



NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL

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

Distribution Factor Task Force

August 13, 1998
Concourse Hotel
Columbus, Ohio

Meeting Minutes

Attendance

Madison Long, Chairman	SERC	Greg Campoli	NPCC
Jonathan Riley, Vice Chairman	ECAR	William Tiller	SERC
Greg Krajnik	MAAC	Lanny Nickell	SPP
Thomas Vitez	ECAR	Chi Tang	Canada
Ed Ruck	MAIN	Brian M. Nolan	NERC
Patrick Shanahan	MAIN		

Administrative Matters

The Distribution Factor Task Force (DFTF) meeting was called to order at 9 a.m. on August 13, 1998 by Chairman Madison Long. Each representative introduced himself.

The June 2, 1998 meeting minutes were approved with modifications.

Update on PTDF Matrix Calculation

Robert Cummings sent a letter to the DFTF stating that MAIN will begin the daily calculation process with the September matrix. This schedule appears to be a little ambitious based on conversations with the person who has the responsibility to calculate the values. In the new process, the generation and transmission outage information for updating the base cases will come from the SDX system. To ensure that the matrix is calculated, DFTF will send its outage information to Chi by August 21, 1998. DFTF will still have the responsibility for producing the base case.

All members are to submit its light load MBASE data to Chi by the end of August. The September light-load base case will be based on summer base case and used for off-peak calculations when the daily process begins.

For October, DFTF will use the summer base case, making all needed changes to the topology of the system. For November, DFTF will use the winter base case. The work on the winter base case from the 1997 MMWG series will begin in September. This will allow enough time to work all of the kinks out of the transition from one base case to another. When DFTF changes from one season's

base case to the next, the SDX system will need to be remapped. The remapping of the SDX system can be a very tedious process.

Some of the advantages of moving from the summer to the winter base case are that the units would have the winter loads, winter unit capability, and new facilities. There are enough changes to the system to warrant the use of a winter change as opposed to modifying the summer case. The work to change from the summer to the winter case will give DFTF a heads up for the transition from the 1997 series of cases to the 1998 series.

Until the calculation process switches to the daily update process, the use of load points is on hold. Some believe the general statement was that either all or none of the DFTF would switch to load points.

Daily Updates of Eastern Interconnection Model

SDX

NERC may want to run some workshops on the on the use of the SDX system. The data format, inputting and outputting of the data, and the uses of the data would be useful to discuss.

A translation program will change the SDX data to a PSS/E IDEV file. The ATCWG file format uses the bus name, and not the common name. The preferred format would be to use the MMWG bus names. If another format is used, a translation file should also be sent.

Once a Region gets the SDX system it is up to them to enter the common names into the system. The common names are an enhancement to the system and not meant to supersede the MMWG bus names.

Logistics

Once the updating process goes to the daily process, the DFTF will be responsible for producing the base cases, without outages, that will be used in the calculation process.

For a facility that is to go in service in the middle of a month, what is the proper way to report it? Theoretically, the facility would be accounted for in the MMWG seasonal base case, but since DFTF is using one base case and modifying it for the particular month. The ideal way would be to put the facility in the monthly base case and outage it until it is to come on line.

Ask Conrado if the daily matrix can be loaded into the GAPP system, or if any thing has been done for this.

A web viewer being developed by MECS will be used in place of the current SDX viewer. The web-based viewer is currently being tested and can be found at the following web site:

<http://www.mepcc.com:1114>

Both Ontario Hydro and MAIN will have some archiving system for the historical data. The data will be maintained for one week on the server.

Book of Flowgates

Based on the type of Flowgates that are listed, the contingency Flowgate definition was added back into the definitions of Flowgates.

If these Flowgates cannot be mapped, they will not be part of the TLR process. The mapping links a Flowgate to a security coordinator, control area, and a transmission provider. All Regional

representatives should review the Flowgate mapping spreadsheet for accuracy. For OTDF flowgates, the transmission provider for the limiting element should be the one included.

With the review of the Flowgates and the addition of future OTDF Flowgates, the Flowgate ID (numbering) needs to be reviewed. Resequencing could cause some difficulties in some of the other systems that are currently in place. Chi will check with Bill Pettitt to see what other systems are using the Flowgate ID and if the renumbering will cause difficulty, as well as if leaving a pad at the end of an area would cause problems. Another issue would be going from a three-digit Flowgate number to a four-digit Flowgate number. It was suggested that each area would get an assigned range for numbering the Flowgates.

