AMERICAN TRANSMISSION COMPANY®

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U.P. Energy Summit

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ATC's Track Record

- ATC has made considerable investments in Michigan since 2001 to improve reliability and increase import capacity into the Upper Peninsula
- Import Capacity in to the U.P.
  - 2001: ~200 MWs at system peak
  - 2014: ~600 MWs at system peak
- Gross Capital Expenditures (2001 – 2014)
  - System-wide: ~$3.95B (est.)
  - Michigan: ~$648M (est.)
- Revenue Requirement (FY 2014)
  - System-wide: ~$656.4M (est.)
  - Michigan: ~$64M (est.)

The U.P. Energy Challenge

- Generation, transmission and loads have historically operated in a delicate balance in the U.P.
- This delicate balance is the product of our history:
  - Generation and transmission was constructed during the 1950's and 60's to address an emergent need in the U.P.
  - Generation was typically located near large industrial loads
  - Large industrial loads continue to exist
  - New loads have been constructed or proposed
    - Eagle Mine/Humboldt Mill
    - Other new mining projects
    - Marquette BLP
  - A number of U.P. generators have been retired while others are slated for retirement

Possible Solutions

- Reduce load
  - Demand Response
  - Energy Efficiency
- Construct new generation in the U.P.
  - Several proposals have entered into MISO's queue
- Construct new generation and transmission
  - Preserve system reliability
  - Reduce/eliminate system constraints
  - Creates flexibility and opportunities for growth

Northern Area Reliability Assessment

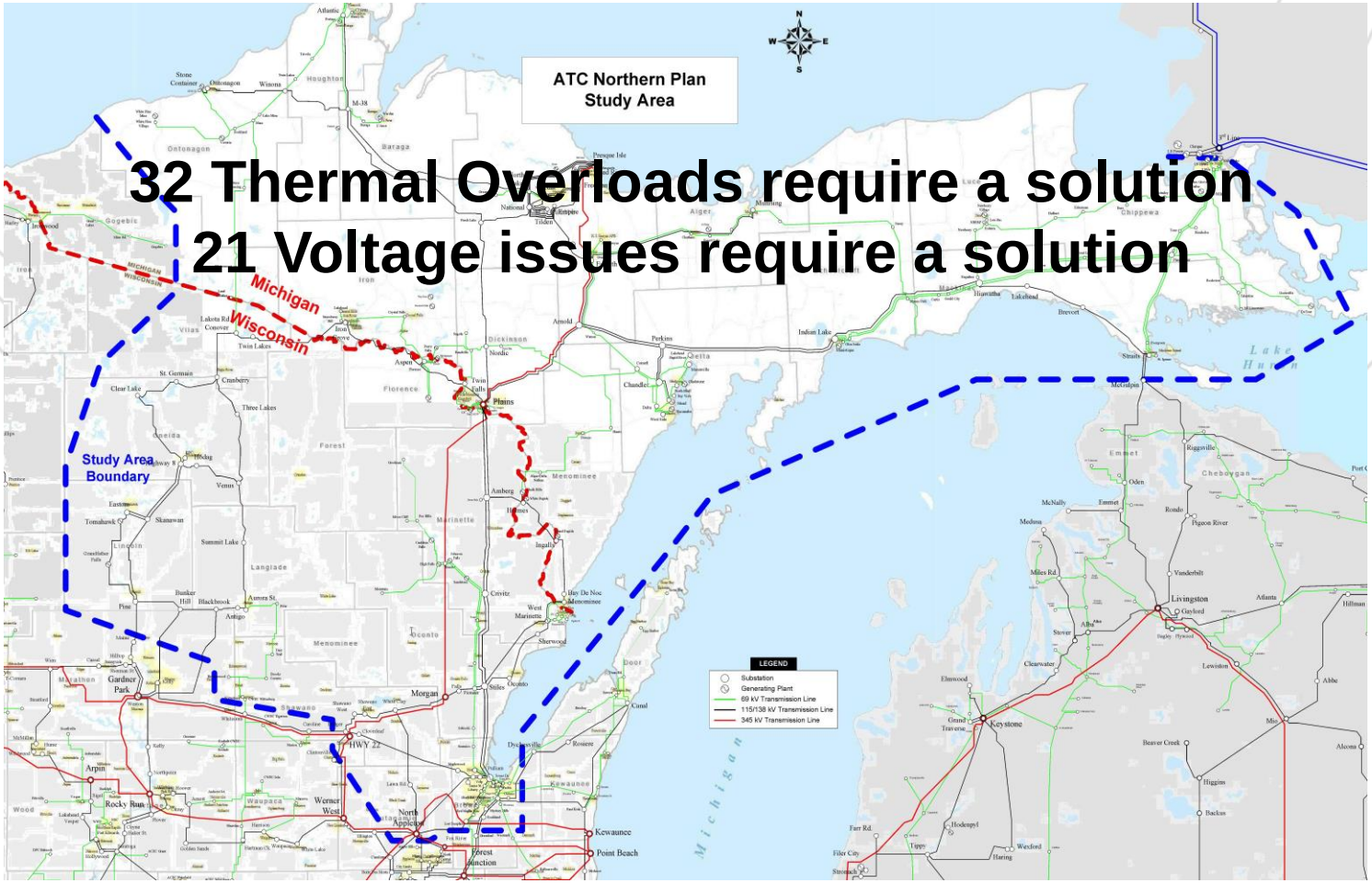
OBJECTIVE

- Develop and evaluate solutions that are necessary to maintain compliance with NERC reliability standards **if**:
  - Presque Isle Units 5-9 are retired
  - Other “resources” are not developed
- Accomplished via extensive stakeholder engagement
  - Stakeholder outreach and solution screening is on-going
    - “Least-regrets” transmission projects submitted to MISO for evaluation under MTEP15 (Appendix A and Appendix B)
    - Projects submitted under MTEP15 in response to regulator and stakeholder requests
- Supports the work that is being done by MISO

NARA Approach & Schedule

- Phase I – Study Design
  - Evaluate “Expected” and “Highly Likely” Futures
  - Seek alignment on major modeling assumptions
  - Stakeholder Engagement completed: May 2014
  - Study Design finalized: May 2014
- Phase II – Analysis & Needs Assessment
  - Review results and seek alignment on “Needs”
  - Analysis and Needs Assessment completed: July 2014
  - Stakeholder Engagement completed: August 2014
- Phase III – Solution Development
  - Solution alternatives developed: August/September 2014
  - Seeking alignment on “core transmission solutions” that will be necessary if other resources aren’t developed
  - Projects submitted for MTEP15 evaluation: September 2014
  - MISO MTEP15 approvals anticipated: Q4 2015

NARA Results



Takeaways

- Generation mix is evolving in the U.P. and beyond
  - Unit retirements (fossil fuel/coal-fired)
  - Integration of “Renewables”
  - Impact of lower Natural Gas prices
- Ensuring reliability will continue to be a top priority
  - Transmission is typically driven by “Reliability” needs
  - NERC Reliability Standards define the “rules of the road”
- Transmission facilitates and enables:
  - Integration of new generation/unit retirements
  - Integration of new load (economic development)

Contact Information

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