Project Name	2020 Est. In- Service Year	2021 Est. In-Service Year	ZONE	Need Category	Planned / Proposed / Provisional	MISO MTEP Appendix (BOLD = Certified)	MTEP PRJID	Cost	Explanation
Hilltop SS, Install 69kV Breakers	2020	2021	1	Condition and Performance	Planned	A in MTEP17	12031	\$ 1,200,000.00	Updated Cost Estimate
Big Pond SS, Retire Substation	2020	2021	1	Retirement	Planned	A in MTEP18	13831	\$ 454,000.00	In-Service
Caroline SS, Transformer (T31) 69kV Breaker and Relay Asset Renewals	2021		1	Condition and Performance	Planned	A in MTEP18	14986	\$ 4,488,625.00	
Harrison SS, Install 69kV Breakers	2021		1	Condition and Performance	Planned	A in MTEP17	12051	\$ 2,700,000.00	In-Service
Saratoga - Coyne 115kV (T-72), Rebuild Whitcomb SS, Transformer (T31) 69kV Breaker Asset Renewals	2021		1	Condition and Performance	Planned	A in MTEP17	12178	\$ 6,600,000.00	In-Service
Waupaca Area Energy Storage Project	2021		1	Condition and Performance	Planned Planned	A in MTEP18 A in MTEP19	14987 15947	\$ 5,469,503.00 \$ 8,071,000,00	
Baker St SS, Add new 115-kV bus and bus tie breaker	2021		1	Operational Flexibility T-D Interconnection	Planned	A in MTEP17	12115	\$ 8,071,000.00 \$ 5,800,000.00	In-Service
Birnamwood SS, DIC replace transformer and substation rebuild	2021		1	T-D Interconnection	Planned	A in MTEP17	15128	\$ 130,000.00	III-3el vice
Pine SS, DIC, Transformer Replacement	2021		1	T-D Interconnection	Planned	A in MTEP20	14907	\$165,000.00	
Petenwell - Saratoga 138kV (X-43), Line Rebuild	2022	2023	1	Reliability, Economic	Planned	A in MTEP20	18017	\$ 24,500,000.00	
Mudwater SS, DIC, New Substation	2022	2025	1	T-D Interconnection	Planned	A in MTEP19	14906	\$391,500.00	
Waupaca SS, DIC, transformer addition	2022	LULU	1	T-D Interconnection	Planned	A in MTEP20	18053	\$ 6,900,000.00	
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	2023		1	Condition and Performance	Planned	A in MTEP18	7764	\$ 14,500,000.00	
Winneconne SS, Relay and Breaker Replacement	2023	2022	1	Condition and Performance	Planned	A in MTEP18	13243	\$ 2,900,000.00	Updated Cost Estimate
J732 Superior SS Generator Interconnection Facilities and Network Upgrades	2023		1	G-T Interconnection	Planned	A in MTEP21	19729	\$ 21,245,605.00	.,
Birnamwood SS, DIC new substation	2023		1	T-D Interconnection	Planned	A in MTEP18	15128	\$ 4,500,000.00	
Petenwell - Council Creek (X-40), OPGW Installation	2024		1	Communication	Planned	A in MTEP21	19587	\$ 9,000,000.00	
Lincoln Pump Station - McKenna 69kV (Y-145), Rebuild	2025		1	Condition and Performance	Planned	A in MTEP18	7765	\$ 9,000,000.00	
McKenna - Castle Rock 69kV (Y-47), Rebuild	2025		1	Condition and Performance	Planned	A in MTEP18	7763	\$ 10,740,000.00	
Brooks Corners SS, DIC, Transformer Addition		2021	1	T-D Interconnection	Planned	A in MTEP20	14907	\$ 300,000.00	
Maine - Hilltop 115kV line (U-11), uprate	2023		1	Reliability	Proposed	A in MTEP20	14909	\$ 835,000.00	
Weston - Sherman Street, 115kV line (Z-52), uprate	2023		1	Reliability	Proposed	A in MTEP20	14909	\$ 997,000.00	
Saratoga SS - Control House and Breaker Asset Renewal	2024	2025	1	Condition and Performance	Proposed	B in MTEP21	19525	\$6,319,095.00	
J986 7 Mile Creek SS, Generator Interconnection Facilities and Network Upgrades		2022	1	G-T Interconnection	Provisional	A in MTEP21	20625	\$ 2,257,123.00	
North Lake - M-38 138kV (NLKG31), Rerate	2020	2021	2	Line Clearance	Planned	A in MTEP18	13825	\$ 1,500,000.00	
