

# American Transmission Company LLC

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## Northern Umbrella Plan (NUP) Projects

February 21, 2006

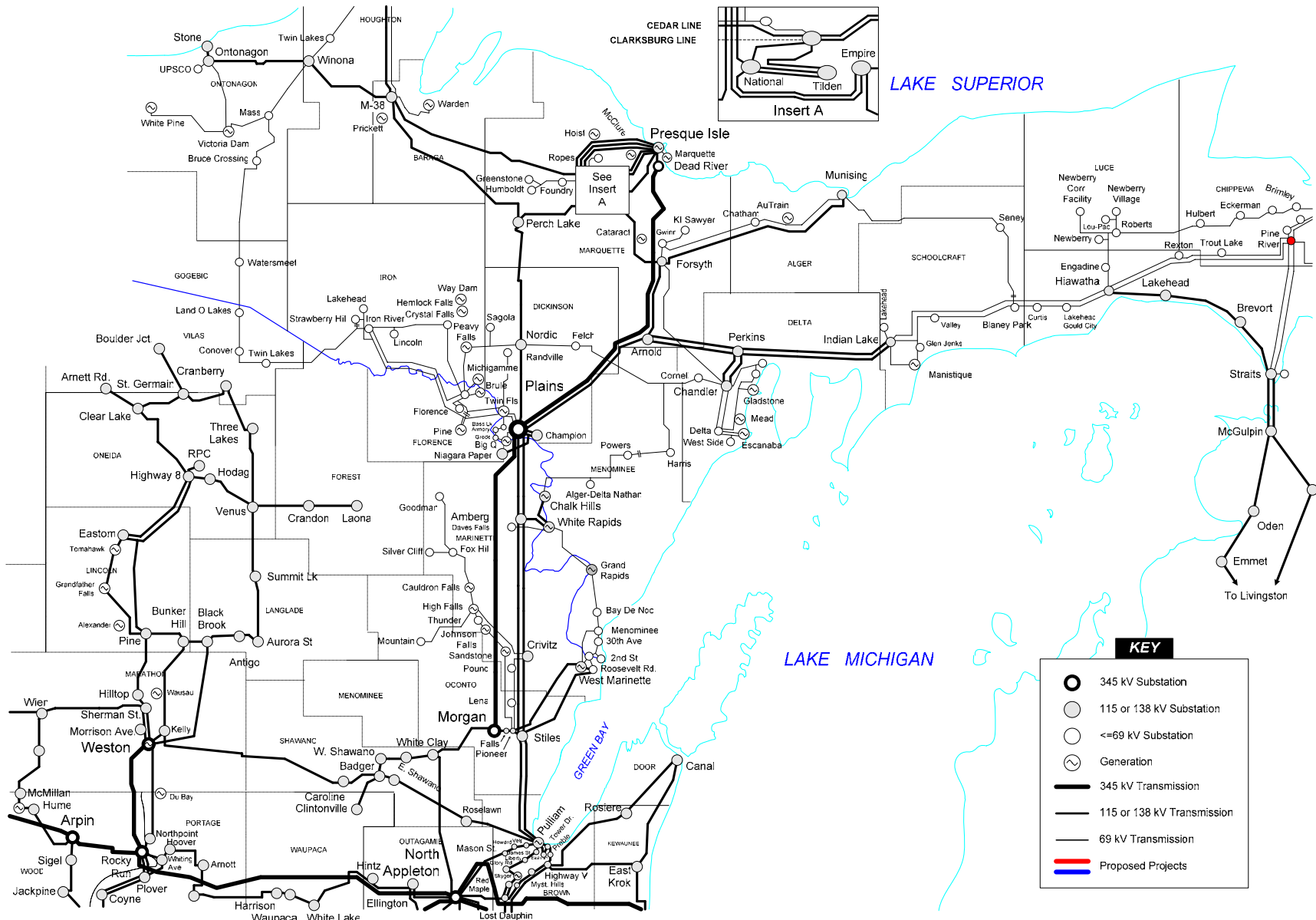


# Agenda

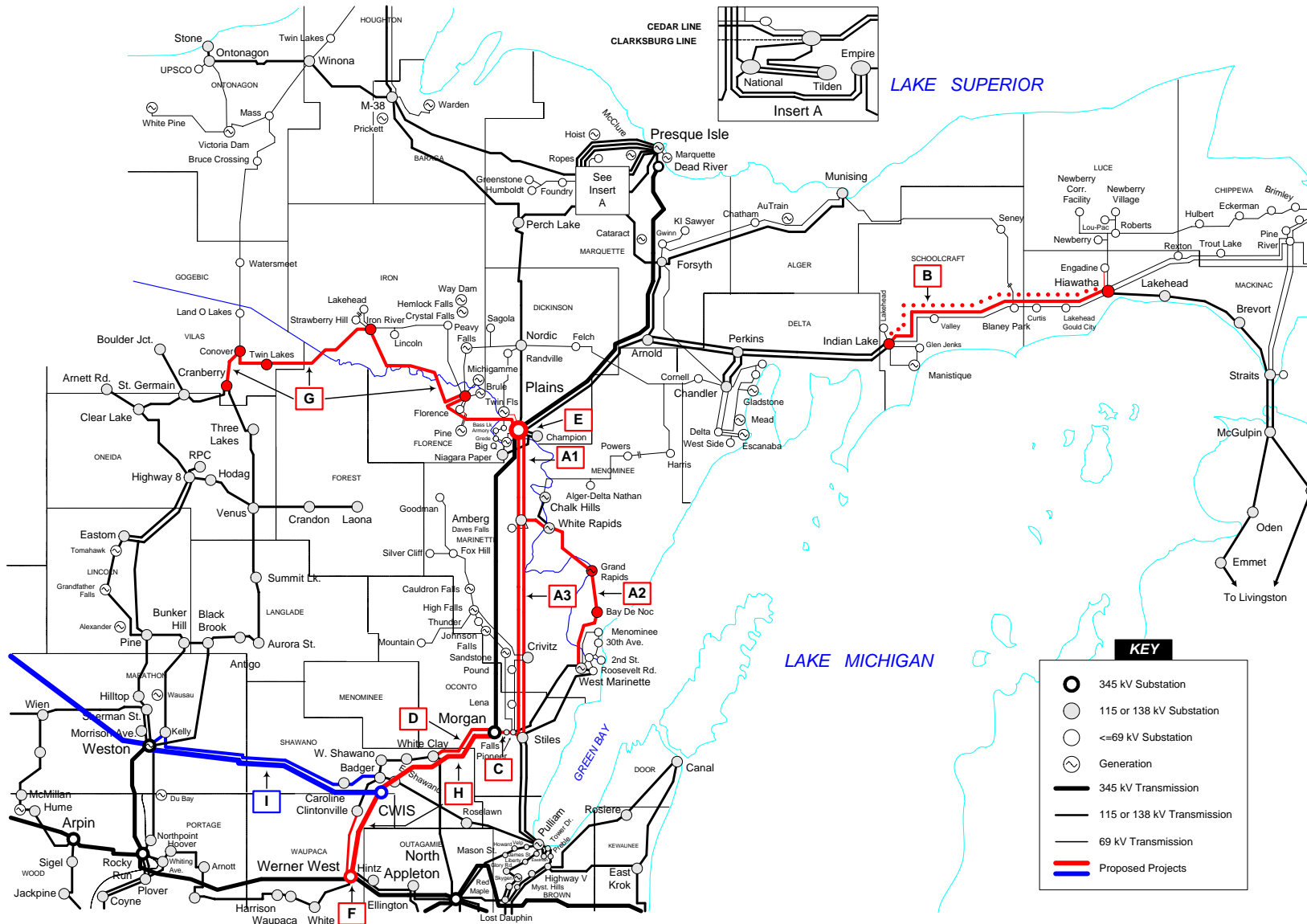
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- **Northern Umbrella Plan**
- **Individual Project Discussion**
- **Summary**

# System Prior to NUP Projects



# NUP Projects



# NUP Projects

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**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

**E:** Add 2<sup>nd</sup> Plains Transformer

**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)

## **Project Schedule/Status: Plains-Stiles 138kV Rebuild**

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- Reconductor Amberg to White Rapids complete
- Rebuild White Rapids to West Marinette complete
- Rebuild Plains to Stiles
  - Plains-Amberg rebuild complete
  - Transfer of second circuit from temporary structures scheduled for completion by February 2006 is now complete.
  - Amberg–Stiles rebuild started in December 2005 as scheduled and is on schedule for completion by November 2006

## **Project Schedule/Status: Indian Lake to Hiawatha 69 kV to 138 kV Rebuild (Phase 2)**

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- Line rebuild was started in November 2004
- Work is approximately 95% complete
- Forecasted to be complete and energized  
March 2006

# **Project Cost/Schedule/Status: Morgan to Stiles Rebuild**

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- The rebuild of the existing 11 mile H-frame supported, single circuit with double circuit mono-pole steel structures is complete
- Modifications (e.g. breakers, switches, jumpers, etc.) required at Morgan, Falls, and Pioneer to upgrade the substation equipment to match the new line rating are also complete
- Modifications at Stiles substation to upgrade equipment to match the new line rating will be completed in Spring 2006



