Network Upgrades	2022	3	G-T Interconnection	Planned	A in MTEP20	19225	\$ 1,767,400.00	
North Lake Geneva Tap - Burlington SS (6541) 138 kV, uprate Green County, new DIC	2022	3	G-T Interconnection	Planned	A in MTEP20	19146	\$ 1,232,351.00	
South Beaver Dam - North Beaver Dam (Y-59), 69kV, uprate	2022 2022	3	T-D Interconnection Reliability	Planned Planned	A in MTEP18 A in MTEP20	15129 14909	\$ 4,000,000.00 \$ 70,000.00	Lindated ISY
West Middleton - Stagecoach 69kV (6927), Partial Rebuild	2022	3	Reliability	Planned	A in MTEP20	12175	\$ 3,820,000.00	opuated isi
Nelson Dewey SS - Control House, Relay Asset Renewal	2022	3	Condition and Performance	Planned	A in MTEP21	19105	\$ 6,170,000.00	Expected MTEP21 Target A Approval
Pflaum SS, Asset Renewal	2022	3	Condition and Performance	Planned	A in MTEP18	13768	\$ 2,075,688.00	
J1188 Sheepkskin SS Network Upgrades and Interconnection Facilities	2022	3	G-T Interconnection	Planned	A in MTEP22	22046	\$ 1,129,461.00	Target A in MTEP22
Bluff LNG SS, new DIC	2022	3	T-D Interconnection	Planned	A in MTEP20	14907	\$ 1,348,859.00	
Blackhawk SS, New DIC Dodgeville SS Grounding System Upgrades	2022 2023	3	T-D Interconnection G-T Interconnection	Provisional Planned	A in MTEP21 A in MTEP20	14968 19226	\$ 150,000.00 \$ 220,000.00	MOTO Descentine d
Eden SS Grounding System Upgrades	2023	3	G-T Interconnection	Planned	A in MTEP20	19226	\$ 220,000.00	MPFCA Renegotiated MPFCA Renegotiated
Hill Valley SS Grounding System Upgrades	2023	3	G-T Interconnection	Planned	A in MTEP20	19246	\$ 611,927.00	MPFCA Renegotiated
Hillman SS, Upgrade Transformer	2023	3	G-T Interconnection	Planned	A in MTEP20		\$ 3,132,719.00	
J947 Tennyson SS Generator Interconnection Facilities and Network Upgrades	2023	3	G-T Interconnection	Planned	A in MTEP20	19145	\$ 5,756,434.00	
Rock Branch SS Grounding System Upgrades	2023	3	G-T Interconnection	Planned	A in MTEP20	19226	\$ 220,000.00	MPFCA Renegotiated
Rock River SS Switch Replacement	2023	3	G-T Interconnection	Planned	A in MTEP20	19145	\$ 95,737.00	
Colley Road SS, Transformer Replacement and Asset Renewal Gateway - Sycamore (6902), 69kV, rebuild	2023	3	Condition and Performance	Planned	A in MTEP20	17585	\$ 3,150,000.00	
Cardinal - Hickory Creek 345kV, Line Construction	2023 2023	3	Reliability Reliability, Economic and Policy	Planned Planned	A in MTEP21 A in MTEP11	14964 3127	\$ 2,900,000.00 \$ 492,200,000.00	Proposed to Planned / Expected MTEP21 Target A Approval
Barneveld SS. DIC. new substation	2023	3	T-D Interconnection	Planned	A in MTEP11	18052	\$ 14,102,000.00	
Bonnie Road, DIC, New Substation	2023	3	T-D Interconnection	Planned	A in MTEP21	19806	\$ 3,504,413.00	Provisional to Planned / Expected MTEP21 Target A Approval / Updated Cost
Tokay SS, DIC, Add Transformer	2023	3	T-D Interconnection	Planned	A in MTEP20	14907	\$ 500,000.00	Prposed to Planned
J1000 Comet SS Network Upgrades and Interconnection Facilities	2023	3	G-T Interconnection	Planned	A in MTEP22	21648	\$ 6,693,598.00	Target A in MTEP22
J1003 North Beaver Dam SS Network Upgrades and Interconnection Facilities	2023	3	G-T Interconnection	Planned	A in MTEP22	21813	\$ 1,031,386.00	Target A in MTEP22
J1154 Crawfish River Solar Network Upgrades Lancaster Transformer Replacement & Substation Rebuild	2023 2023	3	G-T Interconnection T-D Interconnection	Planned Planned	A in MTEP22 A in MTEP21	22047 20925	\$ 2,343,684.00 \$ 3,700,000.00	Target A in MTEP22