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	\$ 45,000.00	
Garden Corners SS, DIC, add 1st Transformer	2021		2	T-D Interconnection	Planned	A in MTEP18	14904	\$ 1,900,000.00	
Mackinac HVDC, System Control and Monitoring (SCM) Asset Renewal	2022		2	Condition and Performance	Planned	A in MTEP20	18020	\$ 4,000,000.00	
NLKG31 Tap - Greenstone 138kV, construct new transmission line	2022		2	Condition and T-D Interconnection	Planned	A in MTEP19	15933	\$ 5,200,000.00	
J849, Chandler SS, Interconnection Facilities and Network Upgrades	2022	2023	2	G-T Interconnection	Planned	A in MTEP19	16492	\$ 3,036,785.00	
Atlantic SS, 138/69kV Bus Reconfiguration and Transformer Addition	2022		2	Operational Flexibility and Condition and Performance	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	\$ 1,500,000.00	
Tilden SS, Control House Replacement and Breaker & Relay Asset Renewal	2023		2	Condition and Performance	Planned	A in MTEP20	16488	\$ 5,880,000.00	
Central UP, new DIC Eastern UP, new DIC	2023	2024	2	T-D Interconnection	Proposed	A in MTEP18	15133	\$ 6,200,000.00	
Winona - Atlantic 69kV (Winona69), rebuild	2023	2024	2	T-D Interconnection Reliability	Proposed Proposed	A in MTEP18 A in MTEP20	15130 4727	\$ 12,593,000.00 \$ 13,900,000.00	
Keel Ridge SS, new DIC	2024	2027	2	T-D Interconnection	Proposed	A in MTEP18	13792	\$ 2,600,000.00	Updated In-Service Year
Marquette County Reactive Power Project	2023	2027	2	Reliability	Provisional	B in MTEP21	19965	\$ 24,200,000.00	Updated Cost Estimate
Munising Area Reactive Power Project	2023		2	Reliability	Provisional	B in MTEP21	19966	\$ 5,000,000.00	Opuated Cost Estimate
Empire SS, Control House Replacement and Breaker & Relay Asset Renewal	2023		2	Condition and Performance	Provisional	A in MTEP21	16489	\$ 6,732,000.00	
Forsyth - Gwinn 69kV, new line	2024		2	Operational Flexibility	Provisional	B in MTEP21	18018	\$ 4,000,000.00	
9 Mile SW STA - Pine River 69kV (6921/23), Replace select poles , x-arms, re-insulate	2024		2	Condition and Performance	Provisional	B in MTEP20	16496	\$ 4,000,000.00	
North Lake - Greenstone 69kV (NLKY11), Rebuild	2026		2	Condition and Performance	Provisional	D 111 1411 E1 13	10430	\$ 14,000,000.00	
Arnold SS, 80 MVAR Inductor Bank	2027		2	Reliability	Provisional	B in MTEP18	14187	\$ 5,000,000.00	
Mass - Conover 69kV (6530), Replace select poles, reinsulate	2028		2	Condition and Performance	Provisional	B in MTEP19	16495	\$ 8,600,000.00	
Columbia SS, Breaker Replacement Asset Renewal	2021		3	Condition and Performance	Planned	A in MTEP18	13821	\$ 1,778,000.00	
Dane - Waunakee 69kV (Y-143), Rebuild	2021		3	Condition and Performance	Planned	A in MTEP17	12177	\$ 7,000,000.00	
Hillside SS, Relay and Breaker Replacements	2021		3	Condition and Performance	Planned	A in MTEP18	13802	\$ 2,000,000.00	Updated Cost Estimate
Sheepskin - Stoughton 69kV (Y-12), Rebuild	2021		3	Condition and Performance	Planned	A in MTEP17	7600	\$ 9,800,000.00	In-Service
Darlington SS Grounding System Upgrades	2021		3	G-T Interconnection	Planned	A in MTEP20	19268	\$ 202,295.00	MPFCA Terminated
Dodgeville SS Grounding System Upgrades	2021		3	G-T Interconnection	Planned	A in MTEP20	19226	\$ 220,000.00	
Eden - Highland (X-147) 138kV, uprate	2021		3	G-T Interconnection	Planned	A in MTEP20	19269	\$ 695,243.00	
Eden - Lands End 69kV, Loop into Highland SS	2021		3	G-T Interconnection	Planned	A in MTEP20	17525	\$ 13,674,246.00	
