

*Table AR-3
Asset Renewal Substation and Other Work¹*

Substation Projects	Projected In-Service Year	Project Status	Planning Zone	MISO MTEP Appendix Status	MTEP PRJiD	Need Category
Eastom SS, Relay and Circuit Switcher Replacement	2018	Planned	1	Targeted A 18	13722	Asset Renewal – Breaker & Relay
Winneconne SS, Relay and Breaker Replacement	2019	Planned	1	Targeted A 18	13243	Asset Renewal – Breaker & Relay
Caroline SS – Transformer (T31) Breaker and Relay Asset Renewal	2021	Planned	1	Targeted A 18	14986	Asset Renewal - Transformer
Whitcomb SS – Transformer (T31) Breaker and Relay Asset Renewals	2021	Planned	1	Targeted A 18	14987	Asset Renewal - Transformer
Victoria SS, Relay and RTU Replacements	2017	Planned	2	Targeted A 18	13737	Asset Renewal – Breaker & Relay
Osceola SS. Breaker Replacements	2019	Planned	2	Targeted A 18	13755	Asset Renewal – Breaker & Relay
Straits SS, Replace 3 138kV Breakers	2019	Planned	2	Targeted A 18	13758	Asset Renewal – Breaker & Relay
Tilden SS, Asset Renewal	2023	Provisional	2	Target B 19	--	Asset Renewal/Reconfiguration
Empire SS, Asset Renewal	2023	Provisional	2	Target B 19	--	Asset Renewal/Reconfiguration
Lone Rock SS, Replace Relays and Breaker	2017	Planned	3	Targeted A 18	13760	Asset Renewal – Breaker & Relay
Baraboo SS, Bus Uprate and RTU Replacement	2018	Planned	3	Targeted A 18	13766	Asset Renewal - Substation
Huiskamp SS, Relay and Breaker Replacement	2018	Planned	3	Targeted A 18	13717	Asset Renewal – Breaker & Relay
N Monroe SS, Relay Replacements	2018	Planned	3	Targeted A 18	13733	Asset Renewal – Breaker & Relay
West Towne SS, Relay Replacements	2019	Planned	3	Targeted A 18	13749	Asset Renewal – Breaker & Relay
Hillside SS, Relay and Breaker Replacement	2019	Planned	3	Targeted A 18	13802	Asset Renewal – Breaker & Relay

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Kilbourn SS, Bus Reconfiguration and Relay Replacement	2019	Planned	3	Targeted A 18	13789	Asset Renewal - Substation
Pflaum SS, Replace Failed 69kV Underground Cable	2025	Planned	3	Targeted A 18	13768	Asset Renewal - Substation
Pulliam SS, Relay Upgrades and Replacements	2019	Planned	4	Targeted A 18	13727	Asset Renewal – Breaker & Relay
Wesmark SS, Relay and Breakers	2019	Planned	4	Targeted A 18	13747	Asset Renewal – Breaker & Relay
Dyckesville SS Relay, Breaker and Switch Replacement	2019	Planned	4	Targeted A 18	13762	Asset Renewal – Breaker & Relay
Cloverleaf SS, Replace Dead End and Switches	2019	Planned	4	Targeted A 18	13728	Asset Renewal – Substation
Edgewater SS, 345kV Asset Renewal and Bus Reconfiguration	2020	Planned	4	Targeted A 18	13756	Asset Renewal - Substation
Shoto SS – Transformer (T1) and Breaker Asset Renewal	2021	Planned	4	Targeted A 18	14988	Asset Renewal - Transformer
Pulliam SS, Transformer Retirement and Asset Renewal	2021	Provisional	4	Target A 19	15930	Asset Renewal – Transformer
Erdman SS, Transformer Addition and Asset Renewal	2021	Provisional	4	Target A 19	15931	Asset Renewal - Transformer
St. Lawrence SS, Breaker Replacements	2018	Planned	5	Targeted A 18	13746	Asset Renewal – Breaker & Relay
Lincoln SS, Relay and Breaker Replacements	2019	Planned	5	Targeted A 18	13738	Asset Renewal – Breaker & Relay
Waukesha SS, Relay and Breaker Replacements	2019	Planned	5	Targeted A 18	13742	Asset Renewal – Breaker & Relay
Bain SS, Asset Renewal	2021	Provisional	5	Target A 19	15932	Asset Renewal - Substation

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Range Line Switchyard, Asset Renewal	2022	Provisional	5	Target A 19	15828	Asset Renewal - Substation
Arcadian SS, Asset Renewal	2023	Provisional	5	Target B 19	--	Asset Renewal/Reconfiguration
Granville SS, Asset Renewal	2023	Provisional	5	Target B 19	--	Asset Renewal/Reconfiguration
Small Capital Project and Asset Renewal Current Cycle	2018-2020	Planned	--	Targeted A 18	13821	Reliability/Asset Renewal
Communications Reliability Upgrades Current Cycle	2018-2020	Planned	--	Targeted A 18	13823	Communication
Physical Security Current Cycle	2018 -2020	Planned	--	Targeted A 18	13826	Physical Security
Small Capital Project and Asset Renewal 2019	2019-2021	Planned	--	Targeted A 18	13822	Reliability/Asset Renewal
Communications Reliability Upgrades 2019	2019-2021	Planned	--	Targeted A 18	13829	Communication
Physical Security 2019	2019-2021	Planned	--	Targeted A 18	13828	Physical Security
Small Capital Project and Asset Renewal 2020	2020-2022	Provisional	--	Target A 19	14908	Asset Renewal/Reliability
Communications Reliability Upgrades 2020	2020-2022	Provisional	--	Target A 19	14910	Communications
Physical Security 2020	2020-2022	Provisional	--	Target A 19	14914	Physical Security
Small Capital Project and Asset Renewal 2021	2021-2023	Provisional	--	Targeted B 18	14909	Asset Renewal/Reliability
Communications Reliability Upgrades 2021	2021-2023	Provisional	--	Targeted B 18	14911	Communications

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Physical Security 2021	2021-2023	Provisional	--	Targeted B 18	14915	Physical Security
Small Capital Project and Asset Renewal 2022	2022-2024	Provisional	--	Targeted B 18	14964	Asset Renewal/Reliability
Communications Reliability Upgrades 2022	2022-2024	Provisional	--	Targeted B 18	14965	Communications
Physical Security 2022	2022-2024	Provisional	--	Targeted B 18	14967	Physical Security