



Helping to keep the lights on,  
businesses running  
and communities strong®

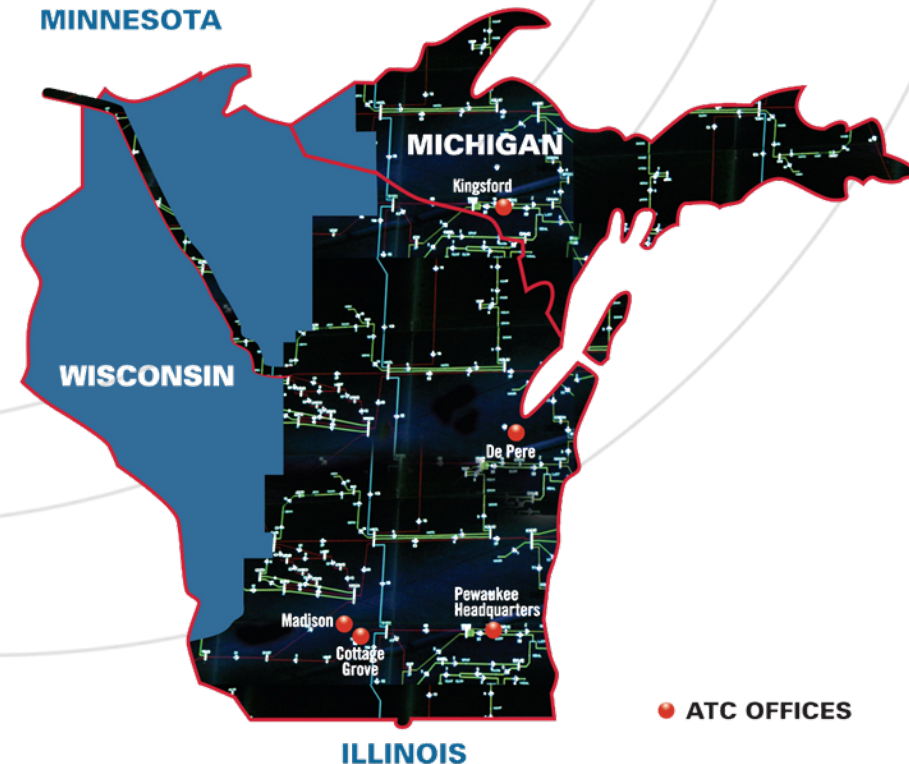
# Transmission Update

Ensuring reliability, lowering cost to deliver energy

Tom Finco, Vice President External Relations

# Introducing ATC

- Began operations in 2001 as 1<sup>st</sup> multi-state, transmission-only utility in U.S.
- Diverse ownership base includes investor-owned utilities and public power
- Grew from \$550 million in assets in 2001 to \$3.3 billion today
- Keeping the lights on with 9,480 miles of lines and 529 substations
  - 20% of system in Michigan



# How we conduct our business

- Bring people into the process
  - Public outreach
  - Regional planning studies
  - Industry groups and benchmarking
  - 10-Year Assessment
- Committed to environmental leadership
  - Compliance, impact reduction
  - Employee involvement, contractor training
  - Proactive partnerships and systems
  - Wisconsin Green Tier
  - Michigan Clean Corporate Citizen (C3)

