ATC 2018 10-Year Assessment (TYA) Preliminary Asset Renewal Continuing Needs

Continuing Asset Renewal Condition Need	2017 Projected Need Year	2018 Projected Need Year	Project Status	Planning Zone	Need Category	MISO MTEP 18 Appendix Status	MTEP PRJiD	MTEP Cost or Cost Range (M\$)	Length (Miles)	Connected Load (MW)	Network Type
North Point - Rocky Run 115kV line (T-20) Partial Rebuild	2019	2020	Provisional	1	Improve condition and increase reliability performance of existing line			<10	TBD/14.8	40-50	Network
Pine River-Hiawatha 69kV line (ESE_6908) Partial Rebuild	2019	2020	Planned	2	Improve condition and increase reliability performance of existing line			<10	10.9/48.2	<10	Network
Whitcomb 115/69-kV T31 & Caroline 115/69-kV T31 Transformers	2020	2021	Provisional	1	Improve condition, reliability			10-25	1	<10	
Plover - Whiting Avenue 115kV line (B-106) Rebuild	2018	2018	Planned	1	Improve condition and increase reliability performance of existing line	А	9423	6.2	4.5/5.8	20-30	Network
Rebuild Waupun 69 kV Substation	2018	2018	Planned	3	End of life, parts obsolescence (4 units) 69 kV	А	12100	4.2		20-30	
Rocky Run 345/115 kV T1 Transformer Monitoring	2019	2019	Planned	1	Improve condition, reliability	В	8443	<10		10-20	
Munising-Blaney Park 69kV line (Inland) Rebuild	2019	2019	Planned	2	Improve condition and increase reliability performance of existing line	Α	3096	17	21.9/52.9	<10	Radial
Replace Nelson Dewey 138/69 kV T31/T32 Transformers	2019	2019	Planned	3	Improve condition, reliability	А	9961	4.8		<10	
Lone Rock - Boscobel 69kV line (Y124) Rebuild	2019	2019	Planned	3	Improve condition and increase reliability performance of existing line	А	7583	32.4	28.8/28.8	20-30	Network
Ohmstead - Cedar Ridge 138kV line (X-2) Rebuild	2019	2019	Planned	4	Improve condition and increase reliability performance of existing line	А	12150	6.9	4.5/4.5	0	Network
Replace Lost Dauphin 138/69 kV T1 Transformer	2019	2019	Planned	4	Improve condition, reliability	Α	9954	6.7		<10	
Rebuild Racine 345kV Bus	2019	2019	Planned	5	End of life, bushing leaks (2 units) 345 kV, live tank, free standing CTs (1 unit) 345 kV	Targeted A	9991	12		>50	
Edgewood -St Martins 138 kV line (3013) Rebuild	2019	2019	Planned	5	Improve condition and increase reliability performance of existing line	А	3510	23.1	7.1/7.1	30-40	Network
Edgewood - Mukwonago 138kV line (671K61) Rebuild	2019	2019	Planned	5	Improve condition and increase reliability performance of existing line	А	3510	23.1	7.1/7.1	30-40	Network
Wild Rose - Harrison 69kV (Y19) Partial Rebuild	2020	2020	Planned	1	Improve condition and increase reliability performance of existing line	Targeted A	12147	10-25	15/21.3	10-20	Network
Wautoma - Wild Rose 69kV (Y180) Partial Rebuild	2020	2020	Planned	1	Improve condition and increase reliability performance of existing line	Targeted A	13770	5.5	4.5/10.4	10-20	Network
Saratoga – Coyne 115kV line (T-72) Rebuild	2020	2020	Planned	1	Improve condition and increase reliability performance of existing line	А	12178	6.6	6.3/6.3	10-20	Network
Petenwell - Saratoga 138kV line (X-43) Partial Rebuild	2020	2020	Provisional	1	Improve condition and increase reliability performance of existing line			<10	TBD/22.7	<10	Network
Coyne - Plover 115kV line (J-114) Partial Rebuild	2020	2020	Provisional	1	Improve condition and increase reliability performance of existing line			<10	TBD/9.9	0	Network
Portage - Staff 138kV line (X-6) Rebuild	2020	2020	Planned	3	Improve condition and increase reliability performance of existing line	А	9968	17.1	14/16.5	<10	Network
Staff - North Randolph 138kV line (X-98) Rebuild	2020	2020	Planned	3	Improve condition and increase reliability performance of existing line	А	9974	7.4	5.7/6.3	10-20	Network
Sheepskin - Stoughton 69 kV line (Y12) Rebuild	2020	2020	Planned	3	Improve condition and increase reliability performance of existing line	А	7600	10.8	6.2/8.3	0	Network
Rebuild 69kV Dane – Waunakee SW Station 69kV line (Y143) Rebuild	2020	2020	Planned	3	Improve condition and increase reliability performance of existing line	А	12177	7	4.7/6.8	10-20	Network
Howard - Pulliam 138kV line (D-82) Partial Rebuild	2020	2020	Provisional	4	Improve condition and increase reliability performance of existing line			<10	TBD/3.4	0	Network
Cedar Ridge Wind – Mullet River 138kV line (X-97) Rebuild	2020	2020	Planned	4	Improve condition and increase reliability performance of existing line	А	12148	22.8	17/23.6	<10	Network
Edgewater SS, 345 kV Bus Reconfiguration	2020	2020	Planned		End of life, bushing leaks (4 units) 345 kV, live tank, free standing CTs (2 units) 345 kV	Targeted B	13756	10.3		10-20	

