



# NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL

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

## Distribution Factor Working Group Meeting

November 3–4, 2004

### Minutes

#### Administrative Matters

Chairman Patrick J. Shanahan called the Distribution Factor Working Group (DFWG) meeting to order at 1 p.m. on November 3, 2004. Attendance is listed in Attachment A.

The minutes from the August 31–September 1, 2004 meeting were approved with modifications.

#### IDC Base Case Status

##### *Preparation for the Winter IDC case*

The winter base case Trial One has been distributed and Kannan is currently accepting changes for Trial Two. When the final base case is submitted, the IDC should be able to accept revision 28. There will need to be changes to the Book of Flowgates to accommodate transformers that are part of the flowgates. The phase shifter models will also be implemented in December, so there are additional control areas and modeling that will need to be addressed. Also, since this will be a new model, there are several base level checks that will need to be performed, such as looking for default values, duplicate bus names, and participating units. Many of these checks were performed on the Trial Zero base case and distributed to DFWG.

Currently Dominion is slated for December integration. MISO will also have GRE joining in December. If both of these are to occur on this date, the base case will need to be loaded into the system at Midnight on November 30.

IDCWG addressed the issue of model version at its Portland meeting. From the IDCWG meeting minutes:

Because of other changes being addressed by the industry, the working group may recommend delaying the IDC winter model upload to February 1, 2005. The working group will discuss this possibility further on a conference call.

The members of the DFWG that also participate on the IDCWG do not recall the February date. There will need to be coordination between DFWG, IDCWG, and SDX SDWT for the conversion, because the outaging of the three-winding transformers will need to be handled the same way between all three systems as well as individual back end systems.

In the Book of Flowgates, the monitored element of the three-winding transformer needs to be the first item in the element. To outage a three-winding transformer, all three windings will need to be submitted

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as out. Care needs to be taken with outaging three-winding transformers, to ensure that it does not island generation or load.

For the December 1 base case upload, the model will be based off of the Revision 26 Summer Model. DFWG will ask that the IDCWG perform a mid December model upload to transition to a winter model in Revision 28. If that were not feasible, the Mid January would be the next chance. DFWG would prefer to not wait until February to transition to the winter model.

### ***IDC case building lessons learned***

Screening of the data for the presence of default values is something that needs to be done at a minimum of when the model season changes.

### ***Transformers in the Book of Flowgates***

The format of the transformer elements in the Book of Flowgates will have an impact on how the flows are curtailed when a TLR is issued on a transformer. The way that this is modeled in the IDC will impact the format that will need to be used in the Book of Flowgates. In the IDC there may need to be several flowgates added to address the different combinations and permutations of the three-winding transformers. Many of these issues are dependent on how OATI is modeling the three-winding transformers in the IDC.

### **DEWG System Flows**

Pat led the discussion on the need for the System Flows site. Many of the links that are not receiving data are no longer flowgates. The reliability coordinators have access to this data through other means, so this site would be primarily for the market participants. The flowgates that are on the web site are from the original MRD program.

The ORS wanted some additional information on the usage level of this site and requested the Brian Nolan report back to the ORS at their December meeting on the usage of the web site. Since the last DFWG and ORS meeting some of the publicly available sites have been "locked down" to outside access.

### **Relevant IDC Change Orders**

#### ***Conversion to PSS/E version 28***

This change order was approved for implementation. OATI is working on the code to accept a PSS/E rev 30 base case. Jim Busbin distributed a reference document that could be used to help people understand how things would be modeled in revision 28 versus revision 26. Entities that are using revision 26 may have difficulty with the conversion of the models, since it would still cause star buses, and mapping the outage data from the SDX into their study models.

#### ***Modeling marginal zones as zones***

The modeling of the marginal zones as PSS/E zones could be used as a stepping-stone to the implementation of IDCGTF's white paper Option 1. One of the primary uses of the zones is to allow for implementing granularity into the model. Jim Busbin has distributed a revised PSS/E Zone Change Order for DFWG to review and comment on. This will be discussed during the November 12, 2004 conference call. IDCWG is waiting on comments from DFWG prior to moving on this change order. Jim will add into the draft change order the reference to Option 1.

### **Book of Flowgates Update**

There have been discussions between several entities about the Book of Flowgates and the format that it is currently available in. Currently the Book of Flowgates is an Excel Workbook. At the IDCWG there were discussions about having the Book of Flowgates rewrite presented as a NERC project for the benefit of the industry. The information that is currently available in the Book of Flowgates is not considered sensitive information, but if there is additional information added to it, then there may be commercial implications.

## Flowgate Administration

The October and November Flowgate Administration document was reviewed. The final document will be submitted to ORS for final approval. The majority of the modified entries in the Flowgate Administration document were for changes to coordinated flowgates and the majority of the removals were for removing of control areas that were integrated. In the November document, a majority of the deletions were to remove several iIDC flowgates and the majority of the additions are coordinated flowgates.

## Posting

The November Book of Flowgates and MUST files have not been posted yet. These will be posted on Friday November 5, 2004. Once they are posted a message will be sent to DFWG notifying them of the change. The meeting minutes are currently up to date. The August meeting minutes have been submitted for formatting and posting.

## Marginal Zone Analysis

### *Duquesne marginal zone review*

The Duquesne marginal zones will be reviewed during a November 12, 2004 conference call. This will be brought to the December ORS meeting for final approval.

### *Updated review of other zones*

After the Duquesne and Dominion integrations are completed, all of the marginal zones will be reevaluated and presented to the ORS. This review will be based on the updated flowgate lists and TLR usage.

### *MISO marginal zones*

The MISO marginal zones will be discussed at the January DFWG meeting.

## Next Call/Meeting

What	Date	Time	Location
Conference Call	November 12, 2004	2 p.m. Eastern – 1 Hour Max	Marginal Zones
Conference Call	November 12, 2004	2 p.m. Eastern – 1 Hour Max	Dominion Integration and PSS/E
Conference Call	December		Winter Base Case, as needed to prepare month case and FG reporting
Meeting	January 5–6, 2005	Half day, half day	Tampa
Conference Call	February		As needed to prepare month case and FG reporting
Meeting	March 30–31, 2005	Half day, half day	Charlotte or New Orleans

## Adjournment

Chairman Shanahan adjourned the meeting at 11 a.m. on November 4, 2004

## Attendance

<b>Name</b>	<b>Representing</b>	<b>E-Mail Address</b>
Pat Shanahan, Chairman	ATC	<a href="mailto:pshanahan@atcllc.com">pshanahan@atcllc.com</a>
Paul Graves	FRCC	<a href="mailto:Paul.Graves@pgnmail.com">Paul.Graves@pgnmail.com</a>
Kannan Sreenivasachar	IMO	<a href="mailto:kannan.sreenivasachar@theimo.com">kannan.sreenivasachar@theimo.com</a>
Jason Marshall	MISO	<a href="mailto:jmarshall@midwestiso.org">jmarshall@midwestiso.org</a>
Phillip Shafeei	NYISO	<a href="mailto:pshafeei@nyiso.com">pshafeei@nyiso.com</a>
Dave Mabry – CC	PJM	<a href="mailto:MABRY@pjm.com">MABRY@pjm.com</a>
Jim Busbin	SOCO	<a href="mailto:jybusbin@southernco.com">jybusbin@southernco.com</a>
Wayne Galli	SPP	<a href="mailto:wgalli@spp.org">wgalli@spp.org</a>
Dan Kehoe	TVA	<a href="mailto:djkehoe@tva.gov">djkehoe@tva.gov</a>
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