

ATC Access Initiative – July 7, 2004 Customer/Stakeholder Meeting

Following introductory meetings in April, and the first in a scheduled series of four monthly meetings on June 2, on July 7 American Transmission Company held the second meeting in this series to discuss the topic of transmission access with ATC Customers and interested Stakeholders. The purpose of the summer meeting series is to present and discuss the status and results of Access Initiative study work done to date, to continue to collaboratively develop and evolve the “access value case”, and to solicit feedback, reaction, and ideas from meeting participants. All initiative materials, including meeting presentations and any follow up materials, are posted on the ATC OASIS page and can be found at http://www.atcllc.com/oasis/Customer_Notices/ATC_notices_meetings.html.

The following organizations were represented in person or via phone at the July 7 meeting:

- Adams-Columbia Electric Cooperative
- Alliant Energy
- Badger Power Marketing Authority
- Citizens Utility Board
- Dairyland Power Cooperative
- Madison Gas & Electric
- Manitowoc Public Utilities
- Marshfield
- MeadWestVaco
- Midwest ISO
- Municipal Electric Utilities of Wisconsin (MEUW)
- MSB Energy Associates
- Peabody Energy
- Public Service Commission of Wisconsin
- We Energies
- Wisconsin Paper Council
- Wisconsin Public Power Inc
- Wisconsin Public Service
- WPS Resources

Following is a summary of Customer/Stakeholder feedback received at this meeting, categorized beneath the relevant meeting agenda item. See meeting materials for full agenda and presentation content.

Chronic Limits

Participants discussed updated information presented by ATC, summarized from data associated with service requests denied by MISO. There was a comment that the service request data reflects human behavior and therefore is not necessarily fully representative of chronic limits. For example, if someone is repeatedly denied desired service, they may just stop requesting it out of a sense of futility, and future data based on denied requests would therefore not reflect the continuing issues associated with that desired service. It was restated that this summary of chronic limiters is only one of several different approaches ATC taking to identify the most

critical limiters to internal and external access, both from look-back and look-forward perspectives. Information based on TLR data is targeted for August presentation. Look-ahead limits are being identified as part of the iterative work associated with the PROMOD analyses.

PROMOD Benchmarking

Based on discussion at the June 2 meeting, ATC presented some possible approaches to validate the PROMOD model and results. The approach that most PROMOD users take is a “high level overview” – looking at various elements like operation of various generating units and assessing whether the results correspond to reasonable expectations for their likely behavior under certain circumstances. Participants requested that PROMOD output data be posted so utilities could vet the results with their production costs models and other such sources. Some requested that input data be supplied for broad review. A discussion about data confidentiality ensued, with respect to what could be posted for all to see and what must be kept confidential due either to software licensing restrictions or code of conduct requirements associated with competitively sensitive or supplier-designated confidential information. Participants noted that there was concern about transparency (i.e. don’t want a mysterious “black box”) that would directly correlate to confidence in subsequent analysis results. ***ATC will develop a means to enable broad customer/stakeholder review and vetting of PROMOD information, and will ideally post some initial information prior to the August 3 meeting. ATC also requests utilities to identify a technical expert to participate in discussions associated with each utility’s facilities.*** It was also requested that if ATC posts information on OASIS associated with the Access Initiative that a note be sent out alerting participants of the newly posted material. ***ATC will let participants know when new Access Initiative information is posted on OASIS.***

Latest PROMOD Results and Case Study

ATC presented updated PROMOD analysis results and a case study illustration of the potential economic impacts associated with identifying and resolving limiters in a sequential manner. This information generated extensive participant discussion. Questions about specific study details were addressed. Deviations from initial results presented at the June 2 meeting were explained, illustrating the iterative nature of analysis work in this area. Participants noted that analysis results likely reflect “minimum economic benefit”, because the study data is based on production costs as opposed to bidding behavior. Impacts of limiters outside of the ATC footprint were illustrated in an initial manner. Various elements and impacts of input data were discussed. Per the mention above, ***ATC would like a technical contact at each utility to verify the minimum run times and ramp times associated with their generators, to ensure that the model is operating the generation in a realistic manner.*** Participants would like to analyze generation capacity factors from PROMOD output to assess whether the generation is being dispatched in a reasonable way. Per mention above, ***ATC will work out a way to present output data for general review.***