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Goodman - Caldron Falls 69kV line (J-88) Rebuild	2020	2020	Planned	4	Improve condition and increase reliability performance of existing line	A	9977	35	21.8/23.9	<10	Radial
Redwood – First Ave 69-kV line (T-46), Underground Transmission Section	2020	2020	Provisional	4	Improve condition and increase reliability performance of existing line			<10	TBD/0.84	0	Network
Chaffee Creek - Lincoln Pump Station 69 kV line (Y18) Rebuild	2021	2021	Planned	1	Improve condition and increase reliability performance of existing line	Targeted A	10486	12.5	9.0/13.6	<10	Network
Wautoma - Chaffee Creek 69kV line (Y49) Rebuild	2021	2021	Planned	1	Improve condition and increase reliability performance of existing line	Targeted A	7764	15.7	11.7/13.1	<10	Network
Academy – North Randolph 138kV line (X-5) Re-insulate	2021	2021	Provisional	3	Improve condition and increase reliability performance of existing line			<10	TBD/3.9	<10	Network
Lodestar – Erdman 138kV line (X-48), Underground Transmission Section	2021	2021	Provisional	4	Improve condition and increase reliability performance of existing line			<10	TBD/4	0	Network
Finger Rd - Canal 69KV line (J-10) Rebuild	2021	2021	Planned	4	Improve condition and increase reliability performance of existing line	А	8841	60.7	54.8/61.7	30-40	Network
Butte des Morts - Sunset Point 138kV lines (40321), (80952),(A-79), (MCRG21) Rebuild	2021	2021	Planned	4	Improve condition and increase reliability performance of existing line	А	12185	20.6	12.2/13.2	>50	Network
Pioneer - Sobieski 69kV line (E-83) Rebuild	2021	2021	Provisional	4	Improve condition and increase reliability performance of existing line	В	12144	14.4	10.7/10.7	20-30	Radial
Sobieski - Bayport 69kV line (T-98) Rebuild	2021	2021	Provisional	4	Improve condition and increase reliability performance of existing line	В	12143	15	10.3/10.3	20-30	Radial
Granville 345/138 kV T3 Transformer	2021	2021	Provisional	5	Improve condition, reliability			<10		>50	
Paris – Burlington 138kV line (8962) Rebuild	2021	2021	Planned	5	Improve condition and increase reliability performance of existing line	Targeted A	13732	12.6	13.5/14.4	10-20	Network
Replace Erdman 138/69 kV T31 Transformer	2022	2022	Planned	4	Improve condition, reliability	A	9944	1.3		10-20	
Edgewater – Erdman 69kV line (Y31) Underground Transmission Section	2022	2022	Provisional	4	Improve condition and increase reliability performance of existing line			<10	TBD/9.4	0	Network
Danz - Finger Rd 69 kV line (L64) Rebuild	2022	2022	Planned	4	Improve condition and increase reliability performance of existing line	Targeted A	12141	4.2	3.3/3.3	10-20	Network
Finger Rd - Hwy V 69kV line (U-47) Rebuild	2022	2022	Planned	4	Improve condition and increase reliability performance of existing line	Targeted A	12140	1.5	0.8/0.8	0	Network
Hwy V - Oak St 69kV line (Z-26) Rebuild	2022	2022	Planned	4	Improve condition and increase reliability performance of existing line	Targeted A	12137	12	6.2/6.2	<10	Network
New Holstein - Custer 69 kV line (P-68) Rebuild	2022	2022	Provisional	4	Improve condition and increase reliability performance of existing line	В	7584	16	TBD/21.6	10-20	Network
Manrap - Wesmark 69KV line (R-44) Rebuild	2022	2022	Provisional	4	Improve condition and increase reliability performance of existing line	В	12135	17	TBD/19.7	20-30	Network
Finger Rd SW Station - Wesmark 69KV line (FIRY11) Rebuild	2022	2022	Provisional	4	Improve condition and increase reliability performance of existing line	В	12134	12.8	TBD/11	10-20	Network
Arcadian 345/138 kV T2 & T3 Transformers	2022	2022	Provisional	5	Improve condition, reliability			10-25		>50	
St. Lawrence – Barton 138kV line (8032) Partial Rebuild	2022	2022	Planned	5	Improve condition and increase reliability performance of existing line	Targeted A	13735	9.8	8.3/13.1	10-20	Network
Barton – Auburn 138kV line (9752) Partial Rebuild	2022	2022	Planned	5	Improve condition and increase reliability performance of existing line	Targeted A	13743	8.1	6.9/11.7	0	Network
Lincoln - McKenna 69kV line (Y145) Rebuild	2023	2023	Provisional	1	Improve condition and increase reliability performance of existing line	В	7765	<10	TBD/12.1	10-20	Network
Mckenna - Castle Rock 69kV line (Y47) Rebuild	2023	2023	Provisional	1	Improve condition and increase reliability performance of existing line	В	7763	10-25	TBD/8.5	<10	Network
North Lake – Greenstone 69kV line (NLKY11) Rebuild	2023	2023	Provisional	2	Improve condition and increase reliability performance of existing line			10-25	TBD/9.7	<10	Radial
Portage - 9 Mile 69kV lines (6901/6902) Re-insulate	2023	2023	Provisional	2	Improve condition and increase reliability performance of existing line			<10	TBD/9	10-20	Network
Gwinn- KI Sawyer 69kV line (Sawyer) Re-insulate	2023	2023	Provisional	2	Improve condition and increase reliability performance of existing line			<10	TBD/5.6	<10	Radial

