

2024 Economic Planning Study Kickoff

PRESENTED BY:

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March 11, 2024

- ATC Confidential & Proprietary -

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Introduction

- Project Updates
- Process Overview and Timeline
- Study Area Results
- Next Steps

AAR (ambient adjusted ratings)

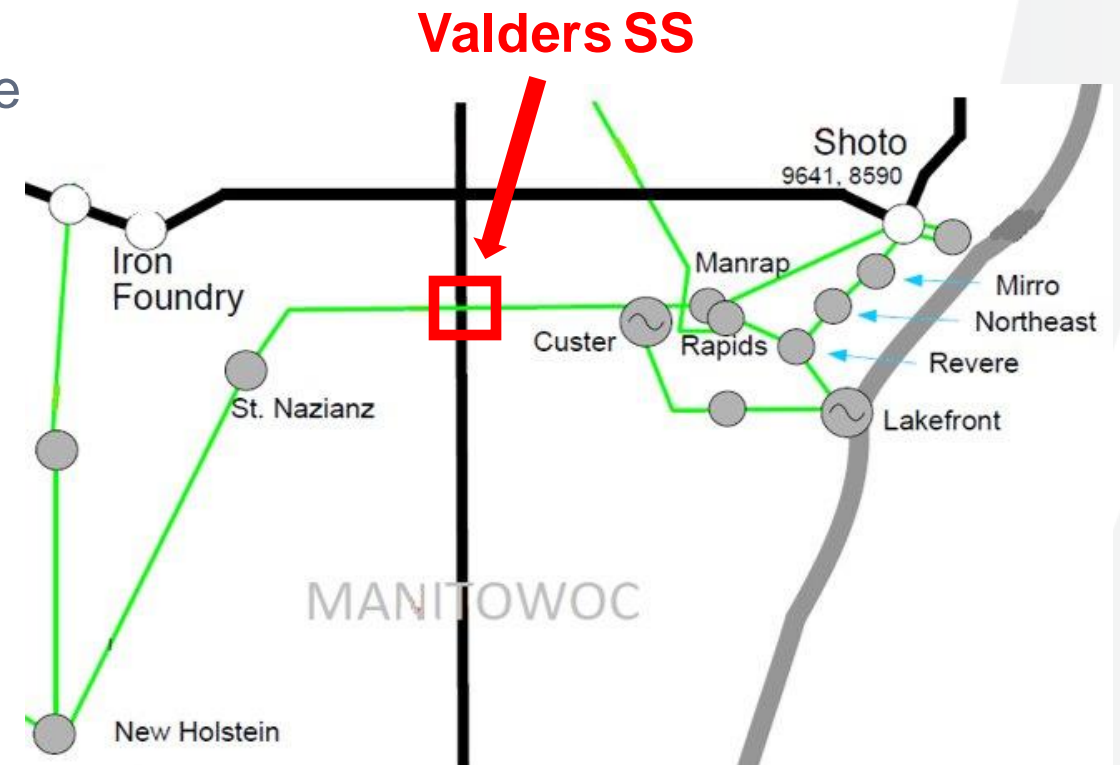
Line Number	SELD From Location	SELD To Location
6120	Plains	Big Quinnesec Falls
6130	Plains	Big Quinnesec Falls
6530	Mass	Conover
6820	Big Quinnesec Falls	Armory
6905	Straits	Pine River
6911	Hiawatha	Roberts

Posted on atcllc.com (ATC oasis) and will be update periodically.

