	Α	В	С	D	E	F	G	Н	I	J
1	System Addition	2018 TYA Network Need Year	2018 TYA In- Service Year	Planning Zone	Need Category	Planned, Proposed or Provisional	MISO MTEP Appendix Status	MTEP PRJID	MTEP Cost or Cost Range	Reason for Change since Previous TYA (Gray items only)
2	Sherman Street SS, DIC - Replace High Side Circuit Switcher	2018***	2018	1	T-D Interconnection	Proposed	targeted A 18	13721	0.07	
3	Wittenberg SS, DIC - Replace Transformer	2018***	2018	1	T-D Interconnection	Proposed	targeted A 18	13787	0.12	
4	Baraboo SS, Bus Uprate and RTU Replacement	2018***	2018	3	T-D Interconnection	Proposed	targeted A 18	13766	1.8	
5	Darlington SS, DIC - Replace Transformer and Construct New Control House	2018***	2018	3	T-D Interconnection	Proposed	targeted A 18	13740	1.88	
6	Oak St SS, DIC - Replace Transformer	2018***	2018	4	T-D Interconnection	Proposed	targeted A 18	13790	0.88	
7	Berryville SS, DIC - Add 2nd Transformer	2018***	2018	5	T-D Interconnection	Proposed	targeted A 18	13734	0.53	
8	Distribution Interconnection Current Cycle	2018***	2018	Various	T-D Interconnection	Proposed	targeted A 18	14904	6.40	
9	Plover SS, DIC - Replace Transformers	2018***	2018	1	T-D Interconnection	Proposed	А	13726	1.8	
10	North Madison - Briggs Road 345 kV line	2018***	2018	1, 3	reliability, economics and policy benefits	Planned	A	3127	541.7	
11	Tripp Rd Substation, breaker installation	2018***	2018	3	T-D Interconnection	Proposed	А	13068	2	
12	Bay Lake: Morgan Substation reconfigure and expand 345-kV and 138-kV switchyards	ASAP***	2018	4	reliability (various TPL categories)	Planned	А	3679	306.081	
13	Bay Lake: North Appleton - Morgan 138 kV line construction	ASAP***	2018	4	reliability (various TPL categories)	Planned	А	3952	59.269	
14	Bay Lake: North Appleton - Morgan 345 kV line construction	ASAP***	2018	4	reliability (various TPL categories)	Planned	А	3679	306.081	
15	City Limits 138-kV bus reconductor	2018***	2018	4	reliability (P3.2)	Proposed	A	8640	0.3	
16	Depere - Glory Rd 138-kV overhead line rebuild	2020***	2018	4	reliability (various TPL categories)	Proposed	А	9081	1.5	
17	Forest Junction 138-kV Substation: Install redundant bus differential	2019***	2018	4	reliability (stability E2.D)	Proposed			<10	
18	Somers Substation: loop Racine - Kenosha 138-kV line 1651 in and out	2019***	2018	5	T-D interconnection	Planned	А	8660	4	
19	Williams Bay Substation: Loop X-44 in and out	2019***	2018	3	T-D interconnection	Proposed	А	4421	4.2	was 2019
20	Hancock SS - DIC, Replace Transformers	2019***	2019	1	T-D Interconnection	Proposed	targeted A 18	13774	4.72	
21	Plover SS, DIC - Replace Transformers	2019***	2019	1	T-D Interconnection	Proposed	targeted A 18	13726	1.77	
22	Stratford SS, DIC, add 2nd transformer and substation rebuild	2019***	2019	1	T-D Interconnection	Proposed	targeted A 18	15044	3.70	
23	Central UP, new DIC	2019***	2019	2	T-D Interconnection	Proposed	targeted A 18	15133	6.20	
24	Cranberry Substation 115 kV, 10.4 MVAR Inductor Bank	2019***	2019	1	P0	Proposed	targeted A 18	14184	1.70	

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25	Iron Grove: 138 kV, 15 MVAR Inductor Bank	2019***	2019	2	P0	Proposed	targeted A 18	14186	1.90	