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Chandler-Delta (UPPCO) 69kV line (Delta 1) Partial Rebuild	2023	2023	Provisional	2	Improve condition and increase reliability performance of existing line			<10	TBD/5.6	0	Network
Hillman - Darlington 138kV line (X-14) Rebuild	2023	2023	Provisional	3	Improve condition and increase reliability performance of existing line		4726	16.7	TBD/12.4	0	Network
South Fond Du Lac SW YD – Spring Brook Road 69kV line (Y133) Rebuild	2023	2023	Provisional	3	Improve condition and increase reliability performance of existing line			>25	TBD/23.7	20-30	Network
Academy - Columbus 69kV line (Y21) Rebuild	2023	2023	Provisional	3	Improve condition and increase reliability performance of existing line	В	10590	<10	TBD/16.5	<10	Network
Danz Ave – University (WPS) 69-kV line (O-15) Underground Transmission Section	2023	2023	Provisional	4	Improve condition and increase reliability performance of existing line			10-25	TBD/13.3	<10	Network
Summit -Cooney 138kV line (6431) Rebuild	2023	2023	Provisional	5	Improve condition and increase reliability performance of existing line			<10	TBD/3.6	0	Network
South Beaver Dam - Horicon 69kV line (Y134) Rebuild	2024	2024	Provisional	3	Improve condition and increase reliability performance of existing line			10-25	TBD/20.8	10-20	Network
Conover-Mass 69kV line (6530) Partial Rebuild	2025	2025	Provisional	2	Improve condition and increase reliability performance of existing line			<10	TBD/57.6	10-20	Network
9 Mile SW STA - Pine River 69kV lines (6921/23) Partial Rebuild	2025	2025	Provisional	2	Improve condition and increase reliability performance of existing line			<10	TBD/19.6	<10	Network
Blaney Park SW STA – Mich. Limestone Quarry Tap 69kV line (6914) Partial Rebuild	2025	2025	Provisional	2	Improve condition and increase reliability performance of existing line			<10	TBD/3.6	<10	Radial
Replace East Krok 138/69 kV T1 Transformer	2025	2025	Provisional	4	Improve condition, reliability	А	9958	<10		10-20	
University-Whitewater 138kV line (UNIG51) Rebuild	2025	2025	Provisional	5	Improve condition and increase reliability performance of existing line			10-25	TBD/6.3	0	Network
University - Mukwonago 138kV line (UNIG52) Rebuild	2025	2025	Provisional	5	Improve condition and increase reliability performance of existing line			>25	TBD/22.8	0	Network
Darlington – Rock Branch 69kV line (Y109) Rebuild	2026	2026	Provisional	3	Improve condition and increase reliability performance of existing line			10-25	TBD/14.1	0	Network
Retire Lone Rock 69-kV Phase Shifter	2026	2026	Provisional	3	Improve condition, reliability			<10		<10	

Legend

No Shading = No change to project since previous
Assessment

Gray Shading = some change (e.g. In-service year or scope) since previous Assessment