# Transmission policy

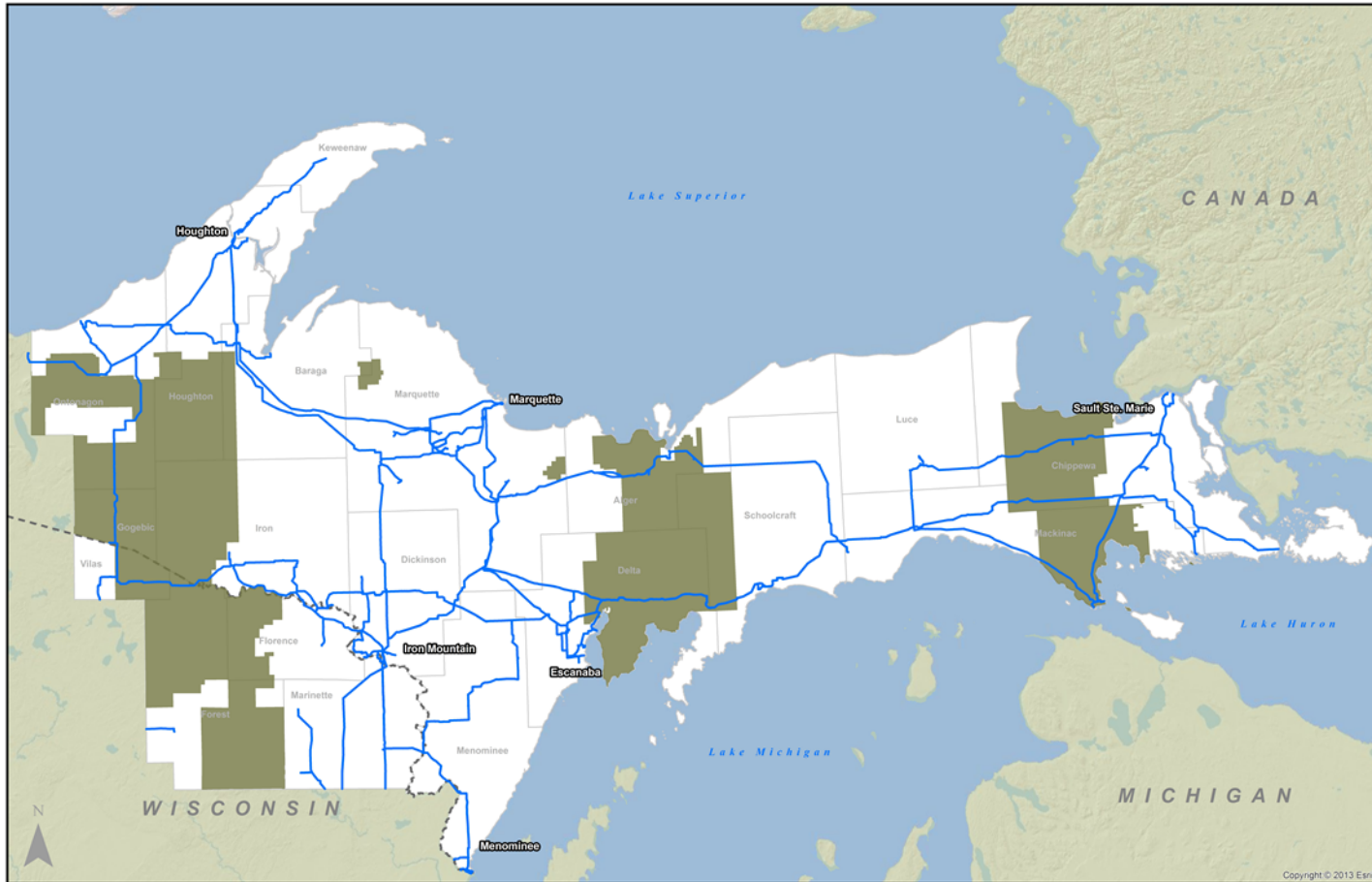
- Key issues and developments

- FERC Open Access Order (Order 888/1996)
  - ATC offers non-discriminatory access to all generation and load
- Move to regional (market) based planning and operation
  - Regional Transmission Organizations (i.e. MISO)
- Renewable Portfolio Standards (RPS)
- FERC Order 1000
  - Public policy need drivers
  - Cost allocation
  - Competition
  - Interregional Planning
- EPA regulations on air emissions

