














# *Electricity Network Codes and Guidelines*

## **Grid Connection European Stakeholder Committee (GC ESC)**

8 September 2016

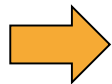
## Provisional Schedule 2016

	FEB-16	MAR-16	APR-16	MAY-16	JUN-16	JUL-16	AUG-16	SEP-16	OCT-16	NOV-16	DEC-16
RfG	 Clearance of scrutiny		 Adoption and publication	 Entry into force							
HVDC		 Start of scrutiny			 Clearance of scrutiny			 Adoption and publication	 Entry into force		
DCC		 Start of scrutiny			 Clearance of scrutiny			 Adoption and publication	 Entry into force		

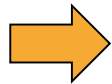
# Implementation Questions



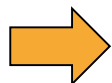
## 1. Can a Member State impose more stringent requirements by a separate legislation than imposed by the network code Requirements for Generators (RfG NC)?



In general, no – not outside of the values provided for in the code.



But: *"the relevant system operator, in coordination with the relevant TSO, and the power-generating facility owner may agree on wider frequency ranges, longer minimum times for operation or specific requirements for combined frequency and voltage deviations to ensure the best use of the technical capabilities of a power-generating module, if it is required to preserve or to restore system security."* Article 13.



*"The network codes shall be developed for cross-border network issues and market integration issues and shall be without prejudice to the Member States' right to establish national network codes which do not affect cross-border trade."* Article 8, Regulation 714.

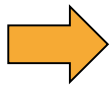
2. What about derogations granted according to national legislation before the RfG NC came into force? Should those derogations be maintained at any moment in time after entering into force of the RfG NC or are those derogations also subjected to Art. 4 of the RfG NC?

➔ Article 4 and 61 applicable immediately.

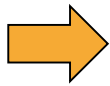
➔ Regulatory certainty critical.

➔ Any specific examples?

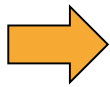
3. Is it allowed that Member States define a dedicated classification for Synchronous PGMs (SPGMs) and a different one for PPMs, each classification with its own thresholds?



Not explicitly prevented – but, was this the intention?



Art 5(2) – e.g. "connection point below 110k and maximum capacity at or above a threshold proposed..."



Article 17 and 20 – differentiated requirements.

#### 4. Procedure in case of differences between English and translated version?

- ➔ A corrigendum can be issued correcting inconsistencies.
- ➔ Please inform in writing to [ENER-ELEC-CROSS-BORDER-COMMITTEE@ec.europa.eu](mailto:ENER-ELEC-CROSS-BORDER-COMMITTEE@ec.europa.eu)

#### 5. Art 3(2)(d) - Why are storage devices excluded?

- ➔ Nascence of technology.
- ➔ Agreed in comitology.
- ➔ Does not prevent national-level requirements.

## 5. Definition of Power Generating Module and Art 5 categorisation.

### Power Generating Module (PGM)

#### Synchronous PGM

*"...an indivisible set of installations which can generate electrical energy such that the frequency of the generated voltage, the generator speed and the frequency of the network voltage are in a constant ratio and thus in synchronism." Art 2(9)*

#### Power Park Module

*"...a unit or ensemble of units generating electricity, which is either non-synchronously connected to the network or connected through power electronics, and that also has a single connection point to a transmission system." Art 2(17)*

### Article 5 categorisation

#### Power-generation facility:

*"...a facility that converts primary energy into electrical energy and which consists of one or more power-generating modules connected to a network at one or more connection points." Art 2(6)*