

ENTSO-E User Group meeting on “Network Code for Requirements for Grid Connection applicable to all Generators” (NC RfG)

22 November 2012 - 9:30 h – 13:00 h
ENTSO-E offices (ground floor)
Avenue de Cortenbergh 100
1000 Brussels

DRAFT MINUTES

DRAFT AGENDA

	<i>Coffee</i>	
9:30	Welcome, overview of present NC RfG phase	ENTSO-E
9:45	Summary of ACER’s Opinion on NC RfG (13 October 2012)	ACER/NRAs
10:00	EC view on the global NC development process	EC
10:15	How to progress in the four areas of ACER’s Opinion	Round-table
11:30	<i>Coffee break</i>	
11:45	ENTSO-E’s initial proposals & Group discussion	ENTSO-E
12:45	Summary and next steps	ENTSO-E
13:00	<i>End of meeting - Lunch</i>	

ATTENDEES

Association	Representative	Affiliation
CEDEC¹	Marc Malbrancke	Inter-regies
	Herman Poelman	Alliander
COGEN Europe	Fiona Riddoch	COGEN Europe
	Bob Knowles	BDR Thermea Group
	Adam Green	MEC
EDSO for Smartgrids¹	Florian Chapalain	EDSO for Smartgrids
EHI	Eckhard Schwendemann	Viessmann
	Dana Popp	EHI
EPIA	Bernhard Ernst	SMA
	Manoel Rekingier	EPIA
EUR	Jonas Persson	Vattenfall
	Helge Regber	E.ON
Eurelectric DSO¹	Pavla Mandatova	Eurelectric DSO
	Jacques Merley	ERDF
Eurelectric WG Thermal	Joerg Kerlen	RWE
	Eric Dekinderen	Electrabel
EUROMOT	Mats Ostman	Wartsila
	Paul Zepf	EUROMOT
EUTurbines	Maxime Buquet	GE
	Ulrich Tomschi	Siemens
EWEA	Paul Wilczek	EWEA
	Frans van Hulle	EWEA
Geode¹	Johan Lundqvist	Svenskenergi
IFIEC	-	-
VGB PowerTech	Philippe Lebreton	EdF
Energy UK	Campbell Mc Donald	SSE
ENTSO-E	Ines Barreda	REE
	Dimitrios Chaniotis	ENTSO-E
	Luis Coronado	REE
	Torsten Haase	50HzT
	Edwin Haesen	ENTSO-E
	Ralph Pfeiffer	Amprion
	Ramunas Ponelis	LitGrid
	Thibault Prevost	RTE

¹ Viewpoints of CEDEC, EDSO4SG, Eurelectric DSO and Geode are indicated in this report as 'DSOs'

	Sergio Martinez	REE
	Helge Urdal	National Grid
observers	Reuben Aitkin	Ofgem
	Uros Gabrijel	ACER
	Jakub Fijalkowski	e-control
	Dipali Raniga	Ofgem
	Matti Supponen	EC – DG ENER
	Wouter Vancoetsem	CENELEC
	Gunnar Kaestle	CENELEC

1. Welcome, agenda

All participants of the RfG User Group, as well as further parties that expressed an interest to join today are much welcomed.

The objective of the meeting is to capture the views of all participating associations on the areas for improvement identified in ACER's Opinion, and to identify an appropriate way forward, considering timing and engagement with all affected stakeholders.

The proposed agenda aims at first providing an opportunity for all participating associations to share their general views and points of emphasis concerning ACER's Opinion and possible ways forward. Secondly, ENTSO-E will give some initial views on its preferred options for broader feedback from the User Group.

2. Summary of ACER's Opinion on NC RfG (13 October 2012)

ACER presents the legislative framework for ACER's Opinion, highlights the importance of the NC RfG and clarifies the four priority areas where targeted improvements are expected to comply with the framework guidelines. ACER stresses that the process in this phase focuses only on these four areas.

COGEN asks whether ACER is looking for one example for more justification with regard to significant deviations (page 8 of the Opinion). ACER notes that a CBA is a complex matter and asks to be pragmatic without unnecessary work.

VGB Powertech asks what are the criteria based on which ACER can reject other requests for more justification, posed by stakeholders, than the two proposals given in Section 2 of the Opinion. ACER responds this should not be understood as an 'open season' on the whole NC RfG. If there is new information that is relevant on the areas addressed in the Opinion, it needs to be heard now.

