

ATC Economic and Reliability Planning Feb 24th meeting Stakeholder meeting

Follow up questions and responses

Summary: The following is a list of questions and concerns presented by stakeholders in the meeting ATC held on Feb 24th. Responses are either provided here or noted as being provided in the next stakeholder meeting.

Q: *Regarding document #1 “ATC 2015 Assessment Summary Presentation,” pages 3*

In past stakeholder reviewing processes, ATC supplied and plotted current and past energy and demand forecasts for ATC’s footprint. These were provided in addition to the regional energy and demand assumptions within MISO’s MTEP Futures.

We would like to receive the 10 year energy and demand forecasts for ATC’s footprint used in ATC economic planning for 2015 and the forecasts carried forth into this year’s planning cycle if they differ. Please also include, in an easy to compare format, the energy and demand forecasts for ATC’s footprint that ATC used in economic and reliability planning each year from 2010 through 2014

Also on page 3, please describe or provide lists showing changes in generation assumptions between 2015 and present. In retrospect, understanding these changes would be helpful as generation assumptions were later discussed as having significant impacts.

A: In past presentations ATC has provided graphs showing current and previous load forecasts as a reflection of changes in demand over time.

With these responses, ATC has posted a spreadsheet that compares demand and energy growth rate assumptions for economic planning futures used in ATC studies between 2010 and 2015.

During the next stakeholder meeting ATC will present preliminary needs for the 2016 Assessment. In that presentation we will review some assumptions for the assessment, including presenting a graph showing the MW load forecasts used in our most recent reliability assessments. We will also review changes in generation assumptions for the 2016 Assessment compared to the 2015 Assessment.

Regarding the generation assumptions changes noted on page 3, these changes included retirement of Weston unit 1, Pulliam units 5 and 6, and a few smaller changes. While these characterized the changes to generation assumption for the 2015 Assessment relative to the 2014 assessment, they should not be assessed as having significant impacts in the 2015 Assessment.

Q: *Regarding document #1 “ATC 2015 Assessment Summary Presentation,” pages 7-8 for Zone #2*

We would like to learn more about projects labeled #3 through #8. In particular, we are interested in the most recent cost-benefit and reliability analysis conducted on these projects, done alone and in conjunction with MISO. Please provide both ATC’s and MISO’s project identification numbers to help reduce confusion with other projects including some of the same facilities. Please include work showing the non-transmission alternative that are being considered or have been suggested.

Q: I am particularly interested in tracking projects #3 through #8 in area 2. And how non-transmission alternatives, such as distributed generation, energy efficiency, and the like are being evaluated as solutions for the Upper Peninsula's energy needs.

Q: I'm writing to ask to be added to ATC's stakeholder meeting email notification list, and am particularly interested in meetings regarding projects 3-8 in ATC's Area #2.

A: ATC is always glad to include interested stakeholders regarding open and transparent planning processes. Specifically regarding projects 3-8 in the 2015 Assessment Summary presentation, ATC does not have specific project identification numbers for these projects.

For the projects ATC has submitted to MISO's MTEP process, the MTEP Project and Facility ID Numbers are listed below:

Project Name	ATC Status	In-Service Year	MTEP PRJ ID	MTEP Facility ID
Plains-National 138-kV project	Provisional	2020	8071	20389
Plains 345/138-kV project	Provisional	2020	8073	20391, 20392
Plains-Arnold 138-kV project	Provisional	2020	8073	20390
Winona-Atlantic 69-kV line rebuild	Provisional	2022	4727	8956, 8958, 8957
Pine River-Hiawatha 69-kV line partial rebuild	Asset Renewal	2018	N/A	N/A
Munising-Gwinn 69-kV line partial rebuild	Asset Renewal	2018	N/A	N/A

When evaluating transmission projects ATC takes into account all aspects of planning and operating the transmission system that we can access to provide reliable and economic service to customers. That evaluation includes non-transmission alternatives, which are accounted for in a variety of ways. ATC considers impacts of generation in the Midwest Independent System Operator (MISO) generator interconnection queue. ATC's load forecasts are generally updated annually and are based on our customers' coincident interconnection point load projections. These projections include impacts such as distributed generation and energy efficiency programs.

Non-transmission alternatives are often developed and some may be implemented as a part of ATCs planning, operation, and maintenance of the transmission system. Operational Guides are developed to address transmission concerns during specific operating conditions in lieu of constructing a transmission project. During the distribution interconnection request process ATC works with local distribution utilities to identify and implement distribution solutions that provide the Best Value Plan for the area. As ATC develops network projects to address reliability needs, we often work with customers to evaluate whether distribution solutions are alternatives for addressing needs. Larger project applications ATC submits to state commissions for approval include assessments of the ability for non-transmission solutions to be alternatives to the proposed transmission solution. In some instances ATC identifies solutions to asset renewal projects that help reduce the overall impact of transmission infrastructure.

Q: Regarding document #1 "ATC 2015 Assessment Summary Presentation," Zone 3, pages 9-10

Please send us the PSC docket number for project #9," Boscobel-Lone Rock 69 kV line rebuild." We are interested in the most recent cost-benefit and reliability analysis conducted on this project. Include description of costs for proposed work with enough itemization to see separate expenses contributing to the total cost. Please provide documentation showing the non-transmission alternatives that have been considered if they differ from or are lacking in materials submitted to the docket.

