Minutes of Meeting
Drafting Team on Demand Connection Code (DT DCC)
DSO Technical Expert Group (DSO TEG)

Date: 29 November 2011
Time: 09h00 – 16h00
Place: Arnhem (NL)

Participants

Name	Affiliation	present	excused
DT DCC			
Gianluca Albanese	Terna		X
Stephanie Bieth	RTE	X	
Anders Danell	SVK	X	
Roberto Gnudi	Terna	X	
Edwin Haesen	ENTSO-E	X	
Bastian Homburg	Amprion	X	
Kees Jansen	Tennet	X	
Klančnik Jurij	ELES		X
Mikko Koskinen	Fingrid	X	
João Moreira	REN	X	
Mark Norton	EirGrid	X	
Sergio Pasero Ruiz	REE		X
Dwayne Shann	National Grid	X	
Guillemette Smadja	Elia / LRG		X
Helge Urdal	National Grid		X
DSO TEG			
Alberto Ceretti	Eurelectric DSO/Enel Distribuzione	X	
Falk Engelmann	CEDEC/VKU		X
Bruno Gouverneur	Eurelectric DSO/Synergrid	X	
Mike Kay	Geode/ENWL	X	
Tony Hearne	Eurelectric DSO/ESB Networks		X
Riccardo Lama	Eurelectric DSO/Enel Distribuzione		X
Johan Lundqvist	Geode/Svenskenergi	X	
Marc Malbrancke	CEDEC/Inter-Regies	X	
Pavla Mandatova	Eurelectric DSO	X	
Jacques Merley	Eurelectric DSO/ERDF	X	
Sylvia Michel	Geode/Svenskenergi		X
Herman Poelman	CEDEC/Alliander	X	
Graeme Vincent	Eurelectric DSO/Scottish Power	X	
Walter Schaffer	Geode/Salzburgnetz		X
Pierre Schlosser	Eurelectric DSO		X
Siegfried Wanzek	Eurelectric DSO/E.ON-Energie	X	

1. Welcome

2. Agenda

Proposed agenda:

09:00-09:05hrs Approve Agenda

09:05-10:00hrs Principles discussion on:
- DSR voltage cross border issue discussion

10:00-10:30hrs Discussion on drafted text Continue from page 17

10:30-10:45hrs Coffee break

10:45-12:30hrs Discussion on drafted text (continued)

12:30-13:00hrs Lunch break

13:00-14:30hrs Discussion on drafted text (continued)

14:30-14:45hrs Coffee break

14:45-15:45hrs Discussion on drafted text (continued)

15:45-16:00hrs Review and Set Actions

Approved with following changes
- The DSO TEG has some general DCC remarks they wish to communicate
- Review of the minutes of last meeting (04/11) will be done by email asap

3. General DSO TEG comments

- It is not always clear in the present DCC requirements whether small or large customers are considered and what the code expects from them
- There is a concern on the use of definitions. These should be aligned with other NCs Especially the definitions of (Relevant) TSO/DSO should be taken care of. → The DT agrees that definitions will need to be revised again to check for consistent use within the code and in relation to other codes.
- Unit vs. Facility: why is one of the two sometimes chosen? Requirements are always to be set at the Connection Point to avoid legal difficulties.
- Why is a definition of significant user needed? → The DT agrees this definition is not needed strictly in the code.
- A clear systematic/distinct set of requirements is expected for existing and new users. → The DCC needs to be in line with the wording of the FWGL concerning retro-active application. SOs are not tended to pursue retro-active application of requirements unless this can be clearly justified by a CBA. It is expected this will be so for a limited number of the requirements/users. The approach will be in line with the approach of NC RfG.
- The DCC sometimes switches between owner and operator responsibility. In some case there is also a distinction between the asset owner (could be the state) and the party responsible for planning/development of assets. →The DT asks if the DSO TEG can propose a definition that sets these roles clear and covers all DSOs in Europe?
- The definition of a closed distribution system is not clear. Why not take the definition of the EC regulation? The DCC definition also uses 'operator' in a definition of a system, this should be revised.
- There is a concern on the eventual categorization of users (cfr. type A to D in NC RfG) → First all requirements will be discussed, only afterwards the type of users are defined for the graded approach of requirements. This categorization could be discussed in a meeting at a later date.
- An elaboration of the CBA is expected (comparing to the NC RfG article on CBA). It is not clear which costs should be included: shallow costs for facilities, system costs, …? It is not clear if implementation costs by the SO or another party are to be included in the CBA.

- What are the next steps after the 07/12 meeting? Is there a deadline for providing comments? → The target is to review the draft DCC by the end of 07/12 meeting. Interaction with the DSO TEG will continue (practical details to be discussed).

4. Principle: Demand Side Response (DSR) as a voltage cross border issue

The DT refers to the ENTSO-E Regional Group Continental Europe defense plan which gives a table with the categorization of large-scale incidents of the last years, indicating many of them to be due to voltage instability. The DSO TEG claims this does not mean that voltage problems on distribution level have a transmission impact, since it is impossible for distributed generation to support transmission voltage over e.g. a 20km overhead line. The DT argues that the entire generation fleet connected to distribution level needs to be considered.

The DSO TEG agrees that voltage requirements and defense schemes need to be consistent.

