

Demand Connection Code (DCC) JESG 23 February 2012



Helge Urdal, Member of EPS WG and Ad Hoq DT for M&A for DCC Helge.urdal@uk.ngrid.com

&

Dwayne Shann, Member of DT DCC dwayne.shann@uk.ngrid.com



DCC Update

- Timeline
- European stakeholder engagement
- Principles
- Scope
- Specific requirement principles
- Questions

3 year work programme – where does DCC fit in?



Deliverable	2011				2012				2013			2014				
		2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Products/legislation relevant for effective implemention of the	ie IE	M														
FG on capacity allocation and congestion management																
NC on capacity allocation and congestion management ¹					¢											
NC on forw ard markets ²									¢							
Regional progress, setup and testing (incl. AESAG process and Regional Initiatives Work Program)																
EC comitology guideline on governance ³																
FG on grid connection ⁴					Γ											
NC on grid connection 5				\diamondsuit												
NC on DSO and industrial load connection						¢										
FG on system operation ⁶														1		
NC on operational security	*					¢										
NC on operational planning and scheduling							\$								ł	
NC on load-frequency control and reserves								$\langle \diamond \rangle$								
NC on operational training							_									r
NC on requirements and operational procedures in emergency																
G on balancing																
										$\langle \diamondsuit \rangle$						
EC comitology guideline on transparency	t		-										ſ			
FG on Third Party Access								8								



Timeline DCC – drafting mandate

- European Commission mandate letter issued on 5 Jan 2012
 - Interpretending ENTSO-E to develop a network code on DSO and industrial load grid connection rules in electricity within a period of one year from the date of this letter.
 - In order to take into account the legitimate considerations of other stakeholders concerned, such as most importantly in this case DSOs and industrial users, ENTSO-E should engage in genuine stakeholder consultations.
 - communicate to us your planning for the development of the network code, in particular how you intend to consult with stakeholders...



Timeline

e		Timeline	Progress
Preparatory phase		Mar. 2011	Kick-off, initial scoping
		Jul. 2011	First meeting with DSO Expert Group
		Jul. 2011	Publication of ACER's Framework Guidelines
		Sep. – Dec. 2011	DCC drafting, initial stakeholder meetings
4	\land	Jan 5 2012	EC mandate letter received
Formal phase		Jan. 2012	Internal ENTSO-E consultation
		Feb. – Mar. 2012	Continued stakeholder interaction & ENTSOE drafting, publication of scoping document, preparation of FAQs & Motivation and Approach documents
		Apr. – Jun. 2012	Public consultation
		Jun. – Sep. 2012	Review comments, code update
		Oct. – Dec. 2012	Finalise code



Speaker Notes

These timelines are milestones for DCC ENTSO-E drafting team and may change or re-arrange due to external/external influences. The timeline is tight because the completion of NC is set by ACER FWGL and the level of urgency required for various requirements to help secure security of supply.



European Stakeholder Engagement

- DSO Expert Group
 - Members (approx. 10) of three European wide DSO associations: Eurelectric DSO, Cedec, Geode, including 2 GB experts
 - Sequence of five meetings set out in 2011 with agreed work programme
 - DSO EG has since July 2011 not allowed ENTSO-E to publish meeting notes. DSO EG has now agreed in principle an the notes should be published shortly, together with notes from meetings with other Stakeholders.
- IFIEC
 - Met 23 Nov 2011
 - Next meeting scheduled for February 29, 2012
- CENELEC
 - In the context of EC mandate M490 on smart gird deployment
 - Met Dec 5 2011



Speaker Notes

The definition of the acronyms and their involvement.

- IFIEC International Federation of Industrial Energy Consumers, they are invited to discuss DCC requirements and how it will impact on national standards and closed private electrical networks.
- CENELEC European Committee for Electro-technical Standardization, not exactly an acronym, but they are invited also to discuss the existing national standards vs DCC and how it will influence or impact the normal way of doing things.
- DSO GB Expert members are Mike Kay and Graeme Vincent.



Principles of DCC

- Closely linked to the Requirements for Generators Code to follow similar principles for existing users' notifications and derogations
- Equitable treatment of all users, technology neutral
- Covers Demand customers (including Industrial) connected to both Transmission and Distribution which are significant from the perspective of cross-border impact and market integration, as well as DSOs
- Only functional requirements (capabilities) are prescribed, not specific use in system operation or by markets
 - Defining capabilities in performance terms and building upon the high level requirements set out in the ACER Framework Guidelines
 - Functional requirements are to be supported by a level of standardisation to deliver more specific applications and details



Principles of DCC (continued)

- Several levels of detail will be given in DCC requirements
 - Prescriptive requirements with single European parameter values or thresholds
 - Framework requirements with ranges of parameters to be set at national level
 - Principle requirements with specific requirements to be set at national level
- The quality of the connection (e.g. number of circuits or transformers required to connect a user) is not in scope
- Closed distribution systems are covered in line with the relevant prescriptions of the 3rd Energy Package



DCC Scope

Specific technical requirements set out in FWGL to be included in DCC:

Frequency and voltage parameters; Requirements for reactive power; Load-frequency control related issues; Short-circuit current; Requirements for protection devices; Balancing capabilities or provision of ancillary services; Equipment requirements at connection point; Demand Disconnection for System Defence & Demand Reconnection Instructions provided by TSO/DSO to User; Information/Data exchange Compliance; Derogation; Enforcement period Section 2.1 Section 2.1 Section 2.1 Section 2.1 Section 2.1, 2.1.1, and 2.1.2 Section 2.1.1 and 2.1.2 Section 2.1.3 Section 2.1.2 and 3.2 Section 3 Section 2.4 Section 2.2

Section 2.3



Speaker Notes

These are the proposed requirements for DCC and in some/or most synchronous zone these will be new requirements on demand, the approach is basically to get some flexibility from active demand, rather than the traditional passive demand.

nationalgrid

DCC Specific Requirements Principles

- A preliminary scoping document is available from ENTSO-E, about to be published.
 - In the meantime the document is covered in this info pack for JESG
- Includes initial thoughts as to the requirements to be covered by the code:
 - Frequency and voltage parameters
 - Requirements for reactive power
 - Load-frequency control related issues
 - Short-circuit current
 - Requirements for protection devices and equipment at connection point
 - Demand management capabilities, balancing capabilities and provision of ancillary services
 - Instruction provided by TSO/DSO to user
 - Information, data exchange, modernisation and equipment replacement, derogation, compliance, enforcement period





Any questions?

Dwayne Shann dwayne.shann@uk.ngrid.com 07760 181611 01926 654128