

Meeting Minutes  
DT DCC – IFIEC Europe

Date: 23 November  
Time: 09h00 – 11h30  
Place: Brussels (Hotel Four Points by Sheraton)

Participants:

Name	Affiliation
<i>DT DCC</i>	
Stephanie Bieth	RTE
Anders Danell	Svenska Kräftnat
Edwin Haesen	ENTSO-E
Mark Norton	EirGrid
Dwayne Shann	National Grid
<i>IFIEC</i>	
11 attendees from WG Electricity	

DT DCC: ENTSO-E drafting team on the Network Code for Demand Connection  
IFIEC: represented by the WG Electricity

### 1. Welcome

The DT requested the possibility to discuss the context and scope of the Demand Connection Code (DCC) with IFIEC. An agenda slot was offered at a WG Electricity meeting which is gratefully accepted.

Both the DT and IFIEC agree that an agreed version of the meeting minutes will be published on the ENTSO-E website in accordance with Regulation (EC) 714/2009.

### 2. Network Code Development

To discuss the Network Code (NC) Development context, the DCC timeline and the basic principles on which DCC requirements are to be drafted a presentation is prepared by ENTSO-E.

Most IFIEC participants are familiar with the context of European NCs, a.o. because of involvement in earlier discussions on the NC on generator connection and participation in the stakeholder usergroup on NC CACM.

### 3. Demand Connection Code scope

A fundamental question for IFIEC is what this NC considers to be a load. The DT has based its definition on ACER's framework guideline which mentions transmission connected loads, DSO connections and DSO

connected customers. To which extent requirements are imposed on each user depends on the significance of the user.<sup>1</sup>

The DT presents the Terms of Reference for this NC agreed within ENTSO-E. IFIEC has no comments on this.

The interactions with other NCs under development (generator connection, system operation, market codes) are briefly described. The NC on demand connection will be aligned with that of generator connection in terms of procedures for derogation, retro-activity, compliance testing. For the sake of clarity the two NCs are considered as distinct codes which can be superposed:

- Requirements in the NC for generator connection are regarded as if no load is present (except for auxiliaries).
- Requirements in the NC for demand connection are regarded as if no (embedded) generation is present.

IFIEC asks how this should be interpreted for industrial sites with an internal network. Both demand and generation will interact in the same internal network, e.g. in case of an internal fault. The DT notes that FRT requirements (referring to the NC on generator connection) are set for transmission grid faults.

IFIEC refers to the 3<sup>rd</sup> Energy package where industrial networks are defined as distribution networks. This could be too specified, e.g. in case all local customers need to place harmonic filters possibly creating resonance. An industrial load is a network with specific consideration.

- ➔ Both the DT and IFIEC agree that industrial sites are considered as distribution networks designed to meet functional requirements at the connection point with the relevant TSO. Local demand facilities within the network are considered for voluntary requirements (e.g. demand side response) and compliance testing of requirements at the industrial network connection point

IFIEC asks if contractual procedures for a.o. ancillary services will be part of the NC on grid access. The DT stated that contractual procedures are outside this NC and also that ENTSO-E still awaits the framework guidelines on this domain.

Both the DT and IFIEC agree that due to the long time frame for changing/amending European network codes once into force as European law, the NC should focus on (technical) functional requirements, instead of very detailed specifications.

#### 4. Demand Connection Code principles

##### *Frequency and voltage parameters*

In addition to the mentioned principles IFIEC emphasizes industrial sites (e.g. Seveso sites) need to be able to isolate their network from the main grid and continue internal operation of essential load based on auxiliary generation. This comment refers to NC RfG where disconnection of generation is prohibited in defined situations.

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<sup>1</sup> "The network code(s) developed according to these Framework Guidelines shall apply to grid connections for all types of significant grid users already, or to be, connected to the transmission or distribution network.

...

*DSOs are treated as grid users where they have to comply with the TSO's requirements in the network code(s). "*

### *Low Frequency/Voltage Disconnection and On Load Tap Blocking*

- ➔ The DT and IFIEC agree that these emergency procedures should be used as a second stage only. A first stage for contingency action would be disconnection on voluntary (i.e. market) basis. The second stage could be inevitable in some cases.

Setting up a two stage process is not within the mandate of this NC, which is an operational process. The code will however provide the functional capabilities, which could allow for such an approach. The operational process will be discussed with the drafting team for NC on system operation.

IFIEC comments that OLTC blocking at a transformer inside some chemical plants is not possible. The DT clarifies that the requirements are specified for the transformers at the connection point.

### *Short circuit current*

IFIEC acknowledges that  $P_{sc}$  is a very important parameter for customers, but request that both the maximum and minimum values are provided by the system operator, as well as the direct and homopolar component. If the code will pose requirements on harmonic current injection, also the grid  $P_{sc}$  or  $Z_{sc}$  values for harmonic components is needed.

### *Disconnection, islanding, reconnection*

No comments on the presented principles

### *Demand management capabilities, balancing capabilities and provision of ancillary services*

If services in this list are made mandatory, it will require a CBA to justify this.

If services are voluntary and a user accepts to provide these, then the related connection requirements will be mandatory. Operational aspects (e.g. max hours disconnection per year, exemption when in maintenance, ...) are subject of operational or market NCs

### *Requirements for reactive power*

No comments on the presented principles

### *Equipment requirements at connection point*

No comments on the presented principles

*Instructions provided to end user*

No comments on the presented principles

## 5. Next steps

ENTSO-E expects a first internal NC draft early 2012. The DT and IFIEC agree for a follow-up bilateral meeting in the first quarter of 2012.

IFIEC will send a list of meeting dates of the WG Electricity in 2012.

IFIEC is open for giving comments in the meantime or having a member participating in a DT meeting if requested.

The minutes will be reviewed by both parties to come to an agreed version which will be placed on the ENTSO-E website in due time.