EWEA asks what happens if there is clear evidence for a deviation with present practices which is not mentioned in the Opinion? ACER considers the earlier statement and the Opinion to be clear that this phase focuses on well identified areas explicitly stated in the Opinion. ENTSO-E notes that all aspects of the NC RfG have been extensively discussed for the past three years. Arguments for choices made in the NC RfG can be found in supporting documents and notes of earlier meetings.

The DSOs note that they provided a larger list of deviations with present practices in the 3 September workshop, hosted by ACER, and asked whether ACER is comfortable with the items on which no further justification is asked by the Opinion. ACER re-iterates their earlier response.

EPIA asks who defines which info is needed on these justifications or what will eventually be provided. ACER responds that this will be defined by ENTSO-E.

3. EC view

The EC stresses that this phase of the process should not run forever. Discussions in the Florence Forum of 20/21 November considered February as a final date.

The EC is hiring a consultant to assess the impact of the NC RfG.

The EC also stresses that the code should not be re-opened for discussion, and asks all to focus on the areas identified by ACER for targeted improvements.

4. Round-table of all participating associations on how to progress in the four areas of ACER's Opinion

a. CEDEC, EDSO4SG, Eurelectric DSO, Geode

(see slides)

Key messages are

- Significance of Grid Users can vary from one area to another considering both the technical parameter concerned and the structure of generation.
- DSOs have provided their evaluation of requirements deviating from current practices and offer their cooperation in checking the justification. The need for standards to support the implementation of NCs is stressed.
- Clear interpretation of the code & systematic oversight are necessary
- Cost recovery: Recovery of reasonable and proportionate costs in a timely manner via network tariffs is an absolute necessity for DSOs. Without Pan-European guidance for cost recovery debates will start on national level with the consequences of undue delays in implementation of the network code.

b. COGEN Europe

COGEN Europe recognizes the work performed already in the development of the NC RfG and the importance of the timing aspect. Some requirements are considered a potential threat for some technologies. COGEN Europe considers the options given in ACER's Opinion on significance test, derogation and on heat all have potential for addressing the concerns raised about the network codes.

COGEN notes that there are discrepancies with present standards and states that CHPs also have to comply with gas network requirements where standards are used to enforce performance of domestic appliances. Additional info on the view to expand Art 3(6)g to industrial CHPs with rigidly coupled dry heat production can be provided. An end date of February appears reasonable to conclude on the four areas. COGEN Europe suggests breaking down the discussions in smaller working groups.

c. EHI

EHI states that large investments have been done in the past ten years to produce products that help to reduce CO₂ emissions. EHI asks for a different treatment of units below 16A. The technical problems of stirling engines in operating in a wide frequency range and providing frequency response are mentioned. EHI states that it supports the importance of the code for stable grids but asks that technologies are addressed based on their inherent characteristics. EHI considers the NC RfG to deviate from EN50438 which is the basis for its products.

The EC notes its sympathy for developing technologies, but asks how the development over time is seen. Exemptions should be seen as temporary measures only and at a mature stage the technologies shall be compliant.

EHI and COGEN Europe ask for time to adapt and to keep characteristics of certain technologies into mind.

ENTSO-E makes reference to a recent public news announcement from an aspiring market entrant in the UK, projecting annual sales in GB of 200.000 microCHP units by 2015 and which would be compliant with the RfG requirements by incorporating an inverter interface. ENTSO-E asks if COGEN Europe and EHI represent this manufacturer as well. COGEN Europe notes there are many technologies in micro CHP some but not all of which can adapt quickly. COGEN Europe also points out that the product mentioned is still not available on the market and that the ORC engine with inverter interface combination proposed results in a lower overall energy efficiency..

d. EPIA

EPIA would welcome a possible type-based derogation process at pan-European level, not only to new technologies, but also for existing ones. EPIA has a concern on the feasibility of the fast reactive current injection as prescribed in the code. EPIA asks for clarification on Article 4(3) and the specific role of the NRA to avoid uncertainty on what will happen next at national level. The role of standardization in implementing the NC RfG is considered unclear.

e. EUR

(see slides)

EUR states that cost based justifications have not been delivered and that EUR has never been asked for cost data. EUR asks what a significant deviation from present practices means and whether this has been defined already. EUR asks how it can provide cost data and how a CBA can be performed to justify a 250ms FRT capability. A letter by the Western European Nuclear Regulators Association (WENRA) has been sent to ACER on 3 October 2012 to request to include a clause on nuclear safety priority above the other code requirements. The voltage ranges in the NC RfG are considered to be significantly deviating

from present situations. Nuclear plants are considered to be not capable of complying with the frequency/voltage requirements in the code.

