

Meeting Minutes
ENTSO-E Drafting Team on Demand Connection Code
IFIEC Europe

Date: 29 February 2012
Time: 14h00 – 17h00
Place: Brussels

Participants:

Name	Affiliation
<i>DT DCC</i>	
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DT DCC: ENTSO-E drafting team on the Network Code for Demand Connection
IFIEC: International Federation of Industrial Energy Consumers

1. Welcome / Agenda

A first meeting with IFIEC took place on 23 November 2011 at which time the main underlying principles for drafting this code were discussed and agreed.

The DT DCC worked on a first draft version of the code which will serve as a basis for further stakeholder consultation. As a main stakeholder in the context of the DCC, the preliminary draft was sent to IFIEC for first reactions. In the meeting this draft code is gone through Article per Article.

IFIEC appreciates the opportunity to give feedback on this first draft in a bilateral meeting.

2. General comments

- IFIEC appreciates that key points raised at the meeting of 23 November are taken into account in the present draft, e.g.
 - The draft DCC sets mandatory capabilities for industrial networks that choose to provide voluntary demand side response services in terms of active and reactive power.
 - A clear distinction is made between mandatory load shedding (LFDD and LVDD) and voluntary services.

- The context of closed distribution networks is well taken into account with these networks having requirements set at the connection point, leaving the possibility open to set these further to the networks internal clients.
- IFIEC expects some points to be made more clear, e.g.
 - DSR load shedding services are based on TSO instructions, but the draft code puts no limit on how often or how long a TSO can request the service. For a customer to accept the service a limit on the number of hours of activation should be introduced. Also whether or not an absolute warranty by the user (covering maintenance) is required impacts the amount of load users will offer into this market.
 - Information exchange on short circuit power: IFIEC expects grid users receive information on minimum and homopolar short circuit power as well for studies on motor starts and protection settings.
- IFIEC expect the DCC to give the explicit right to closed distribution networks or demand facilities to go in island operation due to safety concerns, e.g. for Seveso sites.

3. Detailed comments

The **definition of Distribution Network** will be revised to make it unambiguously clear that it comprises also Closed Distribution Networks.

When the code mentions “avoiding unnecessary investments in some regions so that their respective **regional specificities** are appropriately taken into account”, this does not imply that local grid problems should deteriorate. Regional specificities are mainly understood in terms of synchronous areas which e.g. all have different frequency range requirements.

IFIEC expects that a requirement prescribing demand facilities to be designed for a given set of frequency ranges / time durations, specifically allows for **islanding operation** as well. The DT DCC states that this right is not a functional requirement. If this right is explicitly included in the code it could result in uncertainty for other items which are not explicitly mentioned.

The DT DCC proposes that the table of frequency ranges for which a demand facility or distribution network should be designed covers the same **frequency ranges** as generators are required to withstand (see Network Code ‘Requirements for Generators’). IFIEC would expect that a TSO expects loads to disconnect at the lowest frequency band to support the system.

The DCC draft prescribes that demand facilities and distribution networks connected at 110kV or above shall be able to withstand a given table of **voltage ranges / durations** at their connection point. IFIEC considers 1 p.u. to 1.05 p.u. to be the normal operating range. The DT DCC agrees that TSOs also prefer this under most conditions. The undervoltage situations are however possible.

IFIEC notes that 1.15 p.u. in a system with 110kV nominal voltage would result in 127 kV for which some equipment is not rated and which could give problems with earth faults. This is the result of a **gap between system operation practices and standards** which already exists today.

The draft DCC contains a requirement that transmission connected distribution networks have the capability to maintain 0MVar exchange (within a deadband) at 25% maximum importing capacity. This requirement aims at **compensation of cable networks at the connection point**. IFIEC points out that this might as well result in a network having to install capacitor banks to meet the requirement. The DT will reconsider the formulation of this requirement.

For **requirements on short circuit**, IFIEC expects an obligation for the TSO to inform users of the minimal and homopolar short circuit power. The DT notes this is difficult to set as it depends largely on operating conditions.

When the DCC sets **requirements for protection and control**, IFIEC and the DT agree that first the protection objective should be set, then the scheme, then the settings.

The draft DCC sets capability requirements for demand disconnection for system defense. This comprises also requirements for **On-Load Tap Changing (OLTC) transformer blocking**. The DT clarifies that only transformers at the connection point have to comply with this. In some very particular cases this might result in safety issues, e.g. on chemical sites. For particular cases, a derogation can be pursued on the premise of safety. It is difficult to generalize these particular cases in a network code.

4. Next steps

ENTSO-E notes that future discussions with stakeholders will likely take place in the format of user group meetings. A work program for 2012 and an invitation for a DCC user group will be announced shortly.