

Table RS-1
Transmission Lines Requiring New Right-of-Way

Identified need	Potential solutions	Approx. line mileage		System need year	Projected In-service year	Planning zone	Environmental screening provided?	Comments and/or Corresponding Exhibit Number
		Total	New ROW					
economic benefits	Construct Pleasant Prairie-Zion Energy Center 345-kV line	7	7	2014	2013	5	Yes	Exhibit RS-1
relieve overloads or low voltages under contingency	Construct Old Mead Road-Chandler double circuit 138-kV lines and operate at 138/69	4	4	2014	2014	2	Yes	Exhibit RS-2
T-D interconnection request	Construct double-circuit 138-kV line to serve Milwaukee County T-D interconnection	2	2	2015	2015	5	Yes	Exhibit RS-3
relieve overloads or low voltages under contingency	Bay Lake: Holmes - Escanaba 138-kV two circuit project	54.9	15.3	2016	2016	42	Yes	Exhibit RS-4
relieve overloads or low voltages under contingency	Bay Lake: Green Bay - Morgan - Plains - National 345 kV line construction	155	155	2016	2016	42	Yes	Exhibit RS-5
relieve overloads or low voltages under contingency	Bay Lake: Green Bay - Morgan 138 kV line construction	23	23	2016	2016	4	Yes	Exhibit RS-6
reliability, economics and policy benefits	Badger Coulee: La Crosse area - North Madison - Cardinal 345-kV line construction	118	118	2018	2018	3	Yes	Exhibit RS-7
accommodate new generation	Construct Erdman-Howards Grove-Plymouth #4-Barnhart 138-kV line	18	18	2018	2018	4	Yes	Exhibit RS-8
relieve overloads or low voltages under contingency	Construct Fairwater-Mackford Prairie 69-kV line	4	4	2018	2018	1	Yes	Exhibit RS-9
reliability, economics and policy benefits	Cardinal Bluffs: Dubuque County area - Cardinal 345-kV line construction	80	80	2019	2019	3	Yes	Exhibit RS-10
T-D interconnection request,relieve overloads or low voltages under contingency	Construct Spring Valley-North Lake Geneva 138-kV line	19.0	19.0	2020	2019	35	Yes	Exhibit RS-11
T-D interconnection request,relieve overloads or low voltages under contingency	Construct a new 69-kV circuit from Twin Lakes to the new substation	1.0	1.0	2020	2019	35	Yes	Screening information included in Spring Valley - North Lake Geneva write-up. (Exhibit RS-11)
relieve overloads or low voltages under contingency	Construct a Lake Delton-Birchwood 138-kV line	5	5	2020	2020	31	Yes	Exhibit RS-12
relieve overloads or low voltages under contingency	Construct a Hubbard-East Beaver Dam 138-kV line	10	10	2022	2022	34	Yes	Exhibit RS-13
relieve overloads or low voltages under contingency, economics	Construct Shoto to Custer 138-kV line	6.9	6.9	2022	2022	4	Yes	Exhibit RS-14