Eden SS Grounding System Upgrades	2021		3	G-T Interconnection	Planned	A in MTEP20	19246	\$ 794,591.00	
Elkhorn - North Lake Geneva (X-55) 138 kV, uprate	2021		3	G-T Interconnection	Planned	A in MTEP20	19146	\$ 372,880.00	Moved from MTEP Id 19245 to 19146
Falcon SS Grounding System Upgrades	2021		3	G-T Interconnection	Planned	A in MTEP20	19268	\$ 147,624.00	MPFCA Terminated
Highland - Spring Green (X-17) 138kV, Uprate	2021		3	G-T Interconnection	Planned	A in MTEP20	17525	\$ 2,981,519.00	
Hill Valley SS Grounding System Upgrades	2021		3	G-T Interconnection	Planned	A in MTEP20	19246	\$ 611,927.00	
Hillman SS Grounding System Upgrades	2021		3	G-T Interconnection	Planned	A in MTEP20	19248	\$ 181,784.00	
Hillman SS, Upgrade Transformer	2021	2023	3	G-T Interconnection	Planned	A in MTEP20	19145	\$ 3,132,719.00	Moved from MTEP Id 19268 to 19145
J584 GIC Jordan SS, Generator Interconnection Facilities and Network Upgrades	2021		3	G-T Interconnection	Planned	A in MTEP19	16493	\$ 6,200,858.00	GIA Terminated
J855 Ebenezer SS Generator Interconnection Facilities and Network Upgrades	2021		3	G-T Interconnection	Planned	A in MTEP20	18665	\$ 5,526,333.00	
J947 Tennyson SS Generator Interconnection Facilities and Network Upgrades	2021	2023	3	G-T Interconnection	Planned	A in MTEP20	19145	\$ 5,756,434.00	Updated Cost Estimate

Project Name	2020 Est. In- Service Year	2021 Est. In-Service Year	ZONE	Need Category	Planned / Proposed / Provisional	MISO MTEP Appendix (BOLD = Certified)	MTEP PRJID	Cost	Explanation
Nelson Dewey SS Grounding System Upgrades	2021		3	G-T Interconnection	Planned	A in MTEP20	19267	\$ 537,753.00	
North Monroe - Bass Creek (X-12) 138 kV, uprate	2021		3	G-T Interconnection	Planned	A in MTEP20	19268	\$ 402,454.00	MPFCA Terminated
Rock River SS Switch Replacement	2021	2023	3	G-T Interconnection	Planned	A in MTEP20	19145	\$ 95,737.00	Moved from MTEP Id 19268 to 19145
Rock River SS, Bus Switch Upgrade Spring Green SS Grounding System Upgrades	2021		3	G-T Interconnection G-T Interconnection	Planned Planned	A in MTEP20 A in MTEP20	19268 19269	\$ 182,621.00 \$ 220,000.00	MPFCA Terminated
Cross Country SS, DIC, Install New Breakers	2021		3	T-D Interconnection	Planned	A in MTEP19	14906	\$ 630,000.00	
Milton Lawns SS, DIC add 2nd transformer and line breakers	2021		3	T-D Interconnection	Planned	A in MTEP18	15131	\$ 3,000,000.00	In-Service
Muscoda SS, DIC add 2nd transformer and substation rebuild	2021		3	T-D Interconnection	Planned	A in MTEP18	15124	\$ 3,290,000.00	
Northern Lights Substation, new T-D Interconnection	2021		3	T-D Interconnection	Planned	A in MTEP17	12346	\$ 21,235,700.00	
Orfordville SS, DIC, Capacitor Retirement and Transformer Replacement Portage Industrial Park SS, DIC, replace transformers and substation rebuild	2021 2021		3	T-D Interconnection T-D Interconnection	Planned	A in MTEP19 A in MTEP18	14906 15127	\$ 182,000.00	
Waterloo SS, DIC, New 138kV Substation	2021		3	T-D Interconnection	Planned Planned	A in MTEP18	14906	\$ 3,000,000.00 \$ 3,600,000.00	
McCue SS, Circuit Breaker Asset Renewal	2022		3	Condition and Performance	Planned	A in MTEP19	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	
Concord - Cooney (9042) 138kV, Reconductor	2022	2021	3	G-T Interconnection	Planned	A in MTEP20	18925	\$ 3,363,101.00	Updated In-Servce Year
J818 Jefferson SS Generator Interconnection Facilities and Network Upgrades J850 North Creek SS Generator Interconnection Facilities and Network Facilities	2022	2021	3	G-T Interconnection	Planned	A in MTEP20	18925	\$ 1,669,458.00	Updated In-Service Year