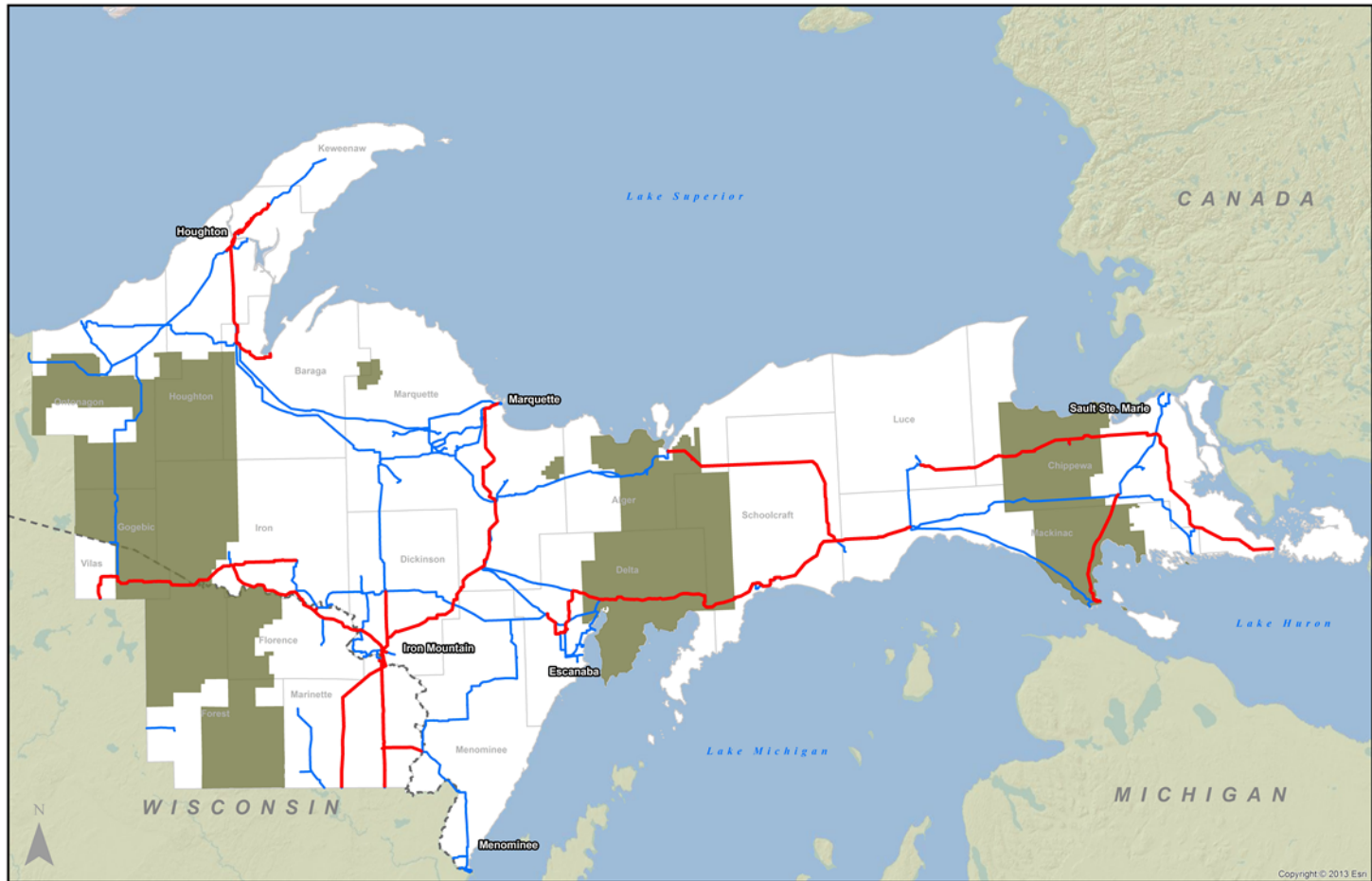
# Grid improvements at-a-glance

- **\$2.8 billion invested**
  - Upgraded 1,748 miles of transmission line
  - Improved 161 electric substations
  - Built 46 new transmission lines (589 miles)
- **Upper Peninsula specific**
  - \$400 million invested
  - 730 miles of transmission
  - 36 substations

