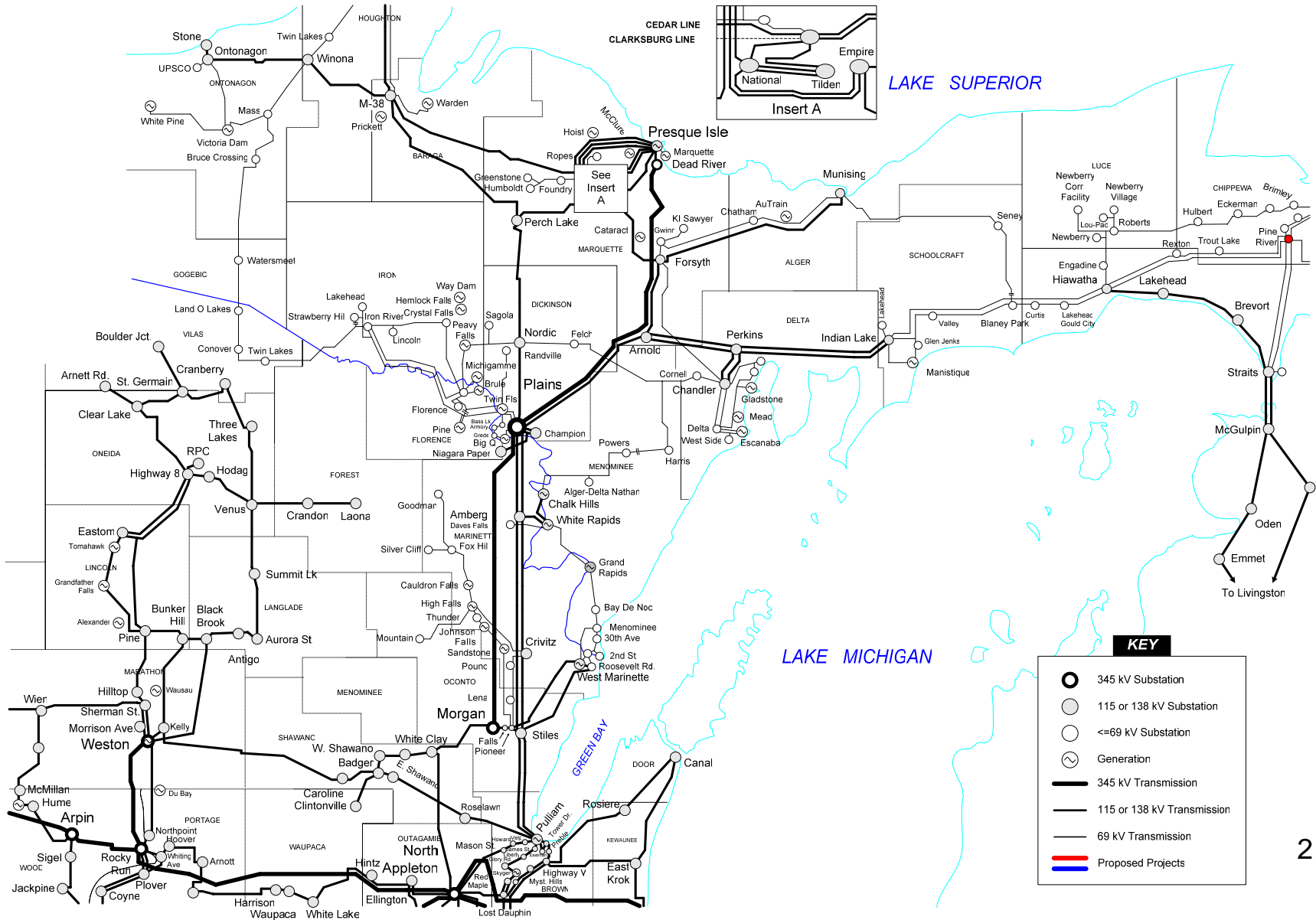




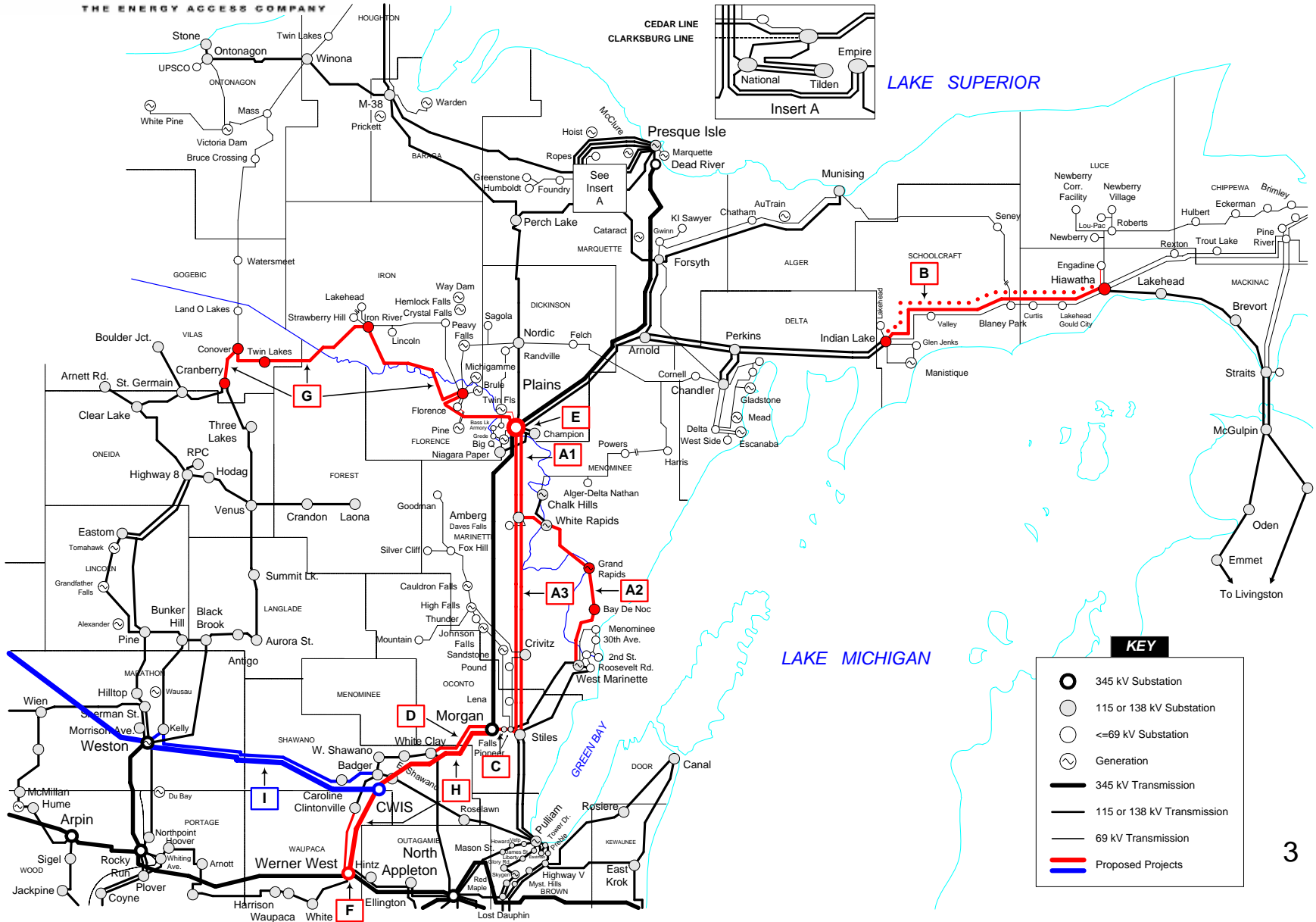
Northern Umbrella Plan Update

December 15, 2006

System Prior to NUP Projects



Northern Umbrella Plan





NUP Projects

Completed Projects:

A: Plains – Stiles 138 kV Rebuild

B: Indian Lake – Hiawatha 69 kV to 138 kV Rebuild

C: Morgan – Stiles 138 kV Rebuild

D: Morgan – White Clay 138 kV Up-rate

In-progress Projects:

F: New Werner West 345/138 kV Substation

G: Cranberry – Conover – Plains Project

H: Morgan – Werner West 345 kV Line (including Clintonville – Werner West 138 kV)

I: New Weston – Central Wisconsin 345 kV Line (for generator interconnection)

Planned Projects:

E: Add 2nd Plains Transformer



Project Overview and Status

Plains-Stiles 138kV Rebuild

- Re-conductor Amberg to White Rapids complete
- Rebuild White Rapids to West Marinette complete
- Rebuild Plains to Stiles complete



Project Overview and Status

Second Transformer at Plains

- Scope
 - Add a second 345/138 kV, 250MVA transformer
- Schedule/Status
 - Pre-project planning started
 - Will obtain pre-authorization in early 2007
 - Start design in 2007
 - Planned in-service 3rd Quarter 2009