OTDF Flowgates

Are OTDF values needed? What differences in PTDF and OTDF values are needed to make the transition justified?

OTDF Flowgates monitor a single element, which would address the CMTF recommendation of using single elements for Flowgates. It would be useful if members would put together some examples of OTDF Flowgate application. It is agreed that the accuracy of the thermally limited Flowgates will improve with the use of OTDF values.

Incorporating OTDF Flowgates would require review of the Flowgate list, taking out some PTDF Flowgates and adding the select OTDF Flowgates. This would increase the number of Flowgates.

With the use of OTDF Flowgates, SPP and SERC do not anticipate a large change in the number of Flowgates submitted. In MAAC, they would go either with all PTDF Flowgates or all OTDF Flowgates. They would anticipate an additional submittal of 500–1000 OTDF Flowgates. NPCC is in the same situation as MAAC. Ontario Hydro is content with the current PTDF Flowgates. Chi believes that there are some legitimate reasons to model some Flowgates as OTDF Flowgates, based on the changing of a sign for some outages and or transactions. MAIN's position is that they would like to see the iIDC include OTDF Flowgates. As a pilot, MAIN would anticipate that their total number of Flowgates would increase by a couple dozen initially. ECAR believes that there are arguments on both sides of the discussion but believes that efforts should be directed to the areas that need the most work. ECAR would add some Flowgates if DFTF switched to selective OTDF Flowgates.

There are many other issues that need to be addressed prior to the decision of OTDF and PTDF value. One item would be to ensure that the accuracy of the PTDF values calculated.

There are some hardware issues that may need to be addressed in order to incorporate OTDF Flowgates. One issue is to determine the maximum number of Flowgates that the iIDC can handle. In the initial development, a number of 2000 was mentioned. With advances this may no longer be the limit. It is agreed that, if applied, Flowgates using PTDF and OTDF Flowgates could and should use a single matrix, and not two separate matrices as suggested in other groups. On a limited basis, DFTF can go to OTDF values. The options that are presented to the DFTF are no OTDF's, a pilot program, selective OTDF's, or all OTDF's.

For a pilot OTDF program, SPP would like to have its multiple element (contingency monitored pair) Flowgates calculated as OTDF Flowgates. MAIN would like to add OTDF Flowgates for the pilot.

Who is going to calculate, when are they going to be calculated, will it be run in tandem with the daily process, and how much will it cost?

The group discussed the input to Mat Long's "Pro's & Con's" letter to the SCS regarding implementation of OTDF Flowgates. Refer to the final draft of the letter for details.

PTDF Viewer

SPP had a situation that occurred this week where a security coordinator put his flowgate on a schedule hold (Level 2A). A transmission customer requested transmission service from SPP and the other security coordinator. Using the PTDF Viewer, SPP determined that the transaction requested would adversely effect the situation and consequently denied the request. The other security coordinator granted the transmission service through its system and allowed the transaction to begin. The security coordinator was under the understanding that negative PTDF values hurt the situation and the positive ones would help the situation. To help people understand the use of this tool, some definitions or documentation would be useful.

One option would be to add a direction type of selection, such as "to control area from control area," "from control area to control area," and "both directions."

Talk to Conrado about the output format. It has shifted by one character from the previous version.

DFTF Meeting Expenses Spreadsheet

After updating the expense spreadsheet it will be posted in the private files section of the DFTF web site. The cost of the meeting room and food and beverage will be added to the spreadsheet.

Review Action Items

- Send light load MBASE data.
- Chairman Long will draft a letter to the SCS outlining our concerns with the OTDF values. This will be sent to the Working Group on Friday for review.
- Chi will check with Bill Pettitt about the flowgate ID's.
- Ask Lou Leffler to make the changes that Pat Shanahan suggested. Ask Mr. Leffler to send the document in a usable format, preferable Office 97.
- All Regional representatives should review the Flowgate mapping file for correctness.
- Each Regional representative should review its own PTDF Flowgates and determine the number of additional Flowgates that would be added if there is a transition to the OTDF/PTDF matrix.
- All to submit meeting expenses to Brian.

Future Meetings

September 14–15, 1998 Saratoga, New York half day, half day
(An alternate location would be Detroit)

Adjournment

Chairman Long adjourned the meeting at 4 p.m., August 13, 1998.