Table AR-1Transmission System Additions – Asset Renewal Line Work

System Additions	Projected In-Service Year	Project Status	Planning Zone	MISO MTEP Appendix Status	MTEP PRJiD	MTEP Cost or Cost Range (M\$)	Need Category
Rebuild Whiting Avenue-Plover 115- kV line B-106	2018	Planned	1	A	9423	6.2	Improve condition and increase reliability performance of existing line
Partial Rebuild North Point - Rocky Run 115-kV line T-20	2020	Provisional	1			<10	Improve condition and increase reliability performance of existing line
Partial rebuild Wild Rose - Harrison 69-kV line Y19	2020	Proposed	1	Targeted B 17, Target A 18	12147	10-25	Improve condition and increase reliability performance of existing line
Partial rebuild Wautoma – Wild Rose 69-kV line Y180	2020	Proposed	1	Target A 18		<10	Improve condition and increase reliability performance of existing line
Rebuild Coyne - Saratoga 115-kV line T-72	2020	Planned	1	Targeted A 17	12178	6.6	Improve condition and increase reliability performance of existing line
Partial rebuild Petenwell - Saratoga 138-kV line X-43	2020	Provisional	1			<10	Improve condition and increase reliability performance of existing line
Partial rebuild Coyne - Plover 115-kV line J-114	2020	Provisional	1			<10	Improve condition and increase reliability performance of existing line
Rebuild Lincoln Pump Sta Chaffee Creek 69-kV line Y18	2021	Proposed	1	B, Target A 18	10486	10-25	Improve condition and increase reliability performance of existing line
Rebuild West Wisconsin Rapids – Sigel 69-kV line Y45	2021	Provisional	1	В	8263	18.7	Improve condition and increase reliability performance of existing line
Rebuild Wautoma – Chaffee Creek 69-kV line Y49	2021	Proposed	1	B, Target A 18	7764	10-25	Improve condition and increase reliability performance of existing line
Rebuild Lincoln Pump Sta McKenna 69-kV line Y145	2023	Provisional	1	В	7765	<10	Improve condition and increase reliability performance of existing line
Rebuild McKenna - Castle Rock 69- kV line Y47	2023	Provisional	1	В	7763	10-25	Improve condition and increase reliability performance of existing line
Partial rebuild Munising-Blaney Park 69-kV line Inland	2019	Planned	2	A	3096	13	Improve condition and increase reliability performance of existing line
Partial rebuild Pine River-Hiawatha 69-kV line ESE_6908	2019	Planned	2	Target A 18		<10	Improve condition and increase reliability performance of existing line
Rebuild North Lake – Greenstone 69- kV line NLKY11	2023	Provisional	2			10-25	Improve condition and increase reliability performance of existing lines
Re-insulate Portage - 9 Mile 69-kV lines 6901/6902	2023	Provisional	2			<10	Improve condition and increase reliability performance of existing lines

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 Transmission System Additions – Asset Renewal Line Work (Continued)

System Additions	Projected In-Service Year	Project Status	Planning Zone	MISO MTEP Appendix Status	MTEP	MTEP Cost or Cost Range (M\$)	Need Category
Re-insulate Gwinn- KI Sawyer 69-kV line Sawyer	2023	Provisional	2			<10	Improve condition and increase reliability performance of existing line
Partial rebuild Chandler-Delta (UPPCO) 69-kV line Delta 1	2023	Provisional	2			<10	Improve condition and increase reliability performance of existing line
Partial rebuild Conover-Mass 69-kV line 6530	2025	Provisional	2			<10	Improve condition and increase reliability performance of existing line
Partial rebuild 9 Mile SW STA - Pine River 69-kV lines 6921/23	2025	Provisional	2			<10	Improve condition and increase reliability performance of existing line
Partial rebuild Blaney Park SW STA – Mich. Limestone Quarry Tap 69-kV line 6914	2025	Provisional	2			<10	Improve condition and increase reliability performance of existing line
Rebuild Portage - Dam Heights 69-kV line Y16	2017	Planned	3	А	3813	33.7	Improve condition and increase reliability performance of existing line
Rebuild Boscobel - Lone Rock 69-kV line Y124	2019	Planned	3	A	7583	41.9	Improve condition and increase reliability performance of existing line
Rebuild Portage – Staff 138-kV X6	2020	Planned	3	B, Targeted A 17	9968	17.1	Improve condition and increase reliability performance of existing line
Rebuild Staff – North Randolph 138- kV X98	2020	Planned	3	B, Targeted A 17	9974	7.4	Improve condition and increase reliability performance of existing line
Rebuild Sheepskin – Stoughton 69- kV line Y12	2020	Planned	3	B, Targeted A 17	7600	10.8	Improve condition and increase reliability performance of existing line
Rebuild Dane - Waunakee 69-kV line Y143	2020	Planned	3	Targeted A 17	12177	7	Improve condition and increase reliability performance of existing line
Re-insulate Academy – North Randolph 138-kV line X5	2021	Provisional	3			<10	Improve condition and increase reliability performance of existing line
Rebuild Darlington – Hillman 138-kV line X14	2023	Provisional	3		4726	16.7	Improve condition and increase reliability performance of existing line
Rebuild South Fond Du Lac SW YD – Spring Brook Road 69-kV line Y133	2023	Provisional	3			>25	Improve condition and increase reliability performance of existing line
Rebuild Academy – Columbus 69-kV line Y21	2023	Provisional	3	В	10590	<10	Improve condition and increase reliability performance of existing line
Rebuild South Beaver Dam - Horicon 69-kV line Y134	2024	Provisional	3			10-25	Improve condition and increase reliability performance of existing line
Rebuild Darlington – Rock Branch 69- kV line Y109	2026	Provisional	3			10-25	Improve condition and increase reliability performance of existing line