J864 Lone Rock SS Generator Interconnection Facilities and Network Exprises	2022 2022		3	G-T Interconnection G-T Interconnection	Planned Planned	A in MTEP20 A in MTEP20	19146 19225	\$ 6,324,293.00 \$ 1,767,400.00	Updated Cost Estimate
North Lake Geneva Tap - Burlington SS (6541) 138 kV, uprate	2022		3	G-T Interconnection	Planned	A in MTEP20	19146	\$ 1,232,351.00	
Green County, new DIC	2022		3	T-D Interconnection	Planned	A in MTEP18	15129	\$ 4,000,000.00	
Colley Road SS, Transformer Replacement and Asset Renewal	2023		3	Condition and Performance	Planned	A in MTEP20	17585	\$ 3,150,000.00	
West Middleton - Stagecoach 69kV (6927), Partial Rebuild	2023		3	Reliability	Planned	A in MTEP20	12175	\$ 3,800,000.00	Updated Cost Estimate
Cardinal - Hickory Creek 345kV, Line Construction Barneveld SS, DIC, new substation	2023		3	Reliability, Economic and Policy	Planned Planned	A in MTEP11 A in MTEP20	3127 18052	\$ 492,200,000.00 \$ 14,102,000.00	Updated Cost Estimate
Academy - Columbus 69kV (Y-21), Rebuild	2024		3	T-D Interconnection Condition and Performance	Planned	A in MTEP20	10590	\$ 8,800,000.00	Opdated Cost Estimate
Nelson Dewey SS - Control House, Relay Asset Renewal	2024	2022	3	Condition and Performance	Planned	A in MTEP21	19105	\$ 6,170,000.00	
Portage - Columbia 138kV (X-13/X-20), rebuild existing double circuit	2024	2030	3	Reliability	Planned	A in MTEP19	4730	\$ 11,500,000.00	Updated In-Service Year
Pflaum SS, Asset Renewal	2025		3	Condition and Performance	Planned	A in MTEP18	13768	\$ 2,075,688.00	
Bloomington (BLO)-LaPointe Sw Str (LPTT), 69kV, Y43 Rerate		2021	3	Line Clearance	Planned	A in MTEP19	14912	\$ 600,000.00	
Bluff LNG SS, new DIC Brodhead Muni 4 SS, DIC, New Substation		2022 2021	3	T-D Interconnection T-D Interconnection	Planned Planned	A in MTEP20 A in MTEP20	14907 14907	\$ 1,348,859.00 \$ 400,000.00	
Gateway - Sycamore (6902), 69kV, rebuild	2023	2021	3	Reliability	Proposed	A in MTEP20	14907	\$ 2,900,000.00	
South Beaver Dam - North Beaver Dam (Y-59), 69kV, uprate	2023		3	Reliability	Proposed	A in MTEP20	14909	\$ 70,000.00	
Tokay SS, DIC, Add Transformer	2023		3	T-D Interconnection	Proposed	A in MTEP20	14907	\$ 500,000.00	
Spring Green - Wick Drive (Y-170), 69kV, uprate	2024		3	Reliability	Proposed	A in MTEP21	14964	\$ 1,500,000.00	
Hillman - Darlington 138kV (X-14/X-101), Rebuild	2028		3	Condition and Performance	Proposed	A in MTEP18	4726	\$ 21,090,000.00	
Lancaster Transformer Replacement & Substation Rebuild Bonnie Road, DIC, New Substation	2023	2023	3	T-D Interconnection	Proposed	A in MTEP21	20925 19806	\$ 3,654,225.00	Updated In-Service Year / Updated Cost
Kirkwood SS, Control House , Transformer and Breaker Asset Renewal	2024	2026	3	T-D Interconnection Condition and Performance	Provisional Provisional	A in MTEP21 B in MTEP21	19806	\$ 3,500,000.00 \$ 7,571,000.00	
Darlington - Rock Branch 69kV (Y-109), Rebuild	2025	2020	3	Condition and Performance	Provisional	B in MTEP20	18046	\$ 16,700,000.00	
Nelson Dewey - Bloomington (Y-184), 69kV, rebuild & OPGW	2025		3	Reliability, Condition and Performance	Provisional	B in MTEP21	19962	\$ 16,300,000.00	Updated Cost Estimate
South Beaver Dam - Horicon 69kV (Y-134), Rebuild	2026		3	Condition and Performance	Provisional	B in MTEP20	18047	\$ 14,000,000.00	
Gran Grae SS, Install a second 161/69kV transformer	2026		3	Reliability	Provisional			\$ 8,200,000.00	
