Table RS-3
Transmission Line Rebuilds/Reconductors, New Circuits and Voltage Conversions on Existing Right-of-Way

Identified need	Lines to be rebuilt/reconductored on existing ROW	Approx. mileage of rebuilt, reconductored or uprated lines	System need year	Projected In-service year	Planning zone	Environmental screening provided?	Comments
asset renewal	Partial rebuild Berlin-Wautoma 69-kV line	22.9	2011	2011	1	Yes	
asset renewal	Partial rebuild Whitcomb-Deer Trail 69-kV line	25.8	2010	2011	1	Yes	
asset renewal	Partial rebuild Nine Mile-Roberts 69-kV line	54.6	2011	2012	2	Yes	
asset renewal	Partial rebuild Rio-North Randolph 69-kV line	19.7	2011	2011	3	Yes	
asset renewal	Partial rebuild Spring Green-Stagecoach 69-kV line	24.6	2010	2011	3	Yes	
generation interconnection, relieve overloads or low voltages under contingency	Rebuild Brodhead to South Monroe 69-kV line	18	2011	2012	3	Yes	
relieve overloads or low voltages under contingency	Rebuild Sunset Point to Pearl Ave 69-kV line	2.37	2011	2012	4	Yes	
asset renewal	Underground cable replacement Sycamore-East Towne 69-kV	0.45	2012	2012	3	Yes	
relieve overloads or low voltages under contingency	Construct Canal-Dunn Road 138-kV line	7.64	2012	2012	4	Yes	
relieve overloads or low voltages under contingency, asset renewal, potential T- D interconnection request	Partial rebuild Dane-Dam Heights 69-kV line	5	2015	2012	3	Yes	
economics, relieve overloads or low voltages under contingency	Construct Monroe County-Council Creek 161-kV line	17.9	2013	2013	1	Yes	
economics, relieve overloads or low voltages under contingency	Uprate Council Creek-Petenwell 138-kV line	32	2013	2013	1	Yes	
asset renewal	Rebuild Concord-Rubicon 138-kV line	13	2013	2016	3	Yes	
relieve overloads or low voltages under contingency	Rebuild M38-Atlantic 69-kV line	22	2009	2013	2	Yes	
relieve overloads or low voltages under contingency, replace aging facilities	Rebuild Sun Valley Tap to Oregon 69-kV line	11	2020	2020	3	Yes	
asset renewal	Rebuild Edgewood-St. Martins 138-kV line	7.2	2014	2017	5	Yes	
asset renewal	Rebuild Edgewood-Mukwonago 138-kV line	7	2014	2017	5	Yes	
asset renewal	Rebuild Concord-Cooney 138-kV line	10.9	2014	2015	5	Yes	
asset renewal	Rebuild St. Lawrence-Hartford 138-kV line	5.2	2014	2014	5	Yes	
asset renewal	Underground cable replacement Redwood-First Avenue 69-kV line	0.8	2015	2015	4	Yes	
asset renewal	Rebuild Butte des Morts-Neevin 138-kV line	3	2015	2015	4	Yes	
asset renewal	Rebuild Dyckesville-Sawyer 69-kV line	24.8	2015	2015	4	Yes	
asset renewal	Partial rebuild Merrill Hills-Waukesha 138-kV line	12.3	2015	2015	5	Yes	
asset renewal	Rebuild Mears Corners-Sunset Point 138-kV line	4.1	2016	2016	4	Yes	
asset renewal	Rebuild Woodenshoe-Mears Corners 138-kV line	2.7	2016	2016	4	Yes	
asset renewal	Rebuild Wesmark-Manrap 69-kV line	19.7	2016	2016	4	Yes	
asset renewal	Rebuild Oak Street-Highway V 69-kV line	6	2016	2016	4	Yes	
asset renewal	Rebuild Finger Road-Danz 69-kV line	3.7	2016	2016	4	Yes	
asset renewal	Rebuild Neevin-Woodenshoe 138-kV line	3.4	2016	2016	4	Yes	
asset renewal	Partial rebuild Montello-Wautoma 69-kV line	20	2017	2017	1	Yes	
relieve overloads or low voltages under contingency, economic benefits	Construct 69-kV double-circuit line between McCue and Lamar substations	4.0	2017	2017	3	Yes	
asset renewal	Underground cable replacement Danz-University 69-kV line	2.7	2017	2017	4	Yes	

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		Approx. mileage of	System	Projected	Planning	Environmental	
Identified need	Lines to be rebuilt/reconductored on existing ROW	rebuilt, reconductored or uprated lines	need year	In-service year	zone	screening provided?	Comments
asset renewal	Rebuild North Appleton-Butte Des Morts 138-kV line	11.9	2017	2017	4	Yes	
asset renewal	Partial rebuild Summit-Waukesha 138-kV line	14.7	2017	2017	5	Yes	
relieve overloads or low voltages under contingency, replace aging facilities	Rebuild Colley Road-Brick Church 69-kV line	19.7	2018	2018	3	Yes	
asset renewal	Rebuild Dam Heights-Portage 69-kV line	23.5	2018	2016	3	Yes	
asset renewal	Rebuild Hillman-Eden 69-kV line	28	2018	2018	3	Yes	
asset renewal	Rebuild Paris-Albers 138-kV line	12.4	2018	2016	5	Yes	
asset renewal	Rebuild Plover-Whiting 115-kV line	5.7	2019	2019	1	Yes	
relieve overloads or low voltages under contingency	Uprate Royster to Sycamore 69-kV line	3.35	2019	2018	3	Yes	
asset renewal	Underground cable replacement West Middleton- Stagecoach 69-kV line	4.3	2019	2019	3	Yes	
asset renewal	Rebuild Goodman-Caldron Falls 69-kV line	21.3	2019	2019	4	Yes	
asset renewal	Rebuild New Holstein-Custer 69-kV line	21.8	2019	2015	4	Yes	
asset renewal	Underground cable replacement Lodestar-Erdman 69-kV line	5.3	2019	2019	4	Yes	
asset renewal	Underwater cable replacement Straits-McGulpin 69-kV line	6.2	2020	2020	2	Yes	
relieve overloads or low voltages under contingency	Construct Cardinal-Blount 138-kV line	5	2020	2020	3	Yes	
asset renewal	Underground cable replacement Erdman-Edgewater 69-kV line	0.7	2021	2021	4	Yes	
asset renewal	Rebuild Doylestown-Rio Pumping Station 69-kV line	11.5	2013	2013	3	Yes	
asset renewal	Partial rebuild Kirkwood-Trienda 138-kV line	16	2012	2012	3	Yes	
relieve overloads or low voltages under contingency	Reconductor Kansas-Harbor 138-kV line	8.4	TBD	TBD	5	Yes	
relieve overloads or low voltages under contingency	Rebuild Straits-Pine River lines 6904/5 for 138 kV and operate at 69 kV	25.3	2014	2014	2	Yes	
accommodate new generation	Convert Forest Junction-Howards Grove and part of Howards Grove-Holland 138-kV lines to double-circuit 345-kV operation	51	2018	2018	4	Yes	
relieve overloads or low voltages under contingency	Rebuild West Middleton-Pheasant Branch 69-kV line with double circuit	5	2022	2022	3	Yes	