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 Transmission System Additions – Asset Renewal Line Work (Continued)

System Additions	Projected In-Service Year	Project Status	Planning Zone	MISO MTEP Appendix Status	MTEP PRJiD	MTEP Cost or Cost Range (M\$)	Need Category
Rebuild Ohmstead - Cedar Ridge Wind Generation 138-kV line X2	2019	Planned	4	Targeted A 17	12150	6.9	Improve condition and increase reliability performance of existing line
Partial rebuild Howard - Pulliam 138- kV line D-82	2020	Provisional	4			<10	Improve condition and increase reliability performance of existing line
Rebuild Cedar Ridge Wind Generation - Mullet River 138-kV line X97	2020	Planned	4	Targeted A 17	12148	22.8	Improve condition and increase reliability performance of existing line
Rebuild Goodman - Caldron Falls 69- kV line J-88	2020	Planned	4	А	9977	35	Improve condition and increase reliability performance of existing line
Rebuild Finger Road -Canal 69-kV line J-10	2021	Planned	4	А	8841	60.7	Improve condition and increase reliability performance of existing line
Rebuild Neevin - Butte Des Morts 138-kV line 43021	2021	Planned	4	Targeted A 17	12185	20.6	Improve condition and increase reliability performance of existing line
Rebuild Pioneer - Sobieski 69-kV line E-83 Tap	2021	Provisional	4	Targeted B 17	12144	14.4	Improve condition and increase reliability performance of existing line
Rebuild Sobieski - Bayport 69-kV line T-98	2021	Provisional	4	Targeted B 17	12143	15	Improve condition and increase reliability performance of existing line
Rebuild Sunset Point - Mears - Woodenshoe - Neevin 138-kV lines A-79, MCRG21 and 80952	2021	Planned	4	Targeted A 17	12185	20.6	Improve condition and increase reliability performance of existing line
Rebuild Danz - Finger Road 69-kV line L-64	2022	Planned	4	Targeted B 17, Target A 18	12141	4.2	Improve condition and increase reliability performance of existing line
Rebuild Finger Road - Highway V 69- kV line U-47	2022	Planned	4	Targeted B 17, Target A 18	12140	1.5	Improve condition and increase reliability performance of existing line
Rebuild Highway V - Oak Street 69- kV line Z-26	2022	Planned	4	Targeted B 17, Target A 18	12137	12	Improve condition and increase reliability performance of existing line
Rebuild Custer - New Holstein 69-kV line P-68	2022	Provisional	4	В	7584	16	Improve condition and increase reliability performance of existing line
Rebuild Manrap - Wesmark 69-kV line R-44	2022	Provisional	4	Targeted B 17	12135	17	Improve condition and increase reliability performance of existing line

System Additions	Projected In-Service Year	Project Status	Planning Zone	MISO MTEP Appendix Status	MTEP PRJiD	MTEP Cost or Cost Range (M\$)	Need Category
Rebuild Finger Road SW STA – Wesmark 69-kV line FIRY11	2022	Provisional	4	Targeted B 17	12134	12.8	Improve condition and increase reliability performance of existing line
Rebuild St. Martins - Edgewood 138- kV line 3013	2019	Planned	5	A	3510	23.1	Improve condition and increase reliability performance of existing line
Rebuild and add breaker on Edgewood - Mukwonago 138-kV line 671K61	2019	Planned	5	A	3510	23.1	Improve condition and increase reliability performance of existing line
Rebuild Paris – Burlington 138-kV line 8962	2021	Planned	5	Target A 18		10-25	Improve condition and increase reliability performance of existing line
Partial rebuild St. Lawrence – Barton 138-kV line 8032	2022	Planned	5	Target A 18		<10	Improve condition and increase reliability performance of existing line
Partial rebuild Barton – Auburn 138- kV line 9752	2022	Planned	5	Target A 18		<10	Improve condition and increase reliability performance of existing line
Rebuild Summit -Cooney 138-kV line 6431	2023	Provisional	5			<10	Improve condition and increase reliability performance of existing line
Rebuild University-Whitewater 138kV line UNIG51	2025	Provisional	5			10-25	Improve condition and increase reliability performance of existing line
Rebuild University - Mukwonago 138- kV line UNIG52	2025	Provisional	5			>25	Improve condition and increase reliability performance of existing line

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 Transmission System Additions – Asset Renewal Line Work (Continued)