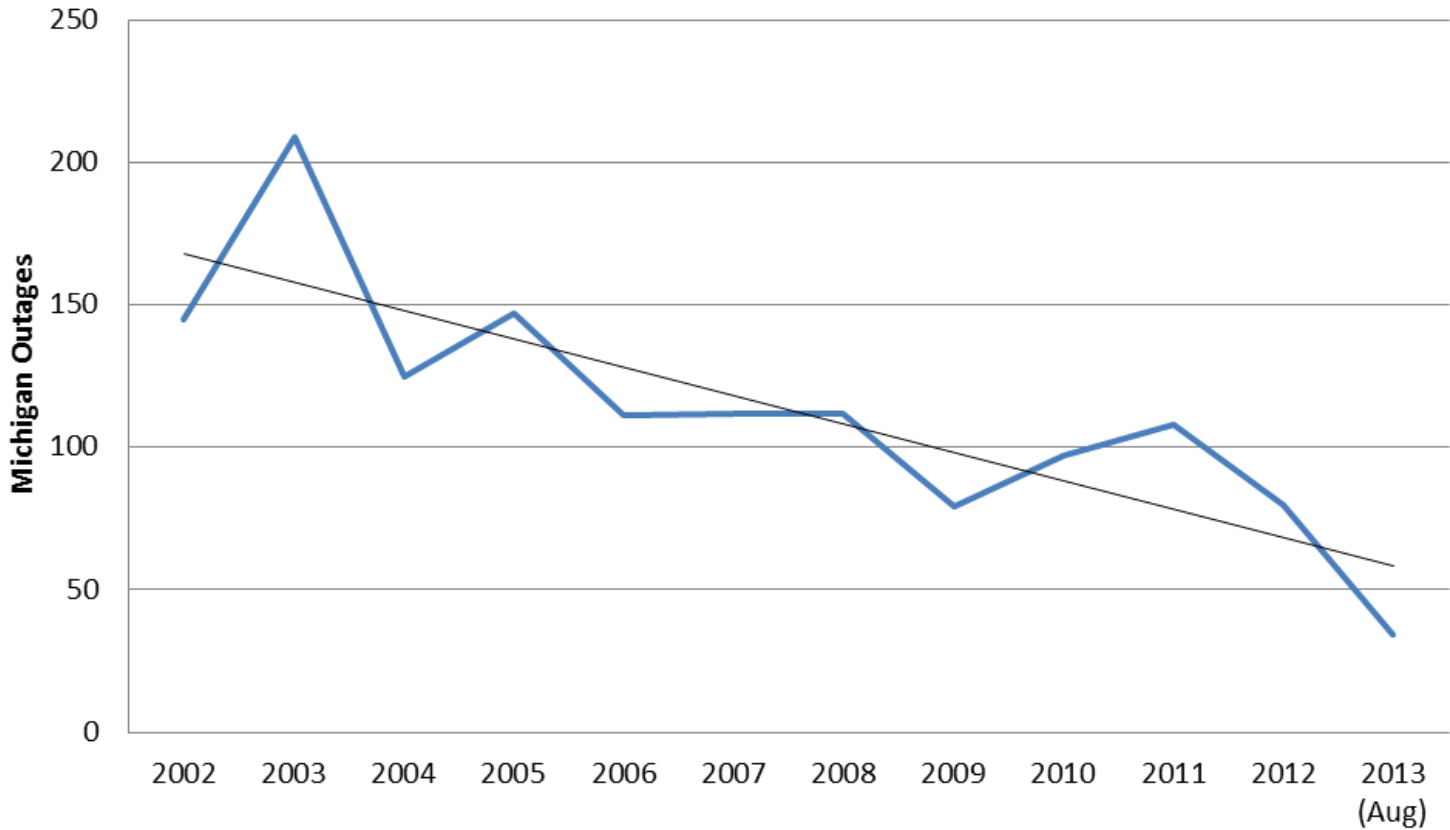
# Upper Peninsula transmission system



# Upper Peninsula transmission system



# Reliability improvements – total sustained outages



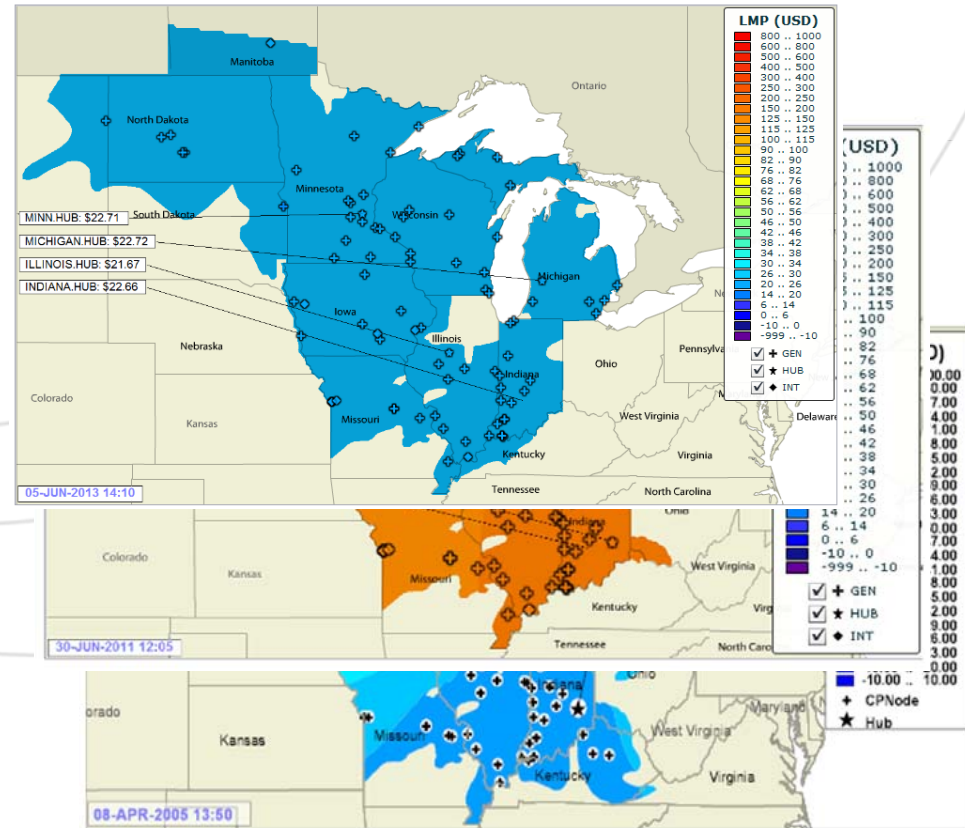
A sustained outage is  $\geq 1$  minute





# Grid provides access to market benefits

- ATC projects over past 3 years:
  - 99% of cost will be offset by savings in energy prices over life of projects
- Significant changes in Locational Marginal Prices since 2005 due to changes in load, generation, fuel prices and transmission



# Dollars and sense of grid improvements

- Transmission is a good value
- Electric superhighway allows utilities to buy and sell power when it's economic to do so
- We're asking the grid to do more than ever before
  - Evolving markets, changing sources, and new technologies