https://www.atcllc.com/wp-content/uploads/Q1_2024_AAR-In-Program.pdf

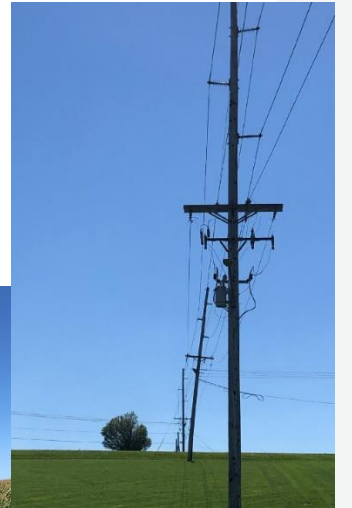
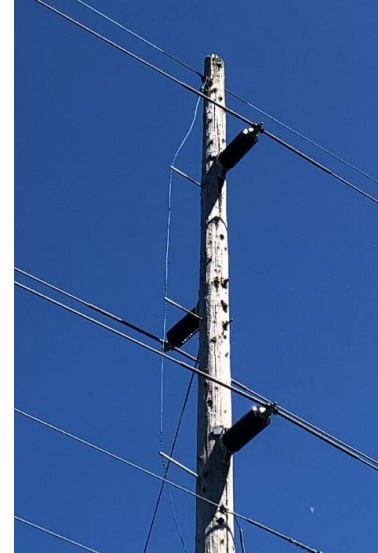
Valders Substation Update

- New 138/ 69kV Substation
 - Connects Forest Junction – Howards Grove 138kV and New Holstein – Custer 69kV
- Benefits
 - Relieves economic congestion
 - Additional 138 kV source
 - Improves operational flexibility
 - Prepares for possible load and generation changes
- Status
 - PSCW CA filing: Q2 2025



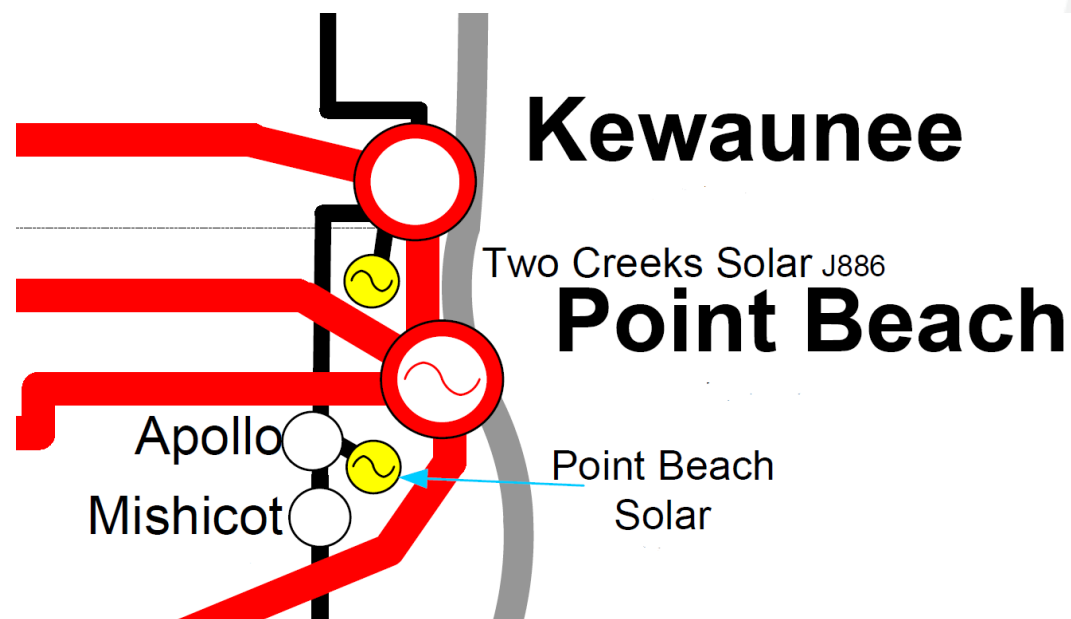
Eden – Rock Branch 69kV (Y-106)

- Rebuild with T2-Hawk, OPGW
- Significantly reduce need for renewable curtailment
- Eliminates poor weather performance
- Benefit to Cost ratio of 2
- Target A for MTEP24, MTEP ID 23910



Kewaunee – Point Beach 345kV (Q-303)

- Uprate Line
 - Address ground clearance violations on most limiting span
 - Cost: ~\$93k estimated
- ISD
 - 5/31/2024 targeted
 - Small Capital Project, exempt from MTEP due to short ISD
- Benefits
 - Reduce congestion and generation curtailment