Rock Branch - Dodgeville 69kV (Y-35), Partial Rebuild South Fond du Lac - Spring Brook 69kV (Y-133), Partial rebuild	2028 2030		3	Condition and Performance Condition and Performance	Provisional	B in MTEP18	13739	\$ 9,000,000.00 \$ 31,000,000.00	
Cardinal - Blount 138kV, construct	2030		3	Reliability	Provisional Provisional	B in MTEP18 B in MTEP21	13739	\$ 31,000,000.00 \$ 109,000,000.00	
Rock County Reliability Project	2001	2026	3	Reliability	Provisional	B in MTEP21	20805	\$ 15,000,000.00	
Butte Des Morts - Sunset Point 138kV, Rebuild	2021		4	Condition and Performance	Planned	A in MTEP17	12185	\$ 20,600,000.00	
Cloverleaf SS, Replace Dead End and Switches	2021		4	Condition and Performance	Planned	A in MTEP18	13728	\$ 1,500,000.00	Updated Cost Estimate
Kewaunee SS, Retire Transformer Menominee SS, DIC, Retire Transformer	2021		4	Condition and Performance	Planned	A in MTEP20	14909	\$ 866,000.00	
Redwood - First Ave 69kV (T-46), Replace the submarine cable	2021 2021		4	Condition and Performance Condition and Performance	Planned Planned	A in MTEP20 A in MTEP18	14905 8444	\$ 417,000.00 \$ 12,500,000.00	
Shoto SS, Transformer (T1) and Breaker Asset Renewal	2021	2022	4	Condition and Performance Condition and Performance	Planned	A in MTEP18	14988	\$ 12,500,000.00	
J505 GIC Apollo SS, Generator Interconnection and Network Facilities	2021		4	G-T Interconnection	Planned	A in MTEP18	14925	\$ 8,300,000.00	In-Service
20th Street SS, Install two 138kV 8.16 MVAR Capacitor Banks	2021		4	Reliability	Planned	A in MTEP19	14908	\$ 2,500,000.00	
Huebner SS, Install two 138kV 8.16 MVAR Capacitor Banks	2021		4	Reliability	Planned	A in MTEP19	14908	\$ 2,400,000.00	
Ryan St SS, DIC, Retire Substation Bayport - Pioneer 138kV, rebuild as a double-circuit	2021		4	T-D Interconnection	Planned Planned	A in MTEP18 A in MTEP18	14904 14706	\$ 476,000.00	
Edgewater SS, Bus Reconfiguration	2022 2022		4	Condition and Performance Condition and Performance	Planned	A in MTEP18	13756	\$ 47,416,000.00 \$ 9,800,000.00	
Erdman SS, Transformer and Breaker Asset Renewal	2022		4	Condition and Performance	Planned	A in MTEP18	15931	\$ 7,000,000.00	
Finger Rd - Danz 69kV (L-64), Rebuild	2022		4	Condition and Performance	Planned	A in MTEP18	12141	\$ 6,000,000.00	Updated Cost Estimate
Hwy V - Finger Rd 69kV (U-47), Rebuild	2022	2021	4	Condition and Performance	Planned	A in MTEP18	12140	\$ 2,200,000.00	Updated Cost Estimate
			4		1 51 1	A in MTEP18	1 7504	\$ 32,800,000.00	
New Holstein - Custer 69kV (P-68), Rebuild	2022			Condition and Performance	Planned		7584		
New Holstein - Custer 69kV (P-68), Rebuild Pioneer - Crivitz 138kV (E-83/B-2), retire 69kV and reconfigure load to 138kV Pulliam SS, Transformer Retirement and Bus Reconfiguration	2022 2022 2022	2023	4 4	Condition and Performance Condition and Performance Condition and Performance	Planned Planned Planned	A in MTEP18 A in MTEP18 A in MTEP20	14926 15930	\$ 20,400,000.00 \$ 4,000,000.00	

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Riverside SS, Bus Uprate	2022		4	Reliability	Planned	A in MTEP18	13832	\$ 80,000.00	
Bayridge SS, new T-D Interconnection	2022		4	T-D Interconnection	Planned	A in MTEP16	10485	\$ 2,122,335.00	
Construct T-D Roosevelt Road Substation Henry St. SS, DIC, Retire Substation	2022	2024	4	T-D Interconnection T-D Interconnection	Planned Planned	A in MTEP16 A in MTEP20	10686 14907	\$ 1,102,365.00	Project Withdrawn
