



NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL

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

Distribution Factor Task Force

May 24–25, 1999
SPP's Office
Little Rock, Arkansas

Meeting Minutes

Attendance

Madison Long, Chairman	SERC	Ramon Tapia	NPCC
Jonathan Riley, Vice Chairman	ECAR	Charles Long	SERC
Dave Mabry	MAAC	Lanny Nickell	SPP
Thomas Vitez	ECAR	Chi Tang	Canada
Patrick Shanahan	MAIN	Conrado Caunan	NERC
Roberto Paliza	MAIN	Brian M. Nolan	NERC

Administrative Matters

The Distribution Factor Task Force (DFTF) meeting was called to order at 1 p.m. on May 24, 1999 by Chairman Madison Long. Each representative introduced himself.

The April 27, 1999 meeting minutes were approved with modifications. All of the action items from the April 27, 1999 meeting were either completed or are work in progress.

Lanny brought DFTF up to speed on the IDC project. Over the past weekend, there was a testing session in Minneapolis at which several of the “experts” were able to test the system and find some of the parts that needed to be corrected or redone. There were calculation errors that needed to be corrected also. OATI is working extra hours to ensure that the system is working correctly. There will be remote testing starting June 14 C the system will go live June 24. OATI wanted to do the acceptance testing on the winter base case.

Book of Flowgates

OATI has a very detailed screen program that reviews the Book of Flowgates and the base case. DFTF needs to ensure that its mapping is as accurate as possible. For the control areas and transmission providers that are not registered, the mapping will go to the Security Coordinator for that area. This is where many of the errors came from. To distinguish between the open and closed values, DFTF will use a “C” instead of a one or zero, at the request of OATI.

DFTF will create a section in the Book of Flowgates Glossary of Terms to document the changes that are being made to accommodate the control areas labels associated with DC ties and phase

shifters. To distinguish between the PTDF and OTDF flowgates, the term OTDF will be added to the “Type” of flowgate.

All of the control areas in ERCOT and WSCC will be included in the Book of Flowgates mapping files. The mapping file is used by OATI in the IDC system. The three mapping files that DFTF has are PSS/E to TIS list, PSS/E to control area, and control area to transmission provider. If an entity is not listed in one of these lists, the OATI checks will “kick out” an error statement.

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.

All representatives should review the type description of their flowgates to ensure accuracy. Once the Book of Flowgates is listed as final, there is still the possibility of changing them, but it will become more difficult. So if changes are to be made, they should be submitted now.

All should download the most recent monitored list from the MAIN web site this week and compare it to the most recent Book of Flowgates.

1999 Summer Base Case Implementation

MAIN is switching to the summer base case and Book of Flowgates June 1, 1999. The NERC effort to register the security centers has taken on a life of its own. Many of the assumed acronyms are no longer acronyms. NYPP currently is not registered as a Security Coordinator.

The use of OTDF or PTDF flowgates will be left up to the Security Coordinators.

For the Market Redispatch (MRD) pilot project, there will be additional flowgates listed as MRD flowgates. The CMWG needs to define which type of flowgates they want for the MRD pilot project; PTDF or OTDF flowgates. Based on the documents sent to FERC, both the PTDF and OTDF flowgates can be represented.

Enron will be added to the summer base case. Chi has to segment an area in the base case first. The facilities that are going into service during the summer should be included in the base case with a status of zero. OATI appears to want to charge for a number of changes that may occur to the network model. DFTF was asked to come up with a process to allow for changes to the network model. Once the IDC goes live, MAIN will be dropping the support for the network model. OATI is expecting to receive a fully operational model, including debugging and validating.

For the June 24 kickoff date for the IDC, DFTF will rely on Chi and Roberto for the network model.

Currently, it takes about one week to prepare a reference case, from either an MMWG or MEN/VEM base case. The DFTF procedure manual describes what is to be done to the base case to get it ready, including matching the TIS list. A NERC contractor develops the case and submits it to DFTF for comments and correction. The comments and corrections are sent back to the NERC contractor who then implements the corrections and changes, RAWD's the file, and sends it to OATI for any minor changes to the reference case the RAWD process will need to be repeated. For any major changes, such as new or merging control areas, the complete process will need to be repeated. New control areas and mergers of control areas, will takes about two business days; this includes changes to the Book of Flowgates and mapping.

Minor changes will be done once monthly and major changes will be done on an as needed basis. When changes are made they are sent to the entire group and the file would be posted on the NERC FTP site. The posted file format would be a saved and RAWD format.

