

**Table PR-19
Transmission Line Rebuilds/Reconductors, New Circuits and Voltage Conversions on
Existing Right-of-Way**

Identified need	Lines to be rebuilt/reconducted on existing ROW	Approx. mileage of rebuilt, reconducted or uprated lines	System need year	Projected In-service year	Planning zone
relieve overloads or low voltages under contingency	Reconductor Stratford-McMillan 115-kV line (MEWD portion)	10	2006	2006	1
relieve overloads or low voltages under contingency, reduce service limitations, replace aging facilities	Rebuild Stiles-Amberg double circuit 138-kV line	45	1996	2006	2 & 4
accommodate new generation, relieve overloads or low voltages under contingency	Rebuild Weston-Sherman St. and Sherman St.-Hilltop 115-kV lines as double circuits with a new Gardner Park-Hilltop 115-kV line	9.5	2007	2007	1
achieve transfer capability associated with Arrowhead-Gardner Park, relieve overloads or low voltages under contingency, accommodate new generation	Reconductor Weston-Northpoint 115-kV line	24	2007	2007	1
relieve overloads or low voltages under contingency, accommodate new generation	Convert Kegonsa-McFarland-Femrite 69-kV line to 138 kV	5.9	2007	2007	3
relieve overloads or low voltages under contingency	Convert Sycamore-Reiner-Sprecher from 69 kV to 138 kV	6.5	2007	2007	3
relieve overloads or low voltages under contingency	String a new Ellinwood-Sunset Point 138-kV line on existing structures	3.58	2007	2007	4
relieve overloads or low voltages under contingency	Uprate North Appleton-Lawn Road-White Clay 138-kV line	29.8	2007	2007	4
achieve transfer capability associated with Arrowhead-Gardner Park	Upgrade Kelly-Whitcomb 115-kV line conductor clearances to 300F	24	2008	2008	1
relieve overloads or low voltages under contingency, replace aging facilities	Rebuild Atlantic-Osceola 69-kV line (Laurium #1)	13.7	2006	2008	2
relieve overloads or low voltages under contingency	Increase ground clearance of M38-Atlantic 69-kV line from 120 to 167 degrees F	22	2008	TBD	2
relieve overloads or low voltages under contingency	Rebuild Hustisford-Horicon 69 kV to 138 kV	8	2008	2008	3
relieve overloads or low voltages under contingency	Rebuild the Verona to Oregon 69-kV line Y119	11	2008	2008	3

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generation interconnection, relieve overloads or low voltages under contingency	Rebuild Brodhead to South Monroe 69-kV line	18	2008	2008	3
relieve overloads or low voltages under contingency	Rebuild Crivitz-High Falls 69-kV double circuit line	14.5	2008	2008	4
relieve overloads or low voltages under contingency, reduce service limitations	Uprate North Appleton-Mason Street 138-kV line	21	2008	2008	4
relieve overloads or low voltages under contingency, reduce service limitations	Uprate North Appleton-Lost Dauphin 138-kV line	12	2008	2008	4
accommodate new generation	Reconductor Pleasant Valley-Saukville 138-kV line	12	2008	2008	5
accommodate new generation	Reconductor Pleasant Valley-St Lawrence 138-kV line	7	2008	2008	5
reduce service limitations, relieve overloads or low voltages under contingency, improve transfer capability and Weston stability	Construct Gardner Park-Central Wisconsin 345-kV line	47	2009	2009	1
maintenance	Rebuild Hiawatha-Pine River 69-kV line ESE 6908	48.28	2009	2009	2
relieve overloads or low voltages under contingency, transfer capability	Rebuild/convert Conover-Plains 69-kV line to 138 kV	73	2009	2009	2
relieve overloads or low voltages under contingency	Convert Rock River to Bristol to Elkhorn 138-kV operation; rebuild Bristol with a new 138 kV bus	27.74	2008	2009	3
relieve overloads or low voltages under contingency	Rebuild 2.37 miles of 69 kV from Sunset Point to Pearl Ave with 477 ACSR	2.37	2009	2009	4
accommodate new generation	Reconductor Oak Creek-Ramsey 138-kV line	8.5	2009	2009	5
accommodate new generation	Reconductor Oak Creek-Allerton 138-kV line	5.41	2009	2009	5