Preble SS, DIC, add 4th transformer and substation rebuild	2022	2024	4	T-D Interconnection	Planned	A in MTEP20	17628	\$ 96,000.00 \$ 3,498,694.00	
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	
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	
Lost Dauphin - Red Maple 138kV (Q-147), uprate Sheboygan County SS, DIC, substation rebuild	2023 2023		4	Reliability T-D Interconnection	Planned Planned	A in MTEP21 A in MTEP20	14964 18051	\$ 635,000.00 \$ 6,200,000.00	Updated Cost Estimate
Crivitz SS - Transformer Replacement and Asset Renewal	2023		4	Condition and Performance	Planned	A in MTEP21	19705	\$ 4,344,701.00	Opuated Cost Estimate
North Appleton SS - Transformer Replacement and Asset Renewal	2024		4	Condition and Performance	Planned	A in MTEP21	19706	\$ 7,811,645.00	
Wesmark - Rapids 69kV (R-44), Rebuild	2024		4	Condition and Performance	Planned	A in MTEP18	12135	\$ 21,500,000.00	
Eaton SS, new T-D Interconnection	2024		4	T-D Interconnection	Planned	A in MTEP16	10484	\$ 2,500,000.00	
Edgewater SS, DIC, replace transformer and substation rebuild	2024	2025	4	T-D Interconnection	Planned	A in MTEP18	15126	\$ 5,100,000.00	
Oak St - Hwy V 69kV (Z-26), Rebuild Edgewater - Lodestar 138kV (X-48/Y-31), Underground cable rebuild	2025 2023	-	4	Condition and Performance Condition and Performance	Planned Proposed	A in MTEP18 A in MTEP19	12137 15925	\$ 9,000,000.00 \$ 11,400,000.00	
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East Krok - Beardsley, (EAKY11), 69kV, uprate	2023		4	Reliability	Proposed	A in MTEP21	14964	\$ 2,300,000.00	
Howards Grove - Erdman 138kV, new line 12th Avenue SS, DIC, Transformer Replacement	2023		4	Reliability	Proposed	A in MTEP20	18568	\$ 25,000,000.00	
Wells St. DIC – new West Marinette-Wells St. 69 kV line	2023		4	T-D Interconnection	Proposed	A in MTEP20	14907	\$ 1,778,000.00 \$ 16.100.000.00	
Highway V - Preble 138 kV (X-154), reconductor	2023	2023	4	T-D Interconnection Reliability	Proposed Proposed	A in MTEP21 A in MTEP21	19961 20785	\$ 16,100,000.00 \$ 1,777,603.00	
Sunset Point - Bowen Street (E-5), 69kV, Uprate		2023	4	Reliability	Proposed	A in MTEP21	14964	\$ 699,055.00	
Bain SS, Control House and Breaker Asset Renewal	2021		5	Condition and Performance	Planned	A in MTEP19	15932	\$ 6,400,000.00	Updated Cost Estimate
Burlington SS, Install 138kV Breakers	2021		5	Condition and Performance	Planned	A in MTEP17	12058	\$ 3,500,000.00	Updated Cost Estimate
Paris - Burlington 138kV (8962), Rebuild	2021		5	Condition and Performance	Planned	A in MTEP18	13732	\$ 18,000,000.00	In-Service
Port Washington - Saukville 138kV (762), Rebuild to a double circuit River Bend SS, Add 2nd Transformer	2021		5	Reliability	Planned	A in MTEP16 A in MTEP19	9986	\$ 21,000,000.00	
Tamarack SS, DIC, Replace Transformer	2021 2021		5	T-D Interconnection T-D Interconnection	Planned Planned	A in MTEP19	14906 14906	\$ 717,000.00 \$ 2,000,000.00	
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	Updated Cost Estimate
St. Lawrence - Barton 138kV (8032), Partial Rebuild	2022		5	Condition and Performance	Planned	A in MTEP18	13735	\$ 8,400,000.00	
Summit - Cooney 138kV (6431), Rebuild	2022	2023	5	Condition and Performance	Planned	A in MTEP19	15457	\$ 4,100,000.00	
Berryville SS Grounding System Upgrades Elkhorn SS Grounding System Upgrades	2022		5	G-T Interconnection G-T Interconnection	Planned Planned	A in MTEP20 A in MTEP20	18985 18985	\$ 328,807.00 \$ 223,683.00	Project Withdrawn
