# DSO Views on Draft NC RfG

***(version 24 January 2012)***

**1st USER GROUP MEETING, 22 March 2012, Brussels**

# NC RfG Implementation

# Link to Standardization

- Missing links between requirements and existing standards should be assessed and gaps identified.
- The CBA of the proposed new requirements should take into account the time and costs of developing missing standards and type tests to check compliance with the requirements of the network code.

# Derogation & Maintenance Process

- According to the FG, TSO should handle the request for derogation and perform CBA – DSO to be consulted
- The derogation process should be simplified to avoid a high administrative burden. Bundled requests with the same focus on a national level might be an option
- The code should include a requirement for a periodical maintenance process, to be conducted every three years by ENTSO-E

# Scope of the Network Code, Definition of Generating Unit & Classification

# Scope of NC RfG

## DSO Recommendations:

- **The network code should define technical pre-requisites for PGFs to be connected to the network**
- **The actual settings should be defined by the RNO according to network conditions (protection systems characteristics, operational criteria, etc.). If needed, the relevant TSO and RNO should agree on the settings necessary for the stability of the system as a whole. This should be part of the system operation rules.**
- **The CBA on the requirements deviating from existing practice should be conducted as required by ACER Framework Guidelines, Art 2.1.**

# Generating Units vs Facility (1)

## Both terms used within the RfG, often in a confusing way

- **Performance towards the system is expected at connection point because**
  - **It determines ultimately the system stability and security**
  - **This is the limit between responsibility area**
    - **Below PFG, above RNO**
    - **No RNO want to be responsible for what happens between unit and connection point**

- **Technical requirements often make sense at unit level**
  - **Type testing of components is linked to units compliance**
  - **and PGF Owner is responsible for compliance (Art. 29)**
  - **…at connection point**

# Generating Units vs Facility (2)

## DSO Recommendations:

- Functional requirements shall be set at the connection point between the PGF and the network
- If necessary they can be shifted to or accompanied by requirements at the GU level, especially in order to use routine type testing for components
- PGF owner must be responsible for compliance of both the GUs and the PGF at the connection point. The RNO (TSO or DSO) cannot and should not be responsible for what happens between the GU and the connection point -> Amendment of art. 29

# Type Classification of Power Generating Facilities - Additional Voltage Levels Shall Be Introduced

| | Capacity | | | |
|---|---|---|---|---|
| | 400W <P< Thresh (A/B) | Thresh (A/B) <P< Thresh (C) | Thresh (C) <P< Thresh (D) | Thresh (D) <P |
| U<45kV | A | B | N/A | |
| 45kV<U<170kV | | | C | D |
| 170kV<U | D | | | |

| Synchronous Area | Maximum capacity threshold from which on a Power Generating Facility is of Type B | Maximum capacity threshold from which on a > 45 kV-connected Power Generating Facility is of Type C | Maximum capacity threshold from which on a Power Generating Facility is of Type D |
|---|---|---|---|
| **Continental Europe** | 1 MW | 50 MW | 75 MW |
| **Nordic** | **1 MW** | 10 MW | 30 MW |
| **Great Britain** | 1 MW | 10 MW | 30 MW |
| **Ireland** | 0.1 MW | 5 MW | 10 MW |
| **Baltic** | 0.1 MW | 5 MW | 15 MW |

**Power is the key driver for significance**
**but requirements for MV and HV connected plants cannot be the same!**

# Clarity in Definitions, Compliance Monitoring/Testing & Operational Notification Procedure

# Roles & Responsibilities of DSO

- **(3) Distribution system operators (DSOs) are responsible for providing and operating low, medium and high voltage networks for [...] distribution of electricity as well as [...] connection of customers that can be consumers, other distributors and generators to these networks, and any operations regarding these customers in order to ensure the security of their networks with a high level of reliability and quality.**

# Type Testing – MD&PTC

- **Specifications of MD&PTC authorized certifiers:**
  - **In EU these certifiers are test laboratories, accredited by the national affiliate of European co-operation for Accreditation (EA) according to EN 17025 "General requirements for the competence of testing and calibration laboratories", and certification bodies, accredited by the national affiliate of European co-operation for Accreditation (EA) according to EN 45011 "General requirements for bodies operating product certification systems".**

  **-> Specify definition in art. 2 and insert a new section in art. 31 (7)**
- **Provided that such MD& PTC has been proofed with authorized certifiers, it shall be used as the sole compliance method for Type A**
  - **The most cost-effective way, necessary to address mass markets**

  **-> Amend art. 24.4 accordingly**

# Compliance Assessment & Monitoring

- **PGF Owner shall ensure compliance of both GU and PGF**

  **-> Amend art. 29 (1) accordingly**

- **Regular assessment of compliance of GU art 30(1)**
  - **Would create an obligation for DSO to control hundreds of thousands of installations, impossible to implement! -> CBA IS NECESSARY!**

  **-> The RNO shall have right to assess compliance of <u>PGF of Type C &D</u>**

  **-> As regards Power Generating Facilities of Type A and Type B, the PGF Owner shall indicate any change to the Facility to the Relevant Network Operator; the latter shall check the persistent compliance of the requirements on the basis of the initial documents (MD&PTCs as laid down in Article 24 4.a) and the change reported by the PGF Owner**

# Operational Notification Procedure

- **Three-step process too complex for types A&B, application in mass business not possible**
  - **Another reason why MD & PTC <u>shall</u> be used as the sole compliance method for Type A and be also preferred for Type B**
- **Limited Operational Notification (LON)**
  - **Types A & B should be explicitly excluded**
  - **Impossibility for the facility Owner to apply this procedure, and huge administrative burden for the DSOs**
- **End-of-life notification of a GU/facility to RNO is missing**

# Compliance Simulation -> Simplification of Art. 43-51

- **Compliance simulation is an additional tool to compliance tests**
  - **Compliance simulation replacing type tests for A and B not possible in tests laboratories & not necessary -> CBA should be conducted as required by ACER FG art. 2.1**
- **RNO shall have the right to require compliance simulation from PGF Owners only in following cases:**
  1. **For functions that cannot be tested in the field or in laboratories for technical or economical reasons;**
  2. **For D Type Generating Facilities**
- **The process to perform simulations shall be defined by the RNO**

# Thank you for your attention