Flowgate Approval Process

With flowgate approval on demand, is there a need for surrogate flowgates?

Tom Vitez discussed the draft procedures for changing the Book of Flowgates. One of the open items is “What happens if SPSSTF does not take action and gatekeeper did not unanimously recommend addition?” Does DFTF have the ability to prevent a correctly formatted flowgate, from Security Center or control area, from being added to the Book of Flowgates?

The review process should state that multi-element thermal reliability flowgates will require additional review. At this time, there is no system in the IDC to read the comment field where the differentiation between voltage and thermal stability reliability would be stated.

An address will be added to the flowgate request form so requestors would know where to send the flowgate. One idea is to have the form available on the Internet for people to enter the information and send it to DFTF. One problem with an Internet form is the error checking and integrity of the supplied information. The initial recipient will need to do some preliminary sanity checking. There is a need for logging flowgates on the fly and collection of rationale for on-the-fly flowgates.

Section 3.1.2 will be removed and left to the discretion of the DFTF representatives.

TPF Calculations

Pat Shanahan discussed the painting TPF method:

The draft numbers listed below are the examples we mentioned at the NERC DFTF meeting. The case used was a recent daily iIDC case. Calculation takes about a minute (+ MUST time), but much of this time is for reading in files. Pat is still verifying the calculations, but presented the preliminary results. Pat was surprised that the AEP numbers did not have more separation, and that the EES numbers had such a large separation. Perhaps the EES numbers are due to the tie-line modeling in that area and its proximity to CAJN.

Transfer direction: PJM to CIN

GAPP TPF	= 94.705%	for AEP area 205
Painted TPF	= 93.68%	for AEP area 205
TPF GAPP method 2	= 110.82%	for AEP area 205

Note: It is possible that the GAPP TPF method has slight over counting?

Transfer direction: CAJN to CSWS

GAPP TPF	= 47.59%	for EES area 520
Painted TPF	= 94.478%	for EES area 520
TPF GAPP method 2	= 117.28%	for EES area 520

Note: It is possible that the GAPP TPF method has slight under counting?

If TPF's become an issue, DFTF might want to consider the painted TPF method and Pat can give OATI a brief write-up and a program to help them in their development.

Modeling Guidelines/Procedures Documents

This item is on hold until further details about how the Alliance will be handling this are known.

Other Issues

OTDF and PTDF viewer

Conrado discussed the revised TDF viewer, which includes an FTP function for downloading the most recent data sets and Book of Flowgates. Once the files have been downloaded and converted, the viewer is ready for use. The control area file needs to be updated, currently it is using the same CA file as the on-line viewer or one from a few weeks ago. The current and next day data are displayed side by side in the viewer.

Currently, there is not an export or report for the participation factors. Once the requirements of the reports are defined, they will be added to the viewer.

SDX System

The system now includes partial derating and the FTP capability. There is still an issue with the high and low-pressure systems and how they are handled.

OATI and IDC viewer

OATI will supply the raw matrix to NERC until September. After September, the raw data will be on a fee basis. One of the issues that many of the control areas have is that the only access to the data is through the on-line viewer and not the IDC. The IDC is being built for the 18 Security Coordinators only. If the control areas and marketers want to have access to the data, they will have to pay. Also, the IDC viewer does not allow for downloading data.

DFTF needs to make some strong recommendations and or requests for the IDC system. One reason that DFTF needs the data is to verify the data that is being produced.

Items that DFTF should request from the IDC system and OATI:

- Factors that are produced should be downloadable
- Base cases that are used should also be downloadable in RAWD format
- The outages that are used in the base case
- The Book of Flowgates that was used with the base case

Chairman Long will draft a letter requesting the above items and send the draft to DFTF for comments before sending the final letter to the IDCWG.

DFTF representation

It is believed that representation on DFTF should be changed to one per Security Coordinator. The current representation is two per Region.

Review Action Items

- 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.

- Chairman Long will redistribute the Market Redispatch flowgates, including the revised flowgates. Chairman Long will contact Rich Gloff about the Market Redispatch flowgates.
- All representatives should review the type description of their flowgates to ensure accuracy.
- 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.
- Tom will send another draft on the Flowgate Approval Process.

Future Meetings

July 26–27, 1999 Toronto (in process of being planned) noon to noon

Adjournment

Chairman Long adjourned the meeting at noon on May 25, 1999.