



NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL

Princeton Forrestal Village, 116-390 Village Boulevard, Princeton, New Jersey 08540-5731

Distribution Factor Task Force

July 26–27, 1999
Inter-Continental Hotel
Toronto, Canada

Meeting Minutes

Attendance

Madison Long, Chairman	SERC	Charles Long	SERC
Jonathan Riley, Vice Chairman	ECAR	Chi Tang	Canada
Thomas Vitez	ECAR	Conrado Caunan	NERC
Patrick J. Shanahan	MAIN	Brian M. Nolan	NERC
Ramon Tapia	NPCC		

Administrative Matters

Chairman Madison Long called the Distribution Factor Task Force (DFTF) meeting to order at 1 p.m. on July 26, 1999. Each representative introduced himself.

The May 24–25, 1999 meeting minutes were approved with modifications. All of the action items from the May 24–25, 1999 meeting were either completed or are work in progress.

Assignments From Last Meeting

- Chairman Long will make all of the needed corrections to the Book of Flowgates and distribute it back to DFTF this week and send a revised Book of Flowgates to OATI. This has been completed many times since the last meeting. The current version is 15, soon to be 16.
- Chairman Long will redistribute the Market Redispatch flowgates, including the revised flowgates. Chairman Long will contact Rich Gloff about the market redispatch flowgates. This has been clarified and completed.
- All representatives should review the type description of their flowgates to ensure accuracy. This has been completed.
- Chairman Long will draft a letter requesting the additional items to be included in the IDC, send the draft to DFTF for comments, and send the final letter to IDCWG. This has been shelved, waiting for the IDC to get working correctly.
- Tom will send another draft on the Flowgate Approval Process. This has been completed.

Book of Flowgates Update

The current Book of Flowgates is version 15. MAIN is looking to add some additional flowgates. Mat has not received a validation output on the last Book of Flowgates from OATI. As soon as possible, OATI will send a validation output.

SERC has a strange situation with CP&L since two different control areas handle it. This has caused problems in the validation checks.

When IDC kicks off on August 4, 1999, the MAIN and DFTF Book of Flowgates will be the same. All DFTF representatives should review both to ensure that they are the same. The MAIN site will be in hot stand by in the event that the IDC does not work properly. This will allow for NERC to switch back to the iIDC. Because of this, the DFTF will need to make sure that the Book of Flowgates and the MAIN system has the same flowgates.

One of the reasons that the Book of Flowgates and MAIN are potentially out of sync is that the MAIN process needs to be in sync with the Ontario Hydro database. The Ontario Hydro database is a manual updating process. If changes are to be made, a message should be sent to the entire working group as well as MAIN.

Multi-element Flowgates

It was understood that DFTF was to review and justify all multi-element flowgates, not just the thermally limited ones.

Based on the TLR review of the Kammer and Belmont flowgates, the following questions should be reviewed by each DFTF member that has a multi-element flowgate:

Why is this facility a constraint?

1. Description of facilities. Include type (voltage, thermal, etc..)
2. Relationship of limiting facility to outage facility.
3. Why is this flowgate a constraint?
4. Can this flowgate be replaced by an OTDF flowgate? Why or why not?
5. Can this flowgate be replaced by a single element flowgate?
6. Transfers affected by this flowgate (What transfers affect this flowgate?).
7. Recent or scheduled improvements to relieve constraint.
8. Being a limited facility in regional and/or interregional studies, explain if it didn't appear. How long has it shown up?

Prior to OTDF flowgates, there was a concern that people were designing a flowgate to control the market instead of for reliability issues. In many instances these multi-element flowgates have been around for many years and not just since the deregulation of the industry. This is a case of needing to educate and not redesigning the system.

Jon Riley discussed the multi-element flowgate #2195, Central Ohio. The facilities that make up this flowgate are voltage depression and possible collapse following the outage of the Maysville 765/345 kV auto-transformer during peak periods accompanied by transfers through the area, primarily to the north and west areas. These problems have been identified for several years and cited in various Regional and interregional studies. To increase transmission capacity in the area, additional shunt capacitors were installed prior to the 1999 summer, and a new 765/138 kV step-down station is scheduled to be in-service prior to the 2001 summer period. This flowgate has gotten as high as TLR level 3. In general, AEP is not trying to cut off the market with this multi-element flowgate since they would not be able to sell through this area. And, it not only affects through transfers but also AEP exports.

Chi Tang discussed the IMO multi-element reliability flowgates. Many of these could be limited in both directions. Therefore, IMO has been developing flowgates that are in reverse directions from other existing flowgates. This is due to the fact that they can be limited in both directions. In the event of emergency conditions, the double contingency limits are ignored and only single contingency limits are used. Chi will add additional descriptions to his multi-element flowgates.

The PJM and MAPP multi-element flowgates will need to be described. PJM has three multi-element flowgates, but MAPP has a lot more.

The questions will be translated into the Flowgate Definitions document to ensure that they match.

Flowgate Definition Document

The most recent document was distributed in both a clean copy and a revisions copy. Comments on the document that Mat Long received were reviewed. The updated Flowgate Definition document will be distributed by Mat by July 30, 1999.

Flowgate Approval Process

Once the IDC is working correctly, the details will be addressed. The logging file that would be needed for flowgate approval and review is not in the current funding for the IDC. After the IDC is working, NERC will need to create a special order for the logging file.

Currently in the IDC, when flowgates are created on the fly, they are given an ID number in the 10,000 range. The DFTF will remain the keeper of the Book of Flowgates. When a new Book of Flowgates is read into the IDC the current file is overwritten.

Multi-element flowgates will be discouraged from being implemented on the fly, but they will not be prevented from being implemented on the fly.

1999 Winter Base Case Implementation

Should DFTF continue to use the summer base case or switch to the winter base case? It is believed that the switch from the winter to the summer base case will be more difficult than the summer to winter change. This is because the summer to winter is the same series of base cases, whereas the winter to summer will be two different series.

DFTF will switch to the winter base case. DFTF members are to check the winter base case to ensure that the bus names are correct and everything is linked appropriately. The base case switch over will take place in the November/December timeframe. DFTF will again begin with the MEN/VEM base case, which has been finalized. The MEN/VEM base case will be sent to Chi for the standard changes. This file will be put onto the NERC DFTF Private Files site for all to download, by September 1, 1999. If there is a need to switch out parts of the base case or to make changes to the base case, it should be done by September 24, 1999. The updated case will be posted on the NERC DFTF Private Files by October 1, 1999. DFTF will error check and validate against the Book of Flowgates by October 15, 1999. This base case will be sent to OATI for their validation process. Any discrepancies that OATI finds will be sent back to DFTF. The winter base case will be implemented on November 1, 1999.

SDX

The common names will need to be resubmitted to OATI due to the switch from the summer base case to the winter base case. DFTF will need to ensure that the base case and the SDX names match.

Review Action Items

- Request from MMWG that all control areas modeled in their base cases, be registered control areas on the NERC TIS list.
- Request that MMWG insure that the Enron control area is included.
- All DFTF representatives should review both to ensure that they are the same.
- Multi-element discussion papers should be submitted to Mat Long by August 20, 1999.
- Chi is to add additional description to his multi-element flowgates.
- Brian will create a new password for the DFTF Private Files web site.
- Mat will distribute the updated Flowgate Definition document by August 2, 1999.

Future Meetings

August 23–27, 1999	Conference Call	Date and time to be determined
September	Conference Call	Date and time to be determined
October 21–22, 1999	Houston	noon to noon

Adjournment

Chairman Long adjourned the meeting at noon on July 27, 1999.