26	M-38 SS and Silver River SS, New 138 kV Inductor Banks	2019***	2019	2	P0	Proposed	targeted A 18	14185	4.10	
27	Winona Substation: 138 kV, 8 MVAR Inductor Bank	2019***	2019	2	P0	Proposed	targeted A 18	14805	1.90	
28	Construct Edgerton T-D 138 KV	2019***	2019	3	T-D Interconnection	Proposed	А	13066	1.60	
29	Construct Arcadian 138KV D-T	2019***	2019	5	T-D Interconnection	Planned	А	13067	0.26	
30	Lincoln SS, 138 kV Bus Reconfiguration	2019***	2019	5	reliability (prior + P1.2)	Proposed	targeted A 18	13738	4.10	
31	State Line SS, new DIC	2019***	2019	5	T-D Interconnection	Proposed	targeted A 18	14604	8.2	
32	Stratford SS, DIC, add 2nd transformer and substation rebuild	2019***	2019	1	T-D Interconnection	Proposed	targeted A 18	15044	3.7	
33	Distribution Interconnection 2019	2019***	2019	Various	T-D Interconnection	Proposed	targeted A 18	14905	10.50	
34	Mount Pleasant Tech Interconnection Project	2019***	2019	5	T-D Interconnection	Proposed	targeted A 18	14073	140.0	was 2020
35	Lost Dauphin - Red Maple 138 kV line uprate Q-147	2019*	2019	4	reliability (various TPL categories)	Planned	A	9930	0.18	was 2018
36	Plymouth 4 Substation, breaker installation	2019*	2019	4	T-D Interconnection	Planned	A	13065	2.8	was 2018
37	West Marinette Substation: Add high side protection to 138/69-kV transformers	2019*	2019	4	reliability (various TPL categories)	Planned	A	9080	2.2	was 2018
38	Mukwonago Substation: Install line breaker on line 671K61	2019*	2019	5	operating flexibility	Proposed	А	9923	0.9	was 2018
39	Pershing Substation: Loop Stone Lake - Gardner Park 345-kV line into new Pershing 345/115-kV Substation	2019***	2019	1	T-T interconnection	Proposed	В	9925	15.0	
40	J703 Huron SS, Generator Interconnection Facilities	2019***	2019	2	G-T Interconnection	Proposed	targeted A 18	13784	17.1	
41	J704/J711 GIC- Silver River SS-Interconnection and Network Upgrades	2019***	2019	2	G-T Interconnection	Proposed	targeted A 18	13769	19.7	
42	Plains - Arnold 138-kV uprate	2019***	2019	2	NITS Request	Planned	A	13572	2.0	
43	J390: Kittyhawk Substation, new G-T interconnection	2019***	2019	3	G-T Interconnection	Proposed	A	13103	42.1	
44	J395: Darlington - North Monroe 138 kV line X-49, uprate	2017***	2019	3	G-T Interconnection	Proposed	A	12284	17.6	
45	Paddock - NW Beloit 138 kV line X-53, install series reactor	2019***	2019	3	reliability (various TPL categories)	Proposed	A	13004	6.1	
46	Bain - Spring Valley 138-kV uprate 63141	2019	2019	3 & 5	T-D interconnection, reliability (69P1.2)	Planned	A	3808	70.5	
47	Construct a new 138/69-kV substation on Spring Valley - North Lake Geneva 138-kV circuit	2019	2019	3 & 5	T-D interconnection, reliability (69P1.2)	Planned	А	3808	70.5	

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48	Construct a new 69-kV circuit from Twin Lakes to the new substation	2019	2019	3 & 5	T-D interconnection, reliability (69P1.2)	Planned	A	3808	70.5	
49	Construct a new Spring Valley-North Lake Geneva 138-kV circuit	2019	2019	3 & 5	T-D interconnection, reliability (69P1.2)	Planned	А	3808	70.5	
50	Twin Lakes - Katzenberg 69-kV rebuild Y-102	2019	2019	3 & 5	T-D interconnection, reliability (69P1.2)	Planned	А	3808	70.5	
51	Ellinwood 138-kV Bus Rerate	2019*	2019	4	reliability (P6)	Proposed	А	12103	2.4	