ATC Process Overview and Timeline

- **During February** – we hold an initial stakeholder meeting to review the market congestion summary and potential fixes and to discuss economic study scenarios, drivers, ranges, and assumptions.
- **By March 1** – we work with stakeholders to request and prioritize new/other economic studies and recommend study assumptions.
- **By April 15** – we identify preliminary areas of economic study, study assumptions and models and solicit further comments from stakeholders.
- **By May 15** – we finalize areas of economic study, study assumptions and models to be used in analysis.
- **By November 15** – we provide a summary of the results of the economic analyses to our stakeholders.

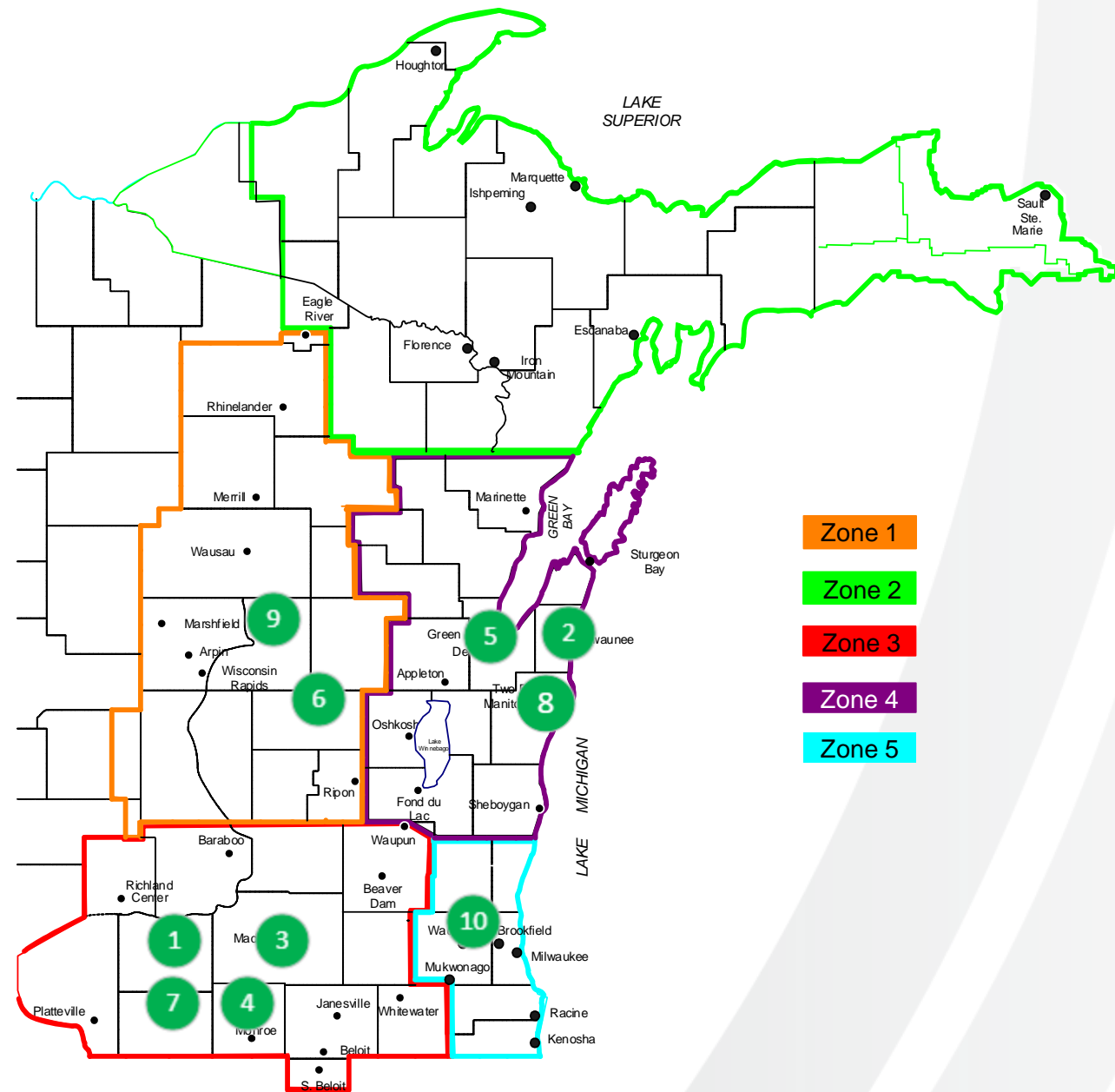
Model Development

- Utilize the MISO Transmission Expansion Plan (MTEP) 2024 models and futures
 - Add DPP projects and generators
 - Consider TYA, LRTP Tranche 2 and 2024 Target A projects

Notable 2023 Congestion

Day Ahead Hours	Real Time Hours	Constraint
1049.0	427.6	Eden - Rock Branch 69 kV (Y-106)
1251.0	176.8	Kewaunee - Point Beach 345 kV (Q-303)
925.0	445.2	East Campus - Walnut 69 kV (6976)
845.0	138.1	Albany - Bass Creek 138 kV (X-12)
605.0	38.0	Lost Dauphin - Red Maple 138 kV (Q-147)
412.0	213.7	Wautoma 138/69 kV Xfmr T31
466.0	101.1	Falcon - Quilt Block 138 kV
410.0	82.2	Northeast - Shoto 69 kV (K-11)
286.0	165.2	7 Mile Creek - Port Edwards 138 kV (X-159)
316.0	82.0	Bluemound - Butler 138 kV (5061)

- 1 Eden - Rock Branch 69 kV (Y-106)
- 2 Kewaunee - Point Beach 345 kV (Q-303)
- 3 East Campus - Walnut 69 kV (6976)
- 4 Albany - Bass Creek 138 kV (X-12)
- 5 Lost Dauphin - Red Maple 138 kV (Q-147)
- 6 Wautoma 138/69 kV Xfmr T31
- 7 Falcon - Quilt Block 138 kV
- 8 Northeast - Shoto 69 kV (K-11)
- 9 7 Mile Creek - Port Edwards 138 kV (X-159)