## **Project: Add 2<sup>nd</sup> Plains SS Transformer**

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- Scope – Add a 2<sup>nd</sup> 345/138 kV, 250MVA transformer
- Schedule/Status –
  - Will obtain authorization in early 2007
  - Start design late 2007
  - Install in 2008

## **Project Cost/Schedule/Status: New Werner West Substation**

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- Received Certificate of Authority from PSC in June 2005
- Slated for construction start in spring 2006 and project completion December 2006
- Ordered all long lead equipment
- Engineering in final phase

## **Project Schedule/Status: Cranberry-Conover-Plains**

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Pre-certification activities	June 2004 – Sept 2006
ATC Executive approval	July 2005
ATC Board approval	July 2005
File CPCN application	November 2005
CPCN Order issued	November 2006
Construction activities	April 2007-Dec 2009
Project completion and in-service	Dec 2009

**Project Schedule/Status: New Morgan-Werner West  
345kV Line (including Clintonville-Werner 138kV)**

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ATC Executive approval	2/2005
ATC Board approval	2/2005
File CPCN application	3/2005
CPCN anticipated issue	6/2006
Pre-construction activities	1/2006-6/2007
<i>(Surveying, engineering, real estate, material procurement)</i>	
Construction period	10/2006-12/2009
Project in-service	12/2009

**Project Schedule/Status: New Gardner Park-Central WI  
345kV line (includes Central WI Switching Station)**

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ATC Executive approval	2/2005
ATC Board approval	2/2005
File CPCN application	3/2005
CPCN anticipated issue	6/2006
Pre-construction activities <i>(Surveying, engineering, real estate, material, procurement)</i>	1/2006-6/2007
Construction period	10/2006-12/2009
Project in-service	12/2009

# Project Status Summary

Project	Key Need Drivers	Projected In-Service Date	Projected Cost	Status
<b>A:</b> 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		\$98.5M	Project approved and under construction
•A1: Plains – Amberg		October 2005		Temporary line in service; reconstruction of permanent double-circuit line underway
•A2: Amberg – West Marinette		November 2005		Rebuild/conversion underway
•A3: Amberg – Stiles		November 2006		Scheduled to start when A1 and A2 are complete.
<b>B:</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			Phase I complete; Phase II in progress
•Phase 1 – Rebuild Indian Lake – Glen Jenks		August 2004	\$6.1M	Complete
•Phase 2 – Rebuild as double circuit 138 kV, operate at 69 kV		June 2006	\$45.0M	Construction underway
•Phase 3 – Convert to 138 kV operation		2009	Under review	Scheduled for 2009, but need and scope is being reviewed
<b>C:</b> Morgan – Stiles 138 kV Rebuild as double circuit	Transfer capability	August 2005	\$7.0M	Project approved and under construction

# Project Status Summary

Project	Key Need Drivers	Projected In-Service Date	Projected Cost	Status
<b>D:</b> Morgan – White Clay 138 kV uprate (eventual rebuild as part of Element H)	Transfer capability	March, 2005	\$0.4M	No PSCW approval required. Project Complete.
<b>E:</b> Add 2 <sup>nd</sup> Plains transformer (250 MVA 345/138 kV)	Transfer capability	2008	\$5.4M	No PSCW approval required. Scheduled for 2008.
<b>F:</b> New Werner West Substation with 345/138 kV transformer	TLR mitigation, system security	December, 2006	\$15.3M	CA approved by the PSC in June 2005, awaiting real estate transactions resulting in a 6 month delay.
<b>G:</b> Cranberry - Conover – Plains Project	Transfer capability; Transmission service; Reliability, physical condition	December 2009	\$118.2M	CPCN submitted to PSCW in Nov 2005
•Rebuild 69 kV Conover - Plains to 138 kV		2009		Work scheduled to begin in 2008
•New 115 kV Cranberry - Conover		2007		Work scheduled to begin in 2007
<b>H:</b> New Morgan – Werner West 345 kV line & Clintonville – Werner West 138 kV line	Transfer capability, reliability	2009	\$132.3M	CPCN submitted to PSCW in March 2005
<b>I:</b> New Gardner Park – Central Wisconsin 345 kV line & Central Wisconsin 345 kV switching station	Required for new Weston 4 generation	2009	\$131.5M	CPCN submitted to PSCW in March 2005

# Northern Umbrella Plan Rollup Summary

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- Current estimated cost for all projects is \$559.7 million
- Total project spending to date is approximately \$140 million (through January 2006)
- Of the 9 projects –
  - 1 is complete and in-service
  - 3 are greater than 50% constructed
  - 5 are in various stages of regulatory approval/permitting and design
- Construction and completion of all projects is expected in late 2009 if all goes according to plan



# Wrap Up

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**QUESTIONS & FEEDBACK**