



2017 10-Year Assessment – www.atc10yearplan.com

Economic planning

ATC utilizes two methods to determine which projects have the potential for economic benefits:

1. Stakeholder Input and Analyses
2. Reliability Project Screening

These methods are described below.

Stakeholder Input and Analyses

In March 2008, Federal Energy Regulatory Commission (FERC) Order 890-A took effect. As part of this order, FERC requires a coordinated, open, and transparent transmission planning process on both a local and regional level. To comply with these requirements, ATC submitted a compliance filing on Order 890-A that provides a timeline of actions to ensure that the economic planning process is both coordinated and open. ATC has also submitted a compliance filing on Order 1000 that incorporates public policy requirement needs into its economic planning analysis

Annually, ATC will use a process with consistent timelines that combines stakeholder input, historical data, future line flow forecasts, and updated information on the electric system to identify transmission upgrades for economic evaluation.

Each year:

- 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, including soliciting stakeholders for public policy requirements that drive transmission needs.
- By May 15 – we finalize areas of economic study, study assumptions and models to be used in analysis, including a determination as to why or why not public policy requirements were included in the assumptions.
- By November 15 – we provide a summary of the results of the economic analyses to our stakeholders.

ATC conducts analyses of the projects identified for study over several months' time and posts the key results, including the extent to which these savings offset project costs. When



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the expected benefits of a studied project are high enough to justify its costs, the process of developing it as a formal proposal is begun.

As a result of the 2017 ATC/stakeholder collaborative process, we are performing economic analyses on the following ATC facilities:

Economic Planning Study Areas

- Forest Junction – Elkhart Lake 138 kV Area
- Edgewater - Saukville 345 kV Area

Studies will be performed and results shared with stakeholders over the course of the year. In addition, customers and stakeholders who would like to request specific economic studies can do so if they are willing to pay for the studies and are willing to have the results posted publicly.

Reliability Project Screening

Economic analyses were performed on 14 projects from the 2016 10-Year Assessment project list to determine whether those projects were candidates for acceleration or deferral based on economic considerations. Please refer [Table EP-1](#) for the list of projects screened. The list of 14 projects was based primarily on the availability of redispatch and capital costs of the projects; however, lower cost projects specifically identified by the ATC planning department were also included in the study. Generation interconnection and distribution interconnection projects were not eligible for inclusion in this list. Further, capacitor bank projects were not considered since the voltage benefits provided were not captured by the PROMOD software analysis. Finally, projects with in-service dates prior to 2020 were not considered since development of those projects was too far underway to make scheduling changes. As a result of this screening, two projects showed significant economic savings to ATC customers. The Port Washington – Saukville (762) 138 kV line rebuild to a double circuit and the Portage – Columbia 69 kV line conversion to 138 kV had savings that helped offset costs, but could not cover them completely. They will continue to be studied further for acceleration.

A similar analysis will be performed in the 2018 10-Year Assessment based upon the 2017 Assessment project list.



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Table EP-1

List of 10-Year Assessment 2017 Economically Screened Projects

#	2017 TYA Economic Studied Projects	Planning Zone
1	Lakota Rd. – Winona 69 kV – 138 kV conversion.	2
2	New Plains – National 138 kV line.	2
3	Replace two existing 345/138 kV transformers at Plains substation with 2-500 MVA transformers.	2
4	Uprate Plains – Arnold 138 kV line.	2
5	Winona – Atlantic 69 kV line rebuild.	2
6	Construct Cardinal – Blount 138 kV line.	3a
7	Rebuild West Middleton – Stagecoach 69 kV line.	3a
8	Install a second 161/69 kV transformer at Gran Grae substation.	3a
9	Convert Portage – Columbia 69 kV line to 138 kV.	3b
10	Rebuild Portage – Columbia 138 kV lines.	3b
11	Rebuild Highway V – Preble 138 kV line.	4
12	New Thunder substation on Morgan – Plains 345 kV line, and construct Morgan – Plains 138 kV line.	4
13	Rebuild Port Washington – Saukville (762) 138 kV line to a double circuit.	5
14	Reconductor Arcadian – Waukesha 138 kV lines.	5