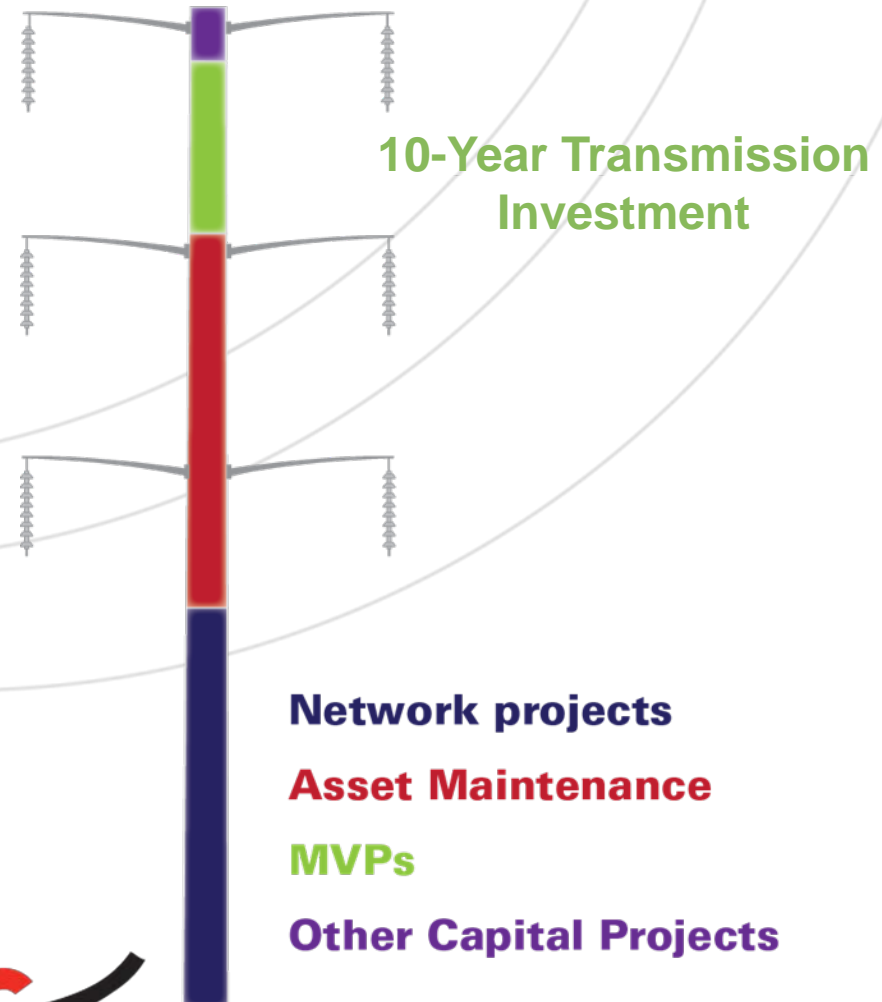
Your electric bill: 7%-10%

**Cost of transmission**



# Changing investment drivers

- Reliability remains top priority
- Need no longer driven just by local load forecasts, reliability
  - Renewables, system congestion, load-shape changes make planning increasingly complex
- Significant ongoing planning
  - 2013 10-Year-Plan indicates need for additional improvements



# Upper Peninsula is unique

- Geography
- Land use
- Transmission connections
  - Predominately north-south with Wisconsin
  - HVDC (mid 2014 in-service) controls excessive east-west flows through the UP
  - Total import capability: from 180mw to 500mw
- Energy use characteristics
  - Mix of industrial, commercial and residential
- Energy production
  - UP based generation is decreasing

# Current developments in Upper Peninsula

- Presque Isle Power Plant
  - Future being evaluated
  - Options (generation, demand response, transmission) will be evaluated
- Load uncertainty
  - Empire Mine
  - Load growth
- Marquette Board Light and Power
- RTO coordination & approvals (MISO)
- Retail choice

# Takeaways

- Dynamic environment
- Stay engaged
- Generation mix is changing
- Input is important: it's not ATC's plan, it's our plan
  - Be mindful of nexus with emerging need drivers
    - Growth, economics, public policy
  - Regional cost sharing = regional transparency and approvals
- Reliability top priority
  - Need for continuing investments
  - Mindful of cost / benefit
- Transmission is a good value
  - Market and policy enabler

# More information

[www.atcllc.com](http://www.atcllc.com)

[www.atc10yearplan.com](http://www.atc10yearplan.com)

[www.atc-projects.com](http://www.atc-projects.com)

