

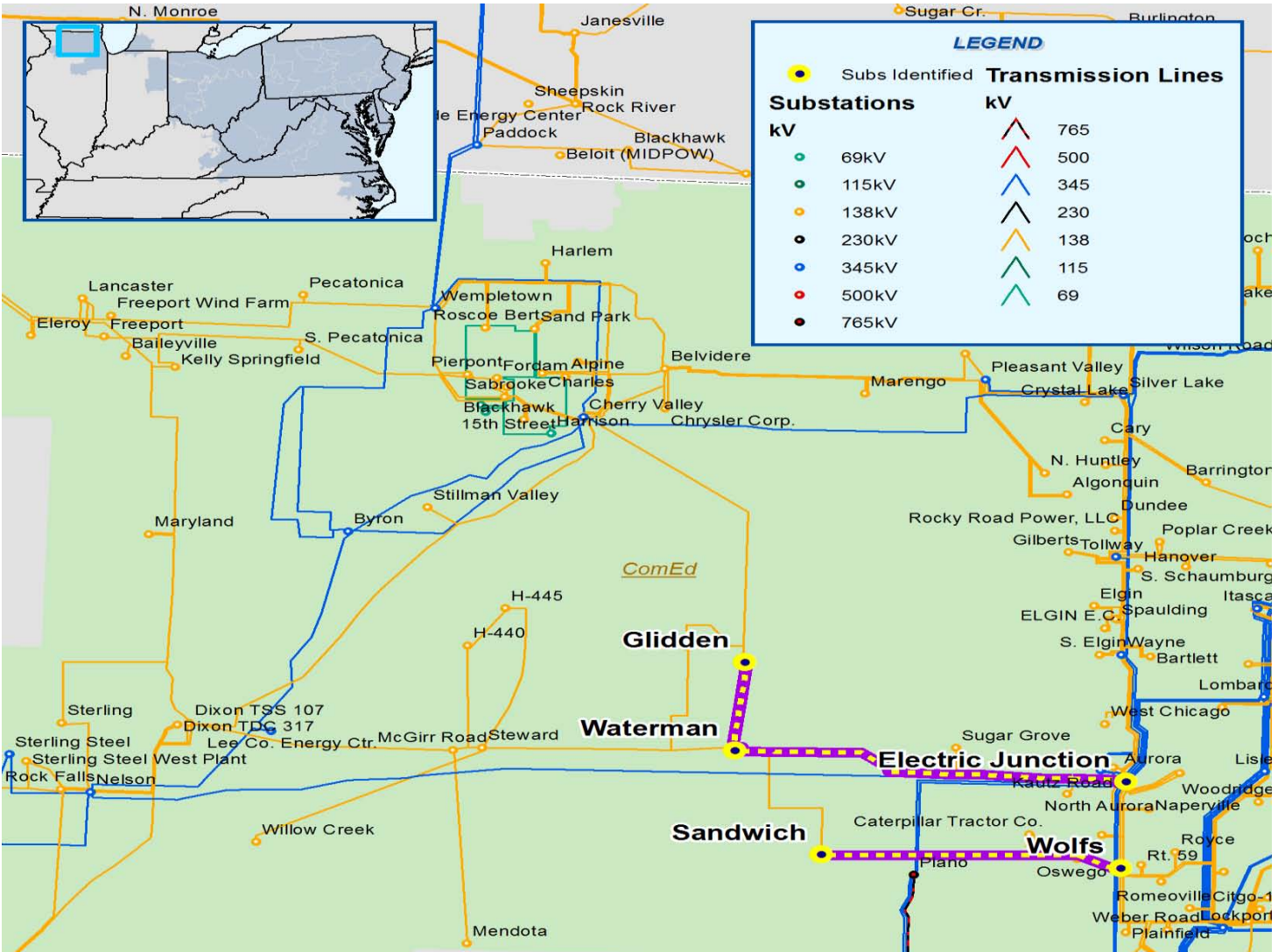


An Exelon Company

Modification of the Wolfs Crossing-Sandwich (L14302) Special Protection System (SPS)

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Wolfs Crossing-Sandwich 138kV line (L14302)



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- ✓ Background – The primary source of L14302 is a single 345/138kV autotransformer at TSS 143 Wolfs Crossing. When 14302 CB is open at Wolfs Crossing, load is fed from Nelson (~85 miles) and Cherry Valley (~75 miles) substations.
- ✓ Purpose - To prevent low voltage on 138 kV line 14302.
- ✓ Triggering Event - Existing 14302 SPS initiates transfer trip on line 14302 for a 138kV bus 1 fault (NERC Category C) at TSS 143 Wolfs Crossing. The modification is to incorporate open line 14302 circuit breaker at TSS 143 Wolfs Crossing into the existing SPS.
- ✓ Consequence of Failure to Operate - Fully redundant system, no consequence for failure of single SPS component.
- ✓ Consequence of Misoperation - Studies show that there are no thermal or voltage violations with the single contingency loss of line 14302.
- ✓ RFC Approval – SPS approved by RFC on November 18, 2010.