Scenario Analysis

ATC presented information from initial scenario analyses as discussed at the June 2 meeting. During discussion of the “low internal generation” scenario, it was noted that the location of retired units impacts constraints differently. Results show a “cost penalty” associated with retirements – the base case production costs increased significantly, hence producing a lower delta cost change associated with adding a major new 345 to an adjacent region. Participants

discussed other desired scenarios for analysis, including a “high gas price” scenario, a “high high internal generation” scenario, and a “high wind generation” scenario both in-state and regionally. It was noted that the location of generation additions or retirements significantly impacts ensuing results.

Losses

It was noted that PROMOD automatically does a loss calculation and counts the dollar impacts as part of the economic analysis. Loss information presented was for ATC losses only, and determined outside of PROMOD.

LOLE Analysis

It was noted that the market will change how we look at reserve margin, as will MISO deliverability studies. It was suggested that ATC assess the LOLE impacts of taking away the capability associated with one interface and utilizing only the other (i.e. imports only from the south or west).

Decision Matrix

ATC requests ideas on appropriate indices or other elements in addition to what we have initially suggested in order to appropriately flesh out the value case.

Additional Input Received:

WPS Comments submitted via email 7/9/04 from Chris Plante

As a followup to our meeting this past week, WPS Resources has the following thoughts on the PROMOD analysis:

1. The modelling effort should stay with public domain data. This would insure some sort of consistency in the view of fuel prices in 2012.
2. Since the current model only has cost based bids (fuel and Variable O&M). There is a chance the the value of import capability will be significantly under stated. I would suggest the following sensitivities to test the theory:
 - a. Assume in the case where imports are limited that merchant plants in EWU can extract a premium for their output. For merchant CC's assume a 15% adder (increase heat rate by 15%) and for merchant CT's assume a 30% adder (crude assumption that when CT's are dispatched market is tighter and therefore a higher margin).
 - b. Assume that the basis differential for natural gas delivered to gas plants in EWU relative to Chicago hub is increased by \$0.50/MMBtu in both the base and high import cases to reflect new investment in pipeline serving WI.
3. If an additional 2012 "high" internal generation scenario is considered, one thought is to include all the generation in the interconnection queue (after eliminating multiple sites for the same unit) and/or including the generation that the PSCW has identified as "projects in the pipeline". I believe the PSCW maintains a document of this type.

We Energies Comments submitted via email 7/8/04 from Paul Schumacher

Promod model run sensitivities:

Wind: The 1500MW of out of state wind is one "high-wind" option. A more likely option given the interest to develop in-state wind resources is a lower level, say 1000MW located within the ATC footprint. Please consider this as a "high-wind" scenario. This will reduce the need for lines connecting to high wind resource areas like MN and/or IA.

Natural Gas: I suggest using 90% and 120% projected gas levels. This is consistent with the production cost runs we perform and captures the impact of an important variable.

Internal generation: I suggest using 90% and 120% of net firm peak demand met with internal generation as sensitivities, in addition to the two existing runs.

On sharing of promod data:

Seems like promod output data could be shared, after all, these data are only projections of the future using one model, and similar data have already been shared. Promod input data does contain confidential elements, and as such I recommend against sharing. Please have your folks contact Pat Gerum for validation of our input data to promod.

Decision Matrix: As I discussed, seems like a projected cost/benefit (C/B) summary, with costs defined as project capital \$'s and benefits as loss reduction (energy \$'s) and market energy savings (or cost). Any ancillary benefits such as reduction in reserve margin could be monetized and the initial C/B adjusted.

Internal Access: This is an important point which we touched at the end of the meeting. I suggest your next 10 year assessment address projects underway and being planned to improve internal access.

We'll provide input to the draft white paper as the effort moves along.