52	Highway V Substation: Install 138-kV breakers and 69-kV circuit switchers on 138/69-kV transformers	2019***	2019	4	operating flexibility, reliability (prior + 69P1.3)	Planned	A	7986	9	
53	Pulliam 138-kV Substation: Install redundant bus differential	2019***	2019	4	reliability (stability P5.5)	Proposed	targeted A 18	13727	1.9	
54	Big Pond SS, Retire Substation	2020***	2020	1	no Need	Proposed	targeted A 18	13831	0.45	
55	Venus SS, Capacitor Bank Retirement	2020***	2020	1	no Need	Proposed	targeted A 18	14806	0.14	
56	Marquette County, new DIC	2020***	2020	2	T-D Interconnection	Proposed	targeted B 18	15125	10-25	
57	Dam Heights SS, DIC, add a new radial line	2020***	2020	3	T-D Interconnection	Proposed	targeted A 18	15045	3.30	
58	Milton Lawns SS, DIC, add 2nd transformer and line breakers	2020***	2020	3	T-D Interconnection	Proposed	targeted A 18	15131	3.00	
59	Muscoda SS, DIC, add 2nd transformer and substation rebuild	2020***	2020	3	T-D Interconnection	Proposed	targeted A 18	15124	3.29	
60	Quincy Street SS, new DIC	2020***	2020	4	T-D Interconnection	Proposed	targeted A 18	15132	6.50	
61	Edgewater - Erdman 69 kV line Y-31 rerate	2020	2020	4	reliability (prior + P1.2)	Proposed	targeted A 18	13824	<10	
62	Distribution Interconnection 2020	2020***	2020	Various	T-D Interconnection	Proposed	target A 19	14906	10.07	
63	Waupaca Area Energy Storage Project	2020***	2020	1	operating flexibility, reliability (prior + P1.2)	Provisional	target B 19		10	
64	J704/J711 GIC- Network Upgrades	2020***	2020	2	G-T Interconnection	Provisional	targeted A 18	14204	18.7	was 2019
65	Forest Junction 138kV Substation: Install 25 Mvar inductor	2020*	2020	4	system intact (P0)	Planned	А	7581	1.8	was 2018
66	Baker St Substation: Add new 115-kV bus and bus tie breaker	2020***	2020	1	T-D Interconnection	Planned	A	12115	4.4	
67	Atlantic Substation: Reconfiguration	2020	2020	2	operating flexibility, reliability (69P5)	Provisional	B, target A 19	7586	9	
68	Northern Lights Substation, new T-D interconnection	2020***	2020	3	T-D Interconnection	Planned	A	12346	26.0	
69	Portage-Trienda 138-kV uprate X-67	2022**	2020	3	reliability (69P1.2)	Planned	A	1624	2.0	
70	Juneautown Substation, new T-D interconnection	2020***	2020	5	T-D Interconnection	Proposed	targeted A 18	13104	34.6	

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71	Birnamwood SS, DIC, replace transformer and substation rebuild	2021***	2021	1	T-D Interconnection	Proposed	targeted A 18	15128	4.50	
72	Eastern UP, new DIC	2021***	2021	2	T-D Interconnection	Proposed	targeted A 18	15130	12.59	
73	Kincheloe SS, New DIC	2021***	2021	2	T-D Interconnection	Proposed	targeted B 18	14968	0.36	
74	Green County, new DIC	2021***	2021	3	T-D Interconnection	Proposed	targeted A 18	15129	4.50	
	Portage Industrial Park SS, DIC, replace transformers and substation rebuild	2021***	2021	3	T-D Interconnection	Proposed	targeted A 18	15127	3.00	
76	Bayport area - Pioneer, rebuild as double-circuit 138 kV	2021	2021	4	Asset renewal, T-D interconnection	Proposed	targeted A 18	14706	51.7	
77	Dartford SS, DIC - Transformer Replacement	2021***	2021	4	T-D Interconnection	Proposed	targeted B 18	14907	0.05	
