



## **ATCTDT June 8, 2006 Meeting Minutes**

The ATCTDT met June 8, 2006. The NERC anti trust guidelines were reviewed and the agenda was approved.

### **FAC Standards Discussions**

Paul Johnson discussed the Facility Ratings standards. Mr. Johnson discussed the following questions regarding the FAC standards and provided the following answers regarding the FAC standards and the general direction of the TTC/ATC/AFC standards.

1. In your opinion and experience is the Transfer Capability that is detailed in the FAC Standards the same as the Total Transfer Capability which is part of the formula for Available Transfer Capability and detailed in the MOD Standard?

Transfer Capability as required in FAC 012 and Total Transfer Capability as required by MOD 001 are indeed the same quantities. The Total Transfer Capability is defines the ‘capability’ of the transmission system (for the given set of conditions) — either as defined by a ‘path’ (Western Interconnection) or between two areas (Eastern Interconnection). The 1995 Transmission Transfer Capability document would be the appropriate reference document for these quantities and general calculation methodology. The 1996 ATC Definitions and Determination document also references the 1995 document. TTC (or TC) is a reliability based value, that defines the capacity of the transmission (or part of the transmission system) that cannot be reliably exceeded. ATC is a commercial (and not a reliability quantity of itself) that is based upon a reliability value. Therefore, the technical bridge between the reliability world and the commercial world is TTC.

Execution of this linkage or the ATC determination processes *could* make this linkage appear less than obvious. For example, for systems that are typically thermally limited (and therefore ‘capacity’ could be more a function of load level for example), the TTC *could* calculate from an FCITC value plus the transfers that were assumed in the model. Therefore, this TTC is more of a derived value and surely not a fixed and rarely changing “ceiling”. Most laymen tend to see Transmission Capacity as a fixed quantity that is ‘always’ known and just a matter of accounting to determine ‘how much is left’.

2. Is the method to determine the Transfer Capability for Rated System Path Method (Western Interconnect) detailed in FAC Standards?

No method is defined in the FAC Standard — mostly because of the Western/Eastern differences. The standard does require the RC and PA to each document their respective methodology in detail (R1). However, I fully expect that the 1995 document will be liberally referenced and/or “plagiarized”.

3. Is the method to determine the Transfer Capability for Network Response Method (Eastern Interconnect) detailed in FAC Standards?

See #2 above.

4. Do the Standards require the Applicable Functions responsible for determining the Transfer Capability to detail all assumptions for a respective method and is this public information?

Assumptions are to be detailed in the Methodology and be available to the appropriate RCs, Pas, and TPs. The FAC standard does not require the Methodology to be 'public'. (However, nothing prevents the ATC Standards to require public disclosure.)

5. In your opinion, can the MOD 001-1 Standard reference the FAC Standards to cross reference the requirements for Transfers Capability or Total Transfer Capability?

Yes, the new ATC Standards could cross reference FAC 012. Definitely worth considering.

6. How do the Rated System Path Method and Network Response Method (using Flowgate) differ? (Your opinion)

In short, Rated Path looks only the capability of the 'direct wires' between two A and B points — while the Network Response Method (using or not using Flowgates) looks at the capability of the network (i.e., including all parallel paths) between points A and B. This is an oversimplification but demonstrates the different approaches. These are two ways to describe a 'transmission capability' — neither is 'better' than the other. However, each is used where it is appropriate to communicate the information. In a 'sparse' network — like the west — where parallel flows are either insignificant or controllable — the rated path is more descriptive. In a more 'integrated' network where parallel flows tend to be significant and uncontrolled — the Network Response Method tends to be more descriptive.

7. In the 1995 NERC Paper "Transmission Transfer Capability" the term First Contingent Total Transfer Capability is used to describe the Total Transfer Capability using (n-1) criteria. Is this the same as Transfer Capability and Total Transfer Capability? (Your opinion)

Yes — all three terms describe the 'ceiling' of the transmission system and can be used interchangeably. I have no idea why so many terms developed for the same concept.

8. Given the up-to-date methods of calculating the Transfer Capability is the Transmission Reserve Margin needed in the ATC formula? (Your opinion)

Yes, TRM must remain. Think of TRM as the compilation of all the things that were not considered or unknown (and unknowable) when the ATC calculation was performed. For example: when the ATC calculation was made there were some assumptions about weather (hence load level), available generation and the specific generation dispatch, ALL transmission outages were known and appropriately modeled, all VAR devices were switch as anticipated etc. But what happens if the weather was hotter than anticipated and the loads where 5% higher than anticipated, hence there will be less 'excess' transmission capacity available as ATC? What about the generation dispatch assumptions — the anticipated economics of a generation fleet changed between calculation and real-time and the dispatch is significantly different. Loadings on the transmission system could be significantly different than first assumed potentially significantly changing the ATC. The above is just a reasonable argument that some sort of a 'fudge factor' or 'safety margin' is need. But further, and in my opinion, if this safety margin is not allowed to be an open or explicit calculation, then, considering the consequence of

being wrong — a conservative ATC calculator would simply assume more ‘safe’ but still reasonable, assumptions to have this margin of safety — in effect lowering both firm AND non-firm ATC.

## **White Paper Discussion**

Dennis Kimm provided a summary of the Network Response and AFC method used within the Eastern Interconnection. Chuck Falls provided a summary of the method used to determine TTC and ATC sign the Rated System Path Method. This brief explanation was provided to help the members understand better where common areas existed.

## **FERC NOPR Proposed Modification of the OATT**

The drafting team reviewed all of the sections of the NOPR thru paragraph 219. The Planning Committee will be developing a task force to respond to the NOPR. Bill Blevins will solicit three members from the drafting team to aid in this response since the team is incorporating issues mentioned in the NOPR as it revises the standards. Laura Lee and Bill Blevins will create a spreadsheet from the NOPR where the commission proposes a change and the team will then determine if any additional work is needed to address an issue in the NOPR. The group will use this to share using the NERC NAESB Joint Standard Development Process. This will help define the items to be developed as a NERC standard and those that are Business Practices.

## **Standard Document Review**

The drafting team reviewed the MOD-001 standard. The team suggested changes to the standard. It was indicated that the team should attempt to post the MOD-001 standard prior to the end of the NOPR comment period, August 7, 2006 so that the industry could review what NERC is doing in revising the standards. It was also mentioned that NERC should contact FERC so that FERC has a contact when the Technical Conference for OATT reform is arranged. Bill Blevins will contact FERC and ensure they have a contact from the ATC drafting team to participate in the Technical Conference.

## **Future Meetings**

The drafting team’s next face to face meeting will be in Seattle or Houston depending on if NAESB can arrange the meeting with a sponsor company. This meeting is scheduled for July 20–21, 2006, and there will be a joint NERC NAESB meeting to review the progress of the drafting teams.

Scheduled a WeBex for the ATCTDT June 19 2006.

### **Attendance:**

Dryn Barker
Kiko Barredo
Charles Falls
E. Nick Henery
Raymond K Kershaw
Dennis Kimm

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Ross Kovacs
Laura Lee
<b>Larry Middleton</b>
Robert J. Morasco
Narinder K. Saini
Matthew E. Schull
Jerry Smith
Shannon Black
DuShaune Carter
Nathan Schweighart
Bill Blevins
Bert Bressers
Via phone
Paul Johnson
Barbara Rehman
Sedina Eric
Kathy York
Valarie Crockett