The DSO TEG favors that generation and demand are not treated distinctly in separated NC's. The DT argues that both codes dot not state how to operate the network

The DT asks where the DCC draft requests more than needed for voltage issues. The DSO TEG refers to the voltage range table. → This table was recently altered by the DT to be in line with the NC RfG requirements.

The DSO TEG still has a concern on which users need to comply with the DCC requirements. If the distribution network has to remain connected, but all LV users will disconnect this has no benefit either to the transmission system → The DT will revise the draft to make the requirements clear.

5. Review draft code

The discussion on the draft code is continued at the point where the meeting of 04 November 2011 ended.

Reactive Power Requirements

- Reactive power provisions do not apply to users connected to the distribution system? DSO TEG agrees on this.
- Power factor 0.9 reflects the widest range that would be in line with RfG
- A set of TSO case studies showed that reactive power compensation at distribution level, would be the most cost efficient from a societal perspective. The argumentation could eventually be included in an FAQ
- The DSO TEG is concerned on who will eventually pay for this requirement while the requirement is to the benefit of the TSO. Does this have an impact on the commercial agreement between TSO and DSO → This NC will not deal with cost recovery issues.
- The DSO TEG favors that no specific values for a range are set on a European level so that local circumstances can be taken adequately into account.

- A new distribution grid will not be built regularly. If new lines are built, will compliance with the requirement be enforced? Will a CBA for a given situation be performed on a case by case analysis or on a national basis (DSO TEG prefers the latter)

Protection

- Overfluxing: 'U/f' is deleted
- The DSO TEG questions why the Article is required in the code, since safety laws already exist on national basis.
- The NC will not change liabilities in this respect. It impacts how to communicate/coordinate on it. The DSO TEG did not yet check if it changes present obligations.

Control schemes and settings

The DCC draft is revised to reflect that SOs have to agree on this.

Information Exchange

No comments

Modernisation and Equipment Replacement
No comments

Disconnection/island mode
- The DSO TEG asks to verify the wording in case networks up to 132kV are distribution.

Low Frequency Demand Disconnection
- The DSO TEG asks for clarification on the phrase "The demand disconnection should be net of embedded generation". Is it is no option to balance generation and load? → LFDD is an automated action as a last resort; balancing automation is no adequate solution in this case.
- The DSO TEG asks if disconnection will also occur if the connection point has a net infeed in the transmission system. The DT already discussed this and came to the same conclusion that disconnection in a LFDD scheme will be prohibited if there is a net infeed.
- The auto-reclosure requirement will be clearly rephrased as a design requirement.
- The DSO TEG expects a follow-up on this issue in the operational code.
- The DSO TEG doubts why pumped storage is explicitly included in the code → The draft is not changed for the moment.
- The DSO TEG states that it is not common in the UK to have multiple possible stages in a single relay. If multiple stages are taken in a defense plan these stages are to be represented in the LFDD scheme over all relevant demand. Allowing several stages to be set in each relay is overly complicated.
- The DSO TEG asks why df/dt should be used in an LFDD relay. → This option is presently only applied in Italy (first stage is based on df/dt, the following stages are based on frequency thresholds).

Low Voltage Demand Disconnection
- This should be subject to an agreement.
- With regards to control room operation it should be made clear that it is the Relevant Network Operator's control room, not an additional market player.
- "Low Voltage Demand Disconnection relay which switches out demand at the location." This phrase can be confusing as it is not clear if location refers to the relay or the load.
- The DCC draft gives three methods on how LVDD should be able to be implemented. Even if there is a clause specifically for control room initiated LVDD, it does not state that control room initiated capabilities need to be implemented.
- "b) The DSO shall also be capable of initiating on its own a trip command after agreement with the TSO" causes confusion → The clause is deleted
- With regards to OLTC blocking the draft should state clearly that it only refers to transformer at the connection point, not in the user's internal network.

Demand Side Response requirements
- The DSO TEG considers making LFDD capabilities mandatory for users that volunteer in a SO controlled scheme to be a possible barrier for users to enter the demand response market as they face an unknown risk on sudden disconnection. The DSO TEG considers this to be an unnecessary interference with demand response markets. The DT argues that in the alternative case LFDD would be implemented anyway in an unselective manner, resulting in the possible disconnection of essential loads as well.

DSR Transmission Constraint Management

Autonomous DSR
- The DSO TEG states these requirements are in serious conflict with demand response market design. These services are to be covered as a product by other market players.
- The DT has no legal ground that states why it could not be applied.
- The specific appliances to which these requirements would be applied is left open for discussion.
- Compliance testing would obviously be performed by type testing
- The DT considers this service not to be fundamentally different or more intrusive compared to LFDD requirements

DSR SVC

- will be removed from the code

DSR RPC
- will likely result in similar requirements mentioned in previous articles.

Power Quality
- Taken over from RfG code
- The DSO TEG does not consider this to be a fundamental topic for cross border trade

Simulation models
- The DSO TEG has concerns how distribution system models will be dealt with.

Operational notification procedure
- The clauses are in line with the NC RfG wording
- The DSO TEG considers it to be overly complicated for the connection of distribution systems, but has no fundamental opposition to it as new connections are not made frequently.
- The DSO TEG does not consider a connection process between DSO and TSO to have a cross-border impact.

The following meeting will pick the review up at this point

6. Next steps

Next steps on interaction with the DSO TEG in the DCC development will be discussed on 07/12 in Düsseldorf.

End of meeting