Madison Area Reactive Power Project	2023	3	Reliability	Provisional	B in MTEP22	20925	\$ 10,000,000.00	Expected MTEP21 Target A Approval Target B in MTEP22
Sun Prarie Park, DIC, Substation Rebuild	2023	3	T-D Interconnection	Planned	A in MTEP20	14907	\$ 1.400.000.00	Target B III WITEF22
Sharon SS, DIC, New Substation	2023	3	T-D Interconnection	Planned	A in MTEP21	14968	\$ 790,000.00	
Academy - Columbus 69kV (Y-21), Rebuild	2024	3	Condition and Performance	Planned	A in MTEP21	10590	\$ 8,800,000.00	Expected MTEP21 Target A Approval
Spring Green - Wick Drive (Y-170), 69kV, uprate	2024	3	Reliability	Planned	A in MTEP21	14964	\$ 1,500,000.00	Proposed to Planned / Expected MTEP21 Target A Approval
Rock County Reliability Project	2024	3	Reliability	Provisional	A in MTEP22	20805	\$ 49,721,000.00	Target A in MTEP22
Darlington - Rock Branch 69kV (Y-109), Rebuild Nelson Dewey - Bloomington (Y-184), 69kV, rebuild & OPGW	2025 2025	3	Condition and Performance Reliability, Condition and Performance	Planned Planned	A in MTEP22 A in MTEP22	18046 19962	\$ 16,700,000.00 \$ 16,300,000.00	Provisional to Planned / Target A in MTEP22 Provisional to Planned / Target A in MTEP22
Husikamp – Ruskin (6937), Partial Rebuild	2025	3	Condition and Performance	Planned	A in MTEP22	21347	\$ 7,900,000.00	Target A in MTEP22
Rockdale and Christiana SS - Control House and Relay Asset Renewal	2025	3	Condition and Performance	Provisional	A in MTEP22	21628	\$ 5,800,000.00	Target A in MTEP22
South Beaver Dam - Hubbard, (Y-134), 69kV Rebuild & OPGW	2026	3	Condition and Performance	Planned	A in MTEP22	18047	\$ 20,100,000.00	Provosional to Planned / Updated Project Name / Target A MTEP22/ Updated Cost
South Monroe – Brownstone (Y-155), Partial Rebuild	2026	3	Condition and Performance	Planned	A in MTEP22	21916	\$ 10,300,000.00	Target A in MTEP22
Kirkwood SS, Control House, Transformer and Breaker Asset Renewal	2026	3	Condition and Performance	Provisional	A in MTEP22	19963	\$ 7,571,000.00	Target A in MTEP22
Renewable Reinforcement Project	2027	3	Reliability	Provisional	B in MTEP22	21905	\$ 50,000,000.00	Target B in MTEP22
Hillman - Darlington 138kV (X-14/X-101), Rebuild Rock Branch - Dodgeville 69kV (Y-35), Partial Rebuild	2028	3	Condition and Performance	Proposed	A in MTEP18	4726	\$ 21,090,000.00 \$ 10,200,000,00	Undeted Cest
Portage - Columbia 138kV (X-13/X-20), rebuild existing double circuit	2028	3	Condition and Performance Reliability	Provisional Planned	A in MTEP19	4730	\$ 10,300,000.00 \$ 11,500,000.00	Updated Cost
South Fond du Lac - Spring Brook 69kV (Y-133), Partial rebuild	2030	3	Condition and Performance	Provisional	B in MTEP18	13739	\$ 17,000,000.00	
Walnut - Blount, new 69kV transmission line	2031	3	Reliability	Provisional	B in MTEP21	1730	\$ 24,000,000.00	
			G-T Interconnection	Planned	A in MTEP20	19267	\$ 537,753.00	MPFCA Renegotiated
Nelson Dewey SS Grounding System Upgrades	2022	3						
Gran Grae SS, Install a second 161/69kV transformer	2026	3	Reliability	Provisional			\$ 8,200,000.00	
Gran Grae SS, Install a second 161/69kV transformer Cloverleaf SS, Replace Dead End and Switches	2026 2021	3	Reliability Condition and Performance	Planned	A in MTEP18	13728	\$ 1,500,000.00	In-Service
Gran Grae SS, Install a second 161/08VV transformer Cloverleaf SS, Replace Dead End and Switches Menominee SS, DIC, Retire Transformer	2026 2021 2021	3 4 4	Reliability Condition and Performance T-D Interconnection	Planned Planned	A in MTEP20	14905	\$ 1,500,000.00 \$ 340,000.00	In-Service