	J505 GIC, Apollo SS, Generator Interconnection and Network Facilities	2021***	2021	4	G-T Interconnection	Proposed	targeted A 18	14925	8.30	
79	Distribution Interconnection 2021	2021***	2021	Various	T-D Interconnection	Proposed	targeted B 18	14907	7.35	
	Presque Isle - Tilden 138 kV line loop into National and uprate National - Tilden 138 kV line	2020	2021	2	reliability (prior + P1.2)	Provisional	targeted B 18, target A 19	15345	<10	was 2020
	Ogden St. Networking Project: Ogden St Bayshore 69-kV line construction	2021*	2021	4	T-D interconnection	Planned	А	4732	10.4	was 2018
82	Port Washington - Saukville: Rebuild Line 762 to a double circuit	2021	2021	5	reliability (P2.4, P7.1)	Planned	А	9986	18.0	
83	Lakota Rd to Winona 138-kV Conversion	2025***	2021	2	reliability (prior + P1.2), condition	Provisional			>25	
84	Arnold Substation: 345 kV, 80 MVAR Inductor Bank	2022***	2022	2	P0	Provisional	targeted B 18	14187	5.00	
85	Pioneer - Crivitz (E-83/B-2), retire 69 kV and reconfigure load to 138 kV	2022	2022	4	Asset renewal, T-D interconnection	Proposed	targeted A 18	14926	20.4	
86	Riverside SS, 69 kV Bus Uprate	2022***	2022	4	reliability (prior plus P1)	Proposed	targeted A 18	13832	0.08	
87	Distribution Interconnection 2022	2022***	2022	Various	T-D Interconnection	Proposed	targeted B 18	14968	38.48	
88	Venus SS, new inductor bank	2022***	2022	1	P0	Provisional	target B 19		<10	
89	Eaton Substation, new T-D interconnection	2022***	2022	4	T-D Interconnection	Planned	A	10484	2.5	
90	Edgewater SS, DIC, replace transformer and substation rebuild	2023***	2023	4	T-D Interconnection	Proposed	targeted A 18	15126	3.00	
91	Cardinal - Hickory Creek 345-kV line construction	2023***	2023	3	reliability, economics and policy benefits	Proposed	A	3127	492.2	
92	West Middleton - Stagecoach 69 kV line rebuild 6927	2023**	2023	3	reliability (P1.2, P1.3)	Proposed	В	12175	3.8	
	Arcadian Substation: install redundant bus differentials on 345-kV and 138-kV buses	2023	2023	5	reliability (stability E2.D)	Provisional			<10	

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94	Granville Substation: install redundant bus differentials on 345-kV and 138-kV buses	2023	2023	5	reliability (stability E2.D)	Provisional			<10	
95	Bayridge Substation, new T-D interconnection	2024***	2024	4	T-D Interconnection	Planned	А	10485	<10	
96	Keel Ridge SS, New DIC	2025***	2025	2	T-D Interconnection	Proposed	targeted A 18	13792	2.60	
97	Gran Grae Substation: Install a second 161/69 kV transformer	2026	2026	3	reliability (69P1.3)	Provisional			<10	
98	Portage - Columbia 138-kV line rebuild X-13	2018	2027	3	reliability (P1.2)	Provisional	target B 19	4730	6	
99	Portage - Columbia 138-kV line rebuild X-20	2018	2027	3	reliability (P1.2)	Provisional	target B 19	4730	6	
100	Construct Cardinal-Blount 138-kV line	>2033	2029	3	reliability (P6)	Provisional		1730	60.8	
101										
102										
103	* = dates based on approved project scope ISDs									
104	** = SBRM Study Need Year									
105	*** = Other Major Project Study need year									
106										
107	No Shading = No change to project since previous Assessment									
108										
109	Gray Shading = some change (e.g. In-service year or scope) since previous Assessment									