

Table PR-17
Zone 4 Transmission System Additions

System Additions	System Need Year	Projected In-Service Year	Planning Zone	Need Category	Planned, Proposed or Provisional
Install a second 138-kV reserve auxiliary transformer (RAT) at Kewaunee and remove tertiary auxiliary transformer (TAT)	2009	2009	4	reliability	Proposed
Uprate Point Beach-Sheboygan Energy Center 345-kV circuit L111 to 167 degrees F	2010	2010	4	economics	Proposed
Reconfigure Kewaunee 345/138-kV switchyard and install a second 500 MVA 345/138-kV transformer	2011	2011	4	reliability, condition	Proposed
Rebuild 2.37 miles of 69 kV from Sunset Point to Pearl Ave with 477 ACSR	2011	2011	4	reliability	Planned
Construct Canal-Dunn Road 138-kV line	2012	2012	4	reliability	Proposed
Install 60 MVA 138/69-kV transformer at Dunn Road	2012	2012	4	reliability	Proposed
Replace two existing 138/69-kV transformers at Glenview Substation with 100 MVA transformers	2016	2016	4	reliability	Provisional
Construct second Dunn Road-Egg Harbor 69-kV line	2016	2016	4	reliability	Provisional
Replace two existing 138/69-kV transformers at Sunset Point Substation with 100 MVA transformers	2018	2018	4	economic benefits	Provisional
Install 28.8 MVAR capacitor bank at Butternut 138-kV Substation	2020	2020	4	reliability	Provisional

Table PR-17 (continued)
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System Additions	System Need Year	Projected In-Service Year	Planning Zone	Need Category	Planned, Proposed or Provisional
Uprate the Melissa-Tayco to 229 MVA (300F)	2020	2020	4	reliability, economics	Provisional
Install 138/69-kV transformer at Custer Substation	2020	2020	4	reliability, economics	Provisional
Construct Shoto to Custer 138-kV line	2020	2020	4	reliability, economics	Provisional
Rebuild/Convert Bayport-Suamico-Sobieski-Pioneer 69-kV line to 138 kV	2020	2020	4	reliability, condition	Provisional