A: All available public information pertaining to the Boscobel-Lone Rock 69 kV line rebuild is posted on the Wisconsin Public Service Commission website using the following link and searching for docket number 137-CE-181.

http://psc.wi.gov/apps35/ERF_search/default.aspx

Q: *Regarding document #4, "ATC 2015 Economic Planning Study Results," Page 7.*

We would like more information about the "676 Distributed EE and DR Resources" that ATC has incorporated into the company's economic and reliability planning assumptions. No link is provided and a large number of documents match these terms when searching MISO's library. We are interested in the estimated amounts of each resource with their geographical locations to better understand how the inclusions are affecting modeling.

A: A publicly available presentation regarding the modeling of Distributed Energy Efficiency and Demand Resources is on the ATC Economic Planning website using the link below.

<http://www.atc10yearplan.com/wp-content/uploads/2014/03/5-ATC-Distributed-Resources.pdf>

ATCs modeling references an EEI 2009 Special Report "FERC on SmartGrid" scenarios, which can be found using the link below.

<http://www.ferc.gov/industries/electric/indus-act/demand-response/dr-potential/assessment.asp>

Q: *Regarding document #4, " ATC 2015 Economic Planning Study Results, " Page 8.*

Should you get around to correcting the MTEP16 futures chart with the energy and demand figures and headings updated, please provide us a copy.

Q: *Please explain why the low growth future has a higher growth rate as compared to the growth rate in the high growth future. (I believe we discussed an error in gas prices in these futures during the last Stakeholder meeting).*

A: ATC has updated the presentation and posted it to the website.

Q: *It is our desire that ATC provide the opportunity to have face-to-face discussion when sharing the 2016 TYA preliminary needs and solutions in the first quarter and second quarter 2016, respectively.*

A: Thank you for the feedback. We will seek to make upcoming meetings regarding the 2016 TYA preliminary needs and solutions in person/webcast. Both meetings are now expected to occur in the second quarter.

Q: *In addition, it would be helpful to get the information listed below, early in the planning process, to facilitate a discussion of non-transmission alternatives:*

- *Model Year and case that the transmission need appears (e.g., 2020SUM)*
- *Limiting Element (Name and kV)*
- *TPL Contingency type (P1, P6, voltage issues, etc. and please continue to identify where there is a P1 with prior maintenance (Thanks!!))*
- *Contingency MVA for thermal with comparison to MVA rating and/or voltage issue (value)*
- *Estimated load shed needed to resolve each violation*
- *Estimated duration and frequency of violation occurring*

A: ATC plans to include some of this information in the preliminary needs and solutions presentation at a future meeting.

Q: *As we discussed, the siting of generation in the MISO Clean Power Plan (CPP) futures has a significant impact on future congestion resulting from PROMOD analyses. For this reason, we encourage ATC to put more focus on the MISO Business As Usual, Low Demand, and High Demand Futures rather than the Regional Clean Power Plan Compliance and Sub-Regional Clean Power Plan Compliance futures.*

A: Thank you for the feedback. Part of ATC's economic planning practices is to carefully consider economically justified projects based on a variety of different futures.

Q: *We also recommend that the Janesville 138kV area be re-evaluated in ATC's 2016 Economic Planning Study to consider more precise modeling information associated with the proposed Riverside generation.*

A: ATC economic planning will fully coordinate with all studies in the Janesville area pertaining to potential reliability needs for the proposed Riverside generation.

Q: *Does ATC have a target benefit/cost ratio used to evaluate whether an economic planning project is reasonable to pursue? Is there any weight given to different futures based upon some determination of likelihood when evaluating projects?*

A: ATC economic planning tests potential projects against each of the futures and only further pursues economically justified projects if they are successful in most of the futures. The objective is to identify projects that are robust across a range of plausible futures.

Q: Are the futures utilizing a two tier option for wind where the capacity and energy associated with wind generation is based upon vintage. This would allow the capture of efficiencies related to newer wind technology.

A: ATC does not actively perform any analysis to determine the costs and benefits of wind generation additions in the generation expansion planning phase of the development of the PROMOD model. ATC does follow the generation expansion planning process at MISO and its implementation into PROMOD. Below is a link to a presentation by MISO containing references to studies done to determine the future capital cost of renewables under the assumptions that future technologies will be more efficient. Slides 9, 28, and 29 contain the information and links to studies used by MISO.

<https://www.misoenergy.org/Library/Repository/Meeting%20Material/Stakeholder/PAC/2015/20150318/20150318%20PAC%20MTEP%20Futures.pdf>

Q: Please support the assumed carbon costs used in the Regional Clean Power Plan Compliance and Sub-Regional Clean Power Plan Compliance in the 2016 Economic Planning Study. These costs seem to be unexpectedly high as compared to other sources.

A: ATC utilizes the futures developed in the MISO MTEP futures process and does not perform any independent analysis to determine compliance with the proposed EPA Clean Power Plan regulations. MISO has a webpage dedicated to all the analysis done regarding EPA regulations. The link is below.

<https://www.misoenergy.org/WhatWeDo/EPARegulations/Pages/EPARegulations.aspx>

Q: Could ATC provide a copy of the template that is sent to Local Distribution Companies (LDCs) for the TYA annual forecast?

A: Yes, see the link on the ATC website in the section with responses to the Feb 24th 2016 stakeholder meeting.

Q: ATC indicated that they request peak demand data from interconnected LDCs. What is the duration of the peak demand values ATC requests?

A: ATC assumes the peak demand data submitted represents the average rate of energy use during the customer's hour of peak energy use for a summer season. ATC also requests factors to apply to loads during other periods of the year.