Gran Grae SS, Install a second 161/69kV transformer Cloverleaf SS, Replace Dead End and Switches Menominee SS, DIC, Reitre Transformer Shoto SS, Transformer (T1) and Breaker Asset Renewal	2026 2021 2021 2021	3 4 4 4	Reliability Condition and Performance T-D Interconnection Condition and Performance	Planned Planned Planned	A in MTEP20 A in MTEP18	14905 14988	\$ 1,500,000.00 \$ 340,000.00 \$ 5,700,000.00	In-Service
Gran Grae SS, Install a second 161/08VV transformer Cloverleaf SS, Replace Dead End and Switches Menominee SS, DIC, Retire Transformer	2026 2021 2021	3 4 4	Reliability Condition and Performance T-D Interconnection	Planned Planned	A in MTEP20	14905	\$ 1,500,000.00 \$ 340,000.00	In-Service

	2021 Est. In-Service Year	ZONE	Need Category	Planned / Proposed / Provisional	MISO MTEP Appendix (BOLD = Certified)	MTEP PRJID	Cost	Explanation
Kewaunee SS, Retire Transformer	2022	4	Condition and Performance	Planned	A in MTEP20	14909	\$ 1,400,000.00	
Bayport - Pioneer 138kV, rebuild as a double-circuit	2022	4	Condition and Performance	Planned	A in MTEP18	14706	\$ 47,416,000.00	
Edgewater SS, Bus Reconfiguration	2022	4	Condition and Performance	Planned	A in MTEP18	13756	\$ 9,800,000.00	
Erdman SS, Transformer and Breaker Asset Renewal	2022	4	Condition and Performance	Planned	A in MTEP19	15931	\$ 1,751,729.00	
Finger Rd - Danz 69kV (L-64), Rebuild	2022	4	Condition and Performance	Planned	A in MTEP18	12141	\$ 6,000,000.00	
New Holstein - Custer 69kV (P-68), Rebuild	2022	4	Condition and Performance	Planned	A in MTEP18	7584	\$ 32,800,000.00	
Riverside SS, Bus Uprate	2022	4	Reliability	Planned	A in MTEP18	13832	\$ 110,000.00	
Bayridge SS, new T-D Interconnection	2022	4	T-D Interconnection	Planned	A in MTEP16	10485	\$ 2,122,335.00	
Preble SS, DIC, add 4th transformer and substation rebuild	2022	4	T-D Interconnection	Planned	A in MTEP20	17628	\$ 3,498,694.00	
Howards Grove - Erdman 138kV, new line	2022	4	Reliability	Proposed	A in MTEP20	18568	\$ 25,606,000.00	
Butte Des Morts - Sunset Point 138kV, Rebuild Pioneer - Crivitz 138kV (E-83/B-2), retire 69kV and reconfigure load to 138kV	2023 2023	4	Condition and Performance Condition and Performance	Planned Planned	A in MTEP17 A in MTEP18	12185 14926	\$ 22,900,000.00 \$ 20,400,000.00	Updated Cost Updated ISY
Pulliam SS, Transformer Retirement and Bus Reconfiguration	2023	4	Condition and Performance	Planned	A in MTEP20	15930	\$ 4,000,000.00	
Stiles SS - West Marinette SS (M117/L142), OPGW Installation	2023	4	Communication	Planned	A in MTEP19	15936	\$ 5,600,000.00	
Danz Ave SW STA - University (WPS) 69kV (O-15), underground rebuild & OPGW	2023	4	Condition and Performance	Planned	A in MTEP19	15924	\$ 14,800,000.00	
Edgewater - Lodestar 138kV (X-48/Y-31), Underground cable rebuild	2023	4	Condition and Performance	Planned	A in MTEP19	15925	\$ 3,800,000.00	
Finger Road SW STA - Wesmark 69kV (FIRY11), Rebuild	2023	4	Condition and Performance	Planned	A in MTEP18	12134	\$ 14,400,000.00	
Glenview SS, Transformer Retirement and Breaker & Relay Asset Renewal	2023	4	Condition and Performance	Planned	A in MTEP20	18019	\$ 2,200,000.00	
East Krok - Beardsley, (EAKY11), 69kV, uprate Lost Dauphin - Red Maple 138kV (Q-147), uprate	2023	4	Reliability Reliability	Planned	A in MTEP21	14964	\$ 2,300,000.00	Proposed to Planned / Expected MTEP21 Target A Approval