- 10 Bluemound - Butler 138 kV (5061)



Choosing Study Area

- Avoid areas that may have fixes for historical congestion
- Project scopes are not yet finalized for LRTP or older DPP phases
- **Best Value Plan**
- Eden - Rock Branch 69 kV (Y-106)
 - Rebuild
- Kewaunee - Point Beach 345 kV (Q-303)
 - Uprate
- Albany - Bass Creek 138 kV (X-12)
 - LRTP?
- Northeast - Shoto 69 kV (K-11)
 - Valders
- Bluemound - Butler 138 kV (5061)
 - LRTP?

Stakeholder and Customer Feedback

- ATC is soliciting stakeholders and customers for new/other economic studies, recommended study assumptions changes, and study areas for our 2023 study
- ATC requests feedback in areas where Public Policy Requirements may drive transmission needs.
 - Public Policy Requirements are enacted statutes (i.e., passed by the legislature and signed by the executive) and regulations promulgated by a relevant jurisdiction, whether within a state or at the federal level, including duly enacted laws or regulations passed by a local governmental entity, such as a municipal or county government. Stakeholders are encouraged to provide ATC with Public Policy Requirements. ATC utilizes transmission needs driven by Public Policy Requirements in its assumptions when performing economic analysis of study areas. The transmission needs driven by Public Policy Requirements that will be included in ATC's finalized assumptions will be posted prior to May 15th.

Next Steps

- Project / Analysis Development
 - Review of Congestion and Adjacent Projects
 - Stakeholder Feedback
- Analysis of Projects
 - All Study Years and All Futures
- Timelines
 - By April 15: Define Preliminary Assumptions
 - By May 15: Finalize Assumptions
 - By November 15: Provide Analysis Update

Questions

- ATC Economic Planning
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Q&A