

DT DCC – DSO meeting

Meeting 14.09.2011

Paris

14 Sept. 2012



Reliable Sustainable Connected

Agenda



1. **Approve Agenda**
2. Approve minutes from meeting 9th June 2011
3. Discussion on changes from draft FWGL and impact on draft code
4. Discussion on drafted text
5. Principles discussion on:
 - Frequency and voltage parameters;
 - Load-frequency control related issues;
 - Low Frequency/Voltage Disconnection and On Load Tap Blocking
 - Short-circuit current;
 - Requirements for protection devices;
 - Disconnection/Islanding/Reconnection
 - Information/Data exchange
6. Review and Set Actions

Agenda

- 09:00-09:05hrs Approve Agenda
- 09:05-09:30hrs Approve minutes from meeting 9th June 2011
- 09:30-10:00hrs Discussion on changes from draft FWGL and impact on draft code
- 10:00-10:30hrs Discussion on drafted text:
- Compliance
 - Derogation
 - Enforcement period
- 10:30-10:45hrs **Coffee break**
- 10:45-12:30hrs Discussion on drafted text (continued):
- 12:30-13:00hrs **Lunch break**
- 13:00-15:45hrs Principles discussion on:
- Frequency and voltage parameters;
 - Load-frequency control related issues;
 - Low Frequency/Voltage Disconnection and On Load Tap Blocking
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 - Requirements for protection devices;
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 - Information/Data exchange
- 15:45-16:00hrs Review and Set Actions

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Agree Minutes



[110706 DSO Minutes+ remarks MM+JM - Post DT discussion.docx](#)

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Final FWGL review – Main changes

Retrospective application

- TSO/NRA to identify need to apply
- CBA method has to be developed for code – work in progress

Current thinking:

1. TSO has to decide to make proposal – only if requirement[s] needed
2. This has to then be demonstrated as justifiable given CBA – otherwise derogation given

Resulting Actions:

- Approach above in line with existing thinking of codes – No action
- CBA approach being developed by Entsoe for all codes – Monitor impact to NC DCC
- Business as usual for now

Final FWGL review – Main changes



NC/Standards interaction

- Network Code has precedence
- More detailed or stringent requirements can be used

Current thinking:

1. Network code should have precedence
2. Network code should be functional not change for change sake
3. Network code should utilise existing standards to inform its drafting of the requirements there within
4. Network code should be by definition the most stringent and therefore no need for more stringent requirements

Resulting Actions:

- Approach above in line with existing thinking of codes – No action
- Business as usual for now



Significance Test

- Network Code (each?) should have a significance test and method used in code

Current thinking:

1. Network code itself is significance test and requirements therein
2. Method explained in Network code or in position paper on network codes

Resulting Actions:

- Approach above in line with existing thinking of codes – No action
- Business as usual for now

Final FWGL review – Main changes



Significance Test

- Network Code (each?) should have a significance test and method used in code
- Significance should be periodically reviewed

Current thinking:

1. Network code itself is significance test and requirements therein
2. Method explained in Network code or in position paper on network codes
3. Review requirement will be covered by periodic review of codes

Resulting Actions:

- Approach above in line with existing thinking of codes – No action
- Business as usual for now

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ENTSO E Connection Code Demand Sent to DSO WG July 2011.doc

Title 3 Operational Notification

Title 4 Compliance

Title 5 Derogations

Title 6 Final Provisions



Derogations

LRG in process of changes necessary, basic principles we believe are the same some additions modifications will be required

EU alignment of National codes, etc

Not in NC and needs to be added

EU commissioning information sharing

Not in NC and needs to be added



Conclusion

Rewording of parts of compliance, derogation and enforcement period required

Some extra clauses need to be added

Approach to changes should be consistent to NC's therefore RfG needs changes and will be first. DCC should make use of their approaches in its approach to FWGL

Principles and existing content of DCC network code unchanged

ToR and critical assumptions still valid – no changes required

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Principles – Frequency and voltage parameters



Follow NC RfG requirements for frequency and voltage ranges over Europe

If generation is staying connected demand should also be able to do so for stability reasons

Say nothing on voltages below 110kV

Use RfG requirements rather than replicate in DCC for embedded industrial generation

Flexibility for wider ranges on Frequency due to geographic differences - Islanding

Requirement in FWGL, but believed covered under applications like LFDD, LVDD and OLTC Blocking

Anything else from your prospective?

Principles – Low Frequency/Voltage Disconnection and On Load Tap Blocking

Existing requirements in Grid codes across Europe for LFDD

LVDD used in some countries recent Entsoe work expects much wider use across Europe

LVDD and OLTC Blocking expected to be required in tandem

DSO responsible to develop implementation plans for requirements i.e. x% of load demand in x stages in line with existing standard current practices

Note: DSO EG concern that LVDD should not become an avoidance tool for system development



Short circuit ratings of equipment must not be exceeded

Short circuit contribution must be provided for protection operation/quality (i.e. EMC)/stability

Short circuit information must be given to TSO/DSO

Need to add that we need to inform users of what to expect from system

DSO: Can we add in the need and/or method for minimising cost in accommodating connections i.e. Equipment replacement costs

DSO: Threshold issue is one required? Nationally/synchronous network/European set?

Islanding varies and therefore applications should be flexible

Reconnection should be allowed following agreement with Relevant System Operator

Synchronism devices to be fitted as specified by Relevant System Operator

Automatic Disconnection from network must be able to be fitted application will be specified and method also

DSO EG: Need to address the longer term in each of these areas when drafting code

Protection requirements for connection interface should be general and functional

Typical protection can be given

Setting should be agreed with Relevant System Operator and co-ordinated between TSO/DSO

Changes have to be agreed with TSO/DSO and should be notified in a timely manner

Principles – Information/Data exchange



Information should be freely transferred from and between TSO[s]/DSO[s]/Users (noting commercially confidentiality data security and privacy issues)

Information lists should not be specific – new technology and configurations of networks

Defined by each System Operator – Assumption is that a centralised core of info will be agreed and develop by all organisations over time

Information should be timely

DSO EG: Does customer need capability or right to information from DSO/TSO's on viability of using their dynamic response information to allow for offering into the market

DSO EG: If real-time used define what that means

DSO EG: Special task force EG2 on data privacy and security in smart grids work, DG Energy website for paper – maybe create a link with this group

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Actions

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Meeting dates and work programme

DT DCC meetings dates set for:

13/14th Sept – Paris

14th Oct - Brussels

3/4th Nov - Brussels

28th/29th Nov – Amsterdam