### American Transmission Company LLC

#### Northern Umbrella Plan (NUP) Projects

September 13, 2006



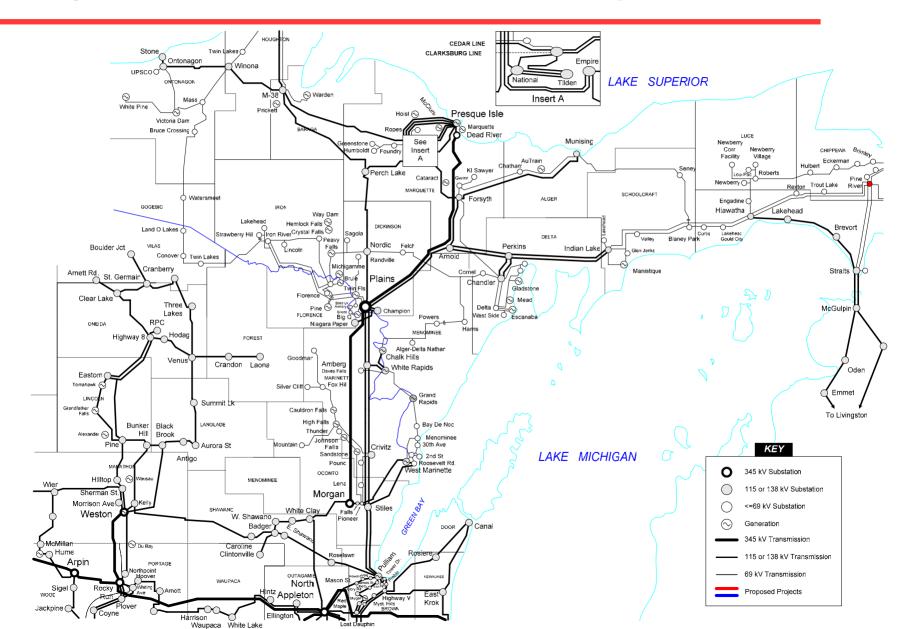
### Agenda

Northern Umbrella Plan

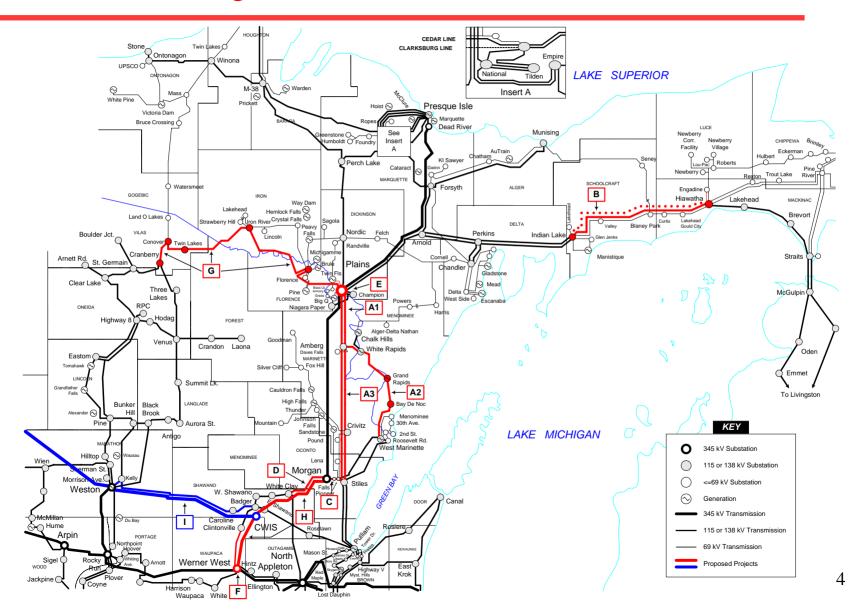
• Individual Project Discussion

• Summary

# System Prior to NUP Projects



### **NUP Projects**



### **NUP 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

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

- Reconductor Amberg to White Rapids complete
- Rebuild White Rapids to West Marinette complete

- Rebuild Plains to Stiles
  - Plains-Amberg rebuild complete
  - Amberg–Crivitz rebuild completed April 2006
  - Crivitz-Stiles rebuild is on schedule for completion by October 2006

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

- Line rebuild was started in November 2004
- Line rebuild was re-energized at 69kV operation on March 31, 2006
- All work has been completed.

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

- The rebuild of the existing 11 mile H-frame supported, single circuit with double circuit mono-pole steel structures is complete
- Modifications at Stiles substation to upgrade equipment to match the new line rating completed
- Line and major substation work is complete

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

- Scope
  - Add a second 345/138 kV, 250MVA transformer
- Schedule/Status
  - Will obtain authorization in early 2007
  - Start design late 2007
  - Install in 2008
  - In service may be pushed to 2009. Additional information forthcoming from ATC Planning

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

- Received Certificate of Authority from PSC in June 2005
- Construction started in April with an expected project completion December 2006
- Ordered all equipment
- Engineering complete

#### **Project Schedule/Status:** 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 issued (expected)	Sep/Oct 2006
Construction activities	April 2007-Dec 2009
Project completion and in-service	December 2009

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

ATC executive approval	February 2005
ATC board approval	February 2005
File CPCN application	March 2005
CPCN anticipated issue	July 2006
Pre-construction activities (Surveying, engineering, real estate, material procurement)	January 2006 – June 2007
Construction period	October 2006 – December 2009
Project in-service	December 2009

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

ATC executive approval	February 2005
ATC board approval	February 2005
File CPCN application	March 2005
CPCN anticipated issue	July 2006
Pre-construction activities (Surveying, engineering, real estate, material procurement)	January 2006 – June 2007
Construction period	October 2006 – December 2009
Project in-service	December 2009

# **Project Status Summary**

Project	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	Project approved and under construction
•A1: Plains – Amberg		October 2005		Complete
•A2: Amberg – West Marinette		November 2005		Complete
•A3: Amberg – Stiles		October 2006		Amberg-Crivitz in-service Crivitz-Stiles underway
<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		March 2006	\$46.2M	Complete
•Phase 3 – Convert to 138 kV operation		2009	Under review	Scheduled for 2009, but need and scope is being reviewed
C: Morgan – Stiles 138 kV Rebuild as double circuit	Transfer capability	May 2006	\$8.0M	In-service

## **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.
E: Add 2 <sup>nd</sup> 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	Below grade construction is complete. Above-grade construction is 85% complete. Test & Commissioning underway.
G: Cranberry - Conover – Plains Project	Transfer capability; Transmission service; Reliability, physical condition	December 2009	\$118.7M	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
H: New Morgan – Werner West 345 kV line & Clintonville – Werner West 138 kV line	Transfer capability, reliability	2009	\$132.3M	Survey work being completed – easements, material on order. Working with Regulatory (PSC) for approval of CMPs.
I: New Gardner Park – Central Wisconsin 345 kV line & Central Wisconsin 345 kV switching station	Required for new Weston 4 generation	2009	\$131.5M	Survey work being completed – easements, material on order. Working with Regulatory (PSC) for approval of CMPs.

#### Northern Umbrella Plan Rollup Summary

- Current estimated cost for all projects is \$558 million
- Total project spending to date is approximately \$178 million (through July 2006)
- Of the 9 projects
  - ➤ 3 are complete and in-service
  - ➤ 1 is greater than 50% constructed
  - ➤ 1 is less than 50% constructed
  - ➤ 4 are in various stages of regulatory approval/permitting and design
- Construction and completion of all projects is expected in late 2009 per current plan

### Wrap Up

## **QUESTIONS & FEEDBACK**