12th Avenue SS. DIC. Transformer Replacement	2023 2023	4	T-D Interconnection	Planned	A in MTEP21 A in MTEP20	14964 14907	\$ 635,000.00 \$ 1,778,000.00	Expected MTEP21 Target A Approval
Sheboygan County SS, DIC, substation rebuild	2023	4	T-D Interconnection	Planned	A in MTEP20	14907	\$ 6,200,000.00	
J1101 Kewaunee SS Network Upgrades and Interconnection Facilities	2023	4	G-T Interconnection	Planned	A in MTEP22	22049	\$ 155,000.00	Target A in MTEP22
Highway V - Preble 138 kV (X-154), reconductor	2023	4	Reliability	Planned	A in MTEP21	20785	\$ 1,777,603.00	Proposed to Planned / Expected MTEP21 Target A Approval
Sunset Point - Bowen Street (E-5), 69kV, Uprate	2023	4	Reliability	Planned	A in MTEP21	14964	\$ 699,055.00	Proposed to Planned / Expected MTEP21 Target A Approval
Wells St. DIC - new West Marinette-Wells St. 69 kV line	2023	4	T-D Interconnection	Proposed	A in MTEP21	19961	\$ 25,100,000.00	Expected MTEP21 Target A Approval / Updated Cost
Northview SS DIC New Substation	2023	4	T-D Interconnection	Planned	A in MTEP22	16770	\$ 974,000.00	
Anderson Creek SS, DIC New SS	2023	4	T-D Interconnection	Planned	A in MTEP21	14968	\$ 2,967,000.00	
Wesmark SS, Relay and Breakers	2024	4	Condition and Performance	Planned	A in MTEP18	13747	\$ 811,572.00	
Henry St. SS, DIC, Retire Substation	2024	4	T-D Interconnection	Planned	A in MTEP20	14907	\$ 96,000.00	
Crivitz SS - Transformer Replacement and Asset Renewal	2024	4	Condition and Performance	Planned	A in MTEP21	19705	\$ 4,599,154.00	Expected MTEP21 Target A Approval
North Appleton SS - Transformer Replacement and Asset Renewal	2024	4	Condition and Performance	Planned	A in MTEP21	19706	\$ 7,938,249.00	Expected MTEP21 Target A Approval
Wesmark - Rapids 69kV (R-44), Rebuild Eaton SS, new T-D Interconnection	2024	4	Condition and Performance T-D Interconnection	Planned	A in MTEP18 A in MTEP16	12135 10484	\$ 21,500,000.00 \$ 2,500,000.00	
Tower Dr – Pulliam (P-16/R-70), Partial Rebuild	2024	4	Condition and Performance	Planned	A in MTEP18	21348	\$ 2,500,000.00	Target A in MTEP22
Edgewater SS, DIC, replace transformer and substation rebuild	2024	4	T-D Interconnection	Planned	A in MTEP18	15126	\$ 5,100,000.00	Target A III WITEF22
Oak St - Hwy V 69kV (Z-26), Rebuild	2025	4	Condition and Performance	Planned	A in MTEP18	12137	\$ 9,000,000.00	
Plymouth #5 - New DIC	2025	4	T-D Interconnection	Provisional	A in MTEP22	21925	\$ 21,500,000.00	Target A in MTEP22
Fitzgerald SS – Transformer and Breaker Asset Renewal	2025	4	Condition and Performance	Provisional	A in MTEP22	21915	\$ 7,897,437.00	Target A in MTEP22
West Marinette SS – Transformer and Breaker Asset Renewal	2025	4	Condition and Performance	Provisional	B in MTEP22	21917	\$ 6,620,408.00	Target B in MTEP22
New Holstein Area Reliability Project	2025	4	Reliability	Provisional	B in MTEP22	21900	\$ 10,000,000.00	Target B in MTEP22
Bain SS, Control House and Breaker Asset Renewal	2021	5	Condition and Performance	Planned	A in MTEP19	15932	\$ 6,400,000.00	×
Burlington SS, Install 138kV Breakers Port Washington - Saukville 138kV (762), Rebuild to a double circuit	2021 2021	5	Condition and Performance Reliability	Planned Planned	A in MTEP17 A in MTEP16	12058 9986	\$ 3,372,743.00 \$ 21,000,000.00	
Tamarack SS, DIC, Replace Transformer	2021	5	T-D Interconnection	Planned	A in MTEP19	14906	\$ 2,000,000.00	In-Service