J850/J878 East Paris SS, new 345/138kV transformer	2022		5	G-T Interconnection	Planned	A in MTEP20	18985	\$ 24,972,611.00	Project Withdrawn
J878 Paris SS Generator Interconnection Facilities and Network Upgrades	2022		5	G-T Interconnection	Planned	A in MTEP20	19265	\$ 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	\$ 6,000,000.00	
Kenosha SS, Breaker, Relay, RTU and Disconnect Asset Renewal	2023		5	Condition and Performance	Planned	A in MTEP19	14905	\$ 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	
Granville SS, Control House and Relay Replacement and Asset Renewal	2024		5	Condition and Performance / Reliability	Proposed	A in MTEP21	16490	\$ 28,950,000.00	
Sussex to Bark River (46143/2661), 138kV, OPGW Installation	2023		5	Communication	Provisional	B in MTEP21	19959	\$ 4,250,000.00	
Lincoln - Bluemound (43rd St) 138kV (5053), replace underground cable Communication Reliability Upgrades Current Cycle	2024 2021	-	5 various	Condition and Performance Communication	Provisional Planned	A in MTEP21 A in MTEP18	18048 13823	\$ 30,000,000.00 \$ 34,461,836.00	
Small Capital Project and Asset Renewal Current Cycle	2021		various	Condition and Performance	Planned	A IN INTEP18	13823	\$ 38,457,451.00	
Line Clearance Mitigation Project Current Cycle	2021		various	Line Clearance	Planned	A in MTEP18	13824	\$ 18,718,669.00	
Physical Security Current Cycle	2021		various	Physical Security	Planned	A in MTEP18	13826	\$ 67,198,396.00	
Distribution Interconnection Current Cycle	2021		various	T-D Interconnection	Planned	A in MTEP18	14904	\$ 6,436,258.00	
Communication Reliability Upgrades 2019	2022	-	various	Communication	Planned	A in MTEP18 A in MTEP18	13829	\$ 1,422,500.00	
Small Capital Project and Asset Renewal 2019 Line Clearance Mitigation Project 2019	2022 2022	-	various various	Condition and Performance Line Clearance	Planned Planned	A in MTEP18 A in MTEP18	13822 13825	\$ 8,007,814.00 \$ 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 Physical Security 2020	2023		various	Line Clearance	Planned	A in MTEP19	14912	\$ 12,062,247.00	
Load Interconnection 2020	2023 2023		various various	Physical Security T-D Interconnection	Planned Planned	A in MTEP19 A in MTEP19	14914 14906	\$ 21,603,965.00 \$ 26,774,954.00	
Communication Reliability Program 2021	2023		various	Communication	Planned	A in MTEP19	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	

Project Name		2021 Est. In-Service Year		Need Category	Planned / Proposed / Provisional	MISO MTEP Appendix (BOLD = Certified)	MTEP PRJID	Cost	Explanation
Communication Reliability Program 2022	2025		various	Communication	Proposed	A in MTEP21	14965	\$ 8,500,000.00	
Small Capital Project and Asset Renewal Program 2022	2025		various	Condition and Performance	Proposed	A in MTEP21	14964	\$ 55,000,000.00	
Line Clearance Mitigation Program 2022	2025		various	Line Clearance	Proposed	A in MTEP21	14966	\$ 7,500,000.00	
Physical Security Program 2022	2025		various	Physical Security	Proposed	A in MTEP21	14967	\$ 15,000,000.00	
Load Interconnection Program 2022	2025		various	T-D Interconnection	Proposed	A in MTEP21	14968	\$ 32,500,000.00	

LEGEND

No Shading = No change to project since previous Assessment

Orange Shading = new project, was not in previous Assessment project list

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

Green Shading = Project In-Service (Interim Updates Only)

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 (1/2021).