

Table PR-18
Zone 5 Transmission System Additions

System Additions	System Need Year	Projected In-Service Year	Planning Zone	Need Category	Planned, Proposed or Provisional
Construct a 138-kV bus at Pleasant Valley Substation to permit second distribution transformer interconnection	2010	2010	5	T-D interconnection	Planned
Expand 345-kV switchyard at Oak Creek to interconnect one new generator	2010	2010	5	new generation	Planned
Construct second Shorewood-Humboldt 138-kV underground cable*	2012	2010	5	reliability (B2)	Proposed
Install 3-75 MVAR capacitor banks at Bluemound Substation	2012	2014	5	reliability (B1)	Provisional
Replace two existing 345/138-kV transformers at Arcadian Substation with 1-500 MVA transformer	2010	2015	5	reliability (B3)	Provisional
Uprate Arcadian-Waukesha 138-kV lines KK9942/KK9962	2010	2015	5	reliability (B2)	Provisional
Construct Spring Valley-Twin Lakes-South Lake Geneva 138-kV line	2018	2018	3 & 5	T-D interconnection, reliability (69B2)	Provisional
Upgrade Oak Creek-Pennsylvania 138-kV line	2021	2020	5	reliability (B2)	Provisional
Install 2-32 MVAR capacitor banks at Mukwonago 138-kV Substation	2021	2020	5	reliability (B2)	Provisional
Reconductor Ramsey-Harbor 138-kV line	TBD	TBD	5	reliability	Provisional