Barton - Auburn 138kV (9752), Partial Rebuild	2022	5	Condition and Performance	Planned	A in MTEP18	13743	\$ 7,050,000.00	
Range Line SW STA, Control House Replacement and Asset Renewal	2022	5	Condition and Performance	Planned	A in MTEP19	15928	\$ 9,400,000.00	
St. Lawrence - Barton 138kV (8032), Partial Rebuild	2022	5	Condition and Performance	Planned	A in MTEP18	13735	\$ 8,400,000.00	
Berryville SS Grounding System Upgrades	2022	5	G-T Interconnection	Planned	A in MTEP20	18985	\$ 328,807.00	
J850/J878 East Paris SS, new 345/138kV transformer J878 Paris SS Generator Interconnection Facilities and Network Upgrades	2022 2022	5	G-T Interconnection G-T Interconnection	Planned Planned	A in MTEP20 A in MTEP20	18985 19265	\$ 24,972,611.00 \$ 1,973,438.00	
Paris SS Grounding System Upgrades	2022	5	G-T Interconnection	Planned	A in MTEP20	19265	\$ 380,402.00	
Germantown SS DIC, Install additional transformer	2022	5	T-D Interconnection	Planned	A in MTEP20	14907	\$ 1,018,596.00	Updated Cost
Summit - Cooney 138kV (6431), Rebuild	2023	5	Condition and Performance	Planned	A in MTEP19	15457	\$ 6,550,000.00	Updated Cost
Sussex to Bark River (46143/2661), 138kV, OPGW Installation	2023	5	Communication	Planned	A in MTEP21	19959	\$ 3,766,000.00	Expected MTEP21 Target A Approval
Kenosha SS, Breaker, Relay, RTU and Disconnect Asset Renewal	2023	5	Condition and Performance	Planned	A in MTEP19	14909	\$ 1,878,000.00	
Arcadian SS, Power Transformer and Control House Replacement and Asset Renewal	2023	5	Condition and Performance / Reliability	Planned	A in MTEP20	16486	\$ 40,000,000.00	
Lincoln - 43rd Street Terminal 138 kV (5053), Replace with double circuit duct bank and XLPE cable	2024	5	Condition and Performance	Planned	A in MTEP21	18048	\$ 35,800,000.00	Provisional to Planned / Expected MTEP21 Target A Approval
	2024	5	Condition and Performance / Reliability	Proposed	A in MTEP21	16490	\$ 28,950,000.00	Expected MTEP21 Target A Approval
Granville SS, Control House and Relay Replacement and Asset Renewal Everatt GIS Asset Renewal	2025	5	Condition and Porformance	Browisional	D in MTED22			
Everett GIS Asset Renewal	2025	5	Condition and Performance	Provisional	B in MTEP22	21923	\$ 16,968,398.00 \$ 37,000,000,00	Target B in MTEP22
Everett GIS Asset Renewal Norwich - Harbor 138kV, (893K11), underground line replacement	2025	5 5 5	Condition and Performance	Provisional	A in MTEP22	21926	\$ 37,000,000.00	Target A in MTEP22
Everett GIS Asset Renewal	2025 2025	5	Condition and Performance Condition and Performance	Provisional Provisional	A in MTEP22 A in MTEP22	21926 21629	\$ 37,000,000.00 \$ 20,900,000.00	Target A in MTEP22 Target A in MTEP22
Everett GIS Asset Renewal Norwich - Harbor 138kV, (893K11), underground line replacement Oak Creek, Racine SS and Remote Ends, Control Buildings and Relaying Asset Renewal	2025		Condition and Performance	Provisional	A in MTEP22	21926	\$ 37,000,000.00	Target A in MTEP22

Project Name	2021 Est. In-Service Year	ZONE	Need Category	Planned / Proposed / Provisional	MISO MTEP Appendix (BOLD = Certified)	MTEP PRJID	Cost	Explanation
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

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 I
Gray Shading = Some Change has happened since the last posted list

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

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