Project Overview and Status

New Werner West Substation

- Certificate of Authority from PSCW in June 2005
- Construction started in April 2006 with an expected December 2006 completion
- All equipment/material on site
- Engineering complete
- Test & Commissioning underway



Cranberry – Conover – Plains

Pre-certification activities	June 2004 – Sept 2006
ATC Executive approval	July 2005
ATC Board approval	July 2005
File CPCN application	November 2005
CPCN Order received	November 20, 2006
Construction activities	3 rd Qtr '07 thru 2 nd Qtr '09
Project completion and in-service	June 2010



New Morgan-Werner West 345kV Line

ATC Executive approval	February 2005
ATC Board approval	February 2005
File CPCN application	March 2005
CPCN issued	June 2006
Pre-construction activities <i>(Surveying, engineering, real estate, material procurement)</i>	January 2006 – October 2007
Construction period	January 2007 – December 2009
Project in-service	December 2009



New Gardner Park-Central WI 345kV line

ATC Executive approval	February 2005
ATC Board approval	February 2005
File CPCN application	March 2005
CPCN issued	June 2006
Pre-construction activities <i>(Surveying, engineering, real estate, material procurement)</i>	January 2006 – October 2007
Construction period	January 2007 – December 2009
Project in-service	December 2009



Project Status Summary

Project Name	Key Need Drivers	Projected In-Service Date	Projected Cost	Status
A: Plains – Stiles 138 kV Rebuild	Physical condition; transfer capability; solution also results in a more robust parallel path for 2/3 of P-S corridor		\$94.3M	Complete
•A1: Plains – Amberg		October 2005	-	Complete
•A2: Amberg – West Marinette		November 2005	-	Complete
•A3: Amberg – Stiles		October 2006	-	Complete
B: Indian Lake – Hiawatha 69 kV to 138 kV Rebuild	TLR mitigation; voltage support; physical condition; local load-serving in Manistique area; required operating guide that splits the U.P. system			Complete
•Phase 1 – Rebuild Indian Lake – Glen Jenks		August 2004	\$6.1M	Complete
•Phase 2 – Rebuild as double circuit 138 kV, operate at 69 kV		March 2006	\$46.2M	Complete
•Phase 3 – Convert to 138 kV operation		N/A	N/A	Not part of the Northern Umbrella Plan
C: Morgan – Stiles 138 kV Rebuild as double circuit	Transfer capability	May 2006	\$8.0M	Complete



Project Status Summary

Project Name	Key Need Drivers	Projected In-Service Date	Projected Cost	Status
D: Morgan – White Clay 138 kV uprate (eventual rebuild as part of Element H)	Transfer capability	March 2005	\$0.4M	Project Complete.
E: Add 2 nd Plains transformer (250 MVA 345/138 kV)	Transfer capability	2008	\$5.4M	No PSCW approval required. Scheduled for 2008.
F: New Werner West Substation with 345/138 kV transformer	TLR mitigation, system security	December 2006	\$15.3M	Construction ~99% complete with Test & Commissioning underway. Expect to meet the inservice date.
G: Cranberry – Conover – Plains Project	Transfer capability; Transmission service; Reliability, physical condition	See below	\$118.7M	PSCW rec'd Nov 2005.
• New 115 kV Cranberry – Conover		June 2008	-	Detailed design started, ROW acquisition to start in 1 st Qtr '07
• Rebuild 69 kV Conover – Plains to 138 kV		June 2010	-	Detailed design to start in 1 st Qtr '07
H: New Morgan – Werner West 345 kV line & Clintonville – Werner West 138 kV line	Transfer capability, reliability, and network service.	2009	\$132.3M	Surveying and easement acquisition underway to support construction 1Q07. Construction Mitigation Plan in regulatory review.
I: New Gardner Park – Central Wisconsin 345 kV line & Central Wisconsin 345 kV switching station	Required for new Weston 4 generation	2009	\$131.5M	Surveying and easement acquisition underway to support construction 1Q07. Construction Mitigation Plan in regulatory review.



Northern Umbrella Plan Summary

- Current estimated cost for all projects is \$558 million
- Total project spending to date is approximately \$193 million (through October 2006)
- Of the 9 projects –
 - 4 are complete and in-service
 - 4 are in various stages of design and construction
 - 1 is in planning
- Construction and completion of all projects is expected in mid-2010