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accommodate new generation	Loop Ramsey5-Harbor 138-kV line into Norwich and Kansas to form new Ramsey-Norwich and Harbor-Kansas 138-kV lines	5.72	2009	2009	5
access initiative, relieve overloads or low voltages under contingency	Construct Monroe County-Council Creek 161-kV line	20	2010	2010	1
access initiative, relieve overloads or low voltages under contingency	Uprate Council Creek-Petenwell 138-kV line	32	2010	2010	1
access initiative, relieve overloads or low voltages under contingency	Rebuild/reconductor Petenwell-Saratoga 138-kV line	23	2010	2010	1
relieve overloads or low voltages under contingency	Convert Indian Lake-Hiawatha 69-kV line to double-circuit 138-kV operation, construct new Hiawatha 138-kV Substation	40	2010	TBD	2
access initiative	Construct second Paddock-Rockdale 345-kV line	35	2010	2010	3
relieve overloads or low voltages under contingency	Rebuild/reconductor Town Line Road-Bass Creek 138-kV line	9	2010	2010	3
accommodate new generation	Uprate Oak Creek-Nicholson 138-kV line	6.8	2010	2010	5
T-D interconnection request	A second distribution transformer at Somers Substation requires a rebuild of the Racine-Somers-Albers 138-kV line; extend Albers 138-kV bus to permit connecting the Racine-Somers-Albers radial line to the Albers 138-kV bus	8	2011	2011	5
relieve overloads or low voltages under contingency, replace aging facilities	Rebuild Blaney Park-Munising 69 kV to 138 kV	50	2012	2012	2
relieve overloads or low voltages under contingency	Construct Huiskamp-Blount 138-kV line	5	2012	2012	3
relieve overloads or low voltages under contingency	Construct Canal-Dunn Road 138-kV line	7.64	2012	2012	4
accommodate new generation	Construct Oak Creek-St. Martins 138-kV circuit #2 installing 16.6 mi. conductor on existing towers	16.6	2013	2013	5

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accommodate new generation	Construct a Hale (Brookdale)-Granville 345-kV line converting/reconducting 5.6 mi. 138 kV, rebuilding 7 mi. 138 kV double circuit tower line and converting/reconducting 3 mi. 138 kV on existing 345 kV structures	15.6	2013	2013	5
accommodate new generation	Restricting Bluemound-Butler 138-kV line (KK5051) on new 345-kV structures installed with Hale (Brookdale)-Granville line	5.41	2013	2013	5
accommodate new generation	String Butler-Tamarack 138-kV line on new 345-kV structures installed with Hale (Brookdale)-Granville line	4.12	2013	2013	5
relieve overloads or low voltages under contingency	Reconfigure the North Randolph-Ripon 69-kV line to form a second Ripon-Metomen 69-kV line and retire the circuit between Metomen and the Mackford Prairie tap	5	2014	2014	1
accommodate new generation	Reconductor Cornell-Range Line 138-kV line	2.43	2014	2014	5
relieve overloads or low voltages under contingency	Reconductor Pulliam-Danz 69-kV line	3	2015	2015	4
relieve overloads or low voltages under contingency	Reconductor Danz-Henry Street 69-kV line	1.5	2015	2015	4
relieve overloads or low voltages under contingency	Reconductor Pulliam-Van Buren 69-kV line	2	2015	2015	4
relieve overloads or low voltages under contingency	Construct West Middleton-Blount 138-kV line	5	2016	2016	3
relieve overloads or low voltages under contingency	Upgrade the Royster to Sycamore 69-kV line to 115 MVA	3.35	2016	2016	3
relieve overloads or low voltages under contingency	Construct a Northside-City Limits 138-kV line	3.16	2016	2016	4
relieve overloads or low voltages under contingency, replace aging facilities	Rebuild/Convert Bayport-Suamico-Sobieski-Pioneer 69-kV line to 138 kV	21.5	2016	2016	4