ENTSO-E responds that explanation of significant deviation, its relevance with regard to exhaustive and non-exhaustive requirements and a comparison with present practices has been provided in the RfG supporting documents. As the slides indicate a concern for existing units, ENTSO-E emphasizes that if retrospective application would be pursued, the process in the code asks for a transparent process with clear justification in which the owner has to provide cost data. Nevertheless, the NC RfG focuses on new units. ENTSO-E notes that nuclear units do exist that can comply with the voltage/frequency requirements in the code. Nevertheless, the NC RfG does not imply that other existing plants need to comply by default.

f. Eurelectric WG Thermal / VGB Powertech

The work done is acknowledged, but more diligence is considered needed. Eurelectric WG Thermal / VGB Powertech ask for a clear regulatory oversight, a fair balance of cost sharing and that costs are borne by the originator. Eurelectric WG Thermal / VGB Powertech suggests to exempt small units which have no cross-border impact from the code requirements and to discuss this in smaller groups. It is stressed that there is no common understanding with ENTSO-E on significant deviations.

g. EUROMOT

EUROMOT appreciates the invitation for the User Group to continue the work. The earlier concern on an FRT implementation of 250ms still persists. EUROMOT also suggests to extend Art 3(6)g to industrial CHPs with dry heat production. Small groups for further discussions are requested as well.

h. EUTurbines

(see slides and short paper)

Key messages on two of the four areas in ACER's Opinion:

- Justification of significant deviations from present practices
 - Modification of power vs. frequency requirement
 - Modification of frequency response time (clarification of wording)
 - Modification of FRT requirement (more details/process needed)
 - Request to keep the exemption of CHP units in the code
- National scrutiny over the implementation at national level
 - Proposal to avoid non-exhaustive requirements as to avoid misinterpretations/divergences at national level

EU Turbines suggests having smaller meetings with the affected stakeholders on specific topics shown in the presentations.

i. EWEA

(see slides)

Key messages:

- More justifications are deemed needed on more requirements, in particular CBAs are missing
- Clarity is needed on Art 4(3) to avoid arbitrary decisions by TSOs without justification

The DSOs note their preference for non-exhaustive requirements. It is not a trick to change present practices, but to cope with local system needs. There will still be a need for a justification then.

ENTSO-E asks for more clarity on why EWEA considers Article 4(3) to be an open door for arbitrary decisions by TSOs. EWEA is concerned that unclear national implementations will result in an avalanche of national lawsuits.

j. CENELEC

(see slides)

CENELEC gives a status update on the ongoing standardization work for distributed generator connection (prEN 50438 and prTS 50549-1 and -2).

5. ENTSO-E's initial proposals & User Group discussion

(see slides)

a. Significance test to identify "significant grid users"

Eurelectric WG Thermal / VGB Powertech asks ACER for confirmation that the concern in the ACER Opinion regarding the significance test targets type A units. ACER confirms.

ENTSO-E's view on the two suggestions in the ACER Opinion:

- Enhancement of criteria in the significance test, based on aggregated impact
 - Link to aggregated impact requires necessarily a link to technology or even manufacturer-specific characteristics.
 - Every exemption of X MW in frequency withstand capability results in increased need for reserves with costs socialized over all users.
 - What would be a reasonable threshold for aggregated capacity? What happens if it is exceeded (retrofit?)
 - What is the difference between a significance test at national level, with detailed cost implications and technology-specific criteria, and a derogation process for which also transparent criteria are to be set?
- Enhancement of the derogation process, open to equipment manufacturers for consideration at a coordinated pan-European level

- Appropriate process to cover justified, technology-specific exemptions
- Transparency in request (e.g. publication, motivation)
- Transparency across Europe (e.g. criteria set by NRA, consulted with ACER)

ENTSO-E proposes to address the issue by enhancing the derogation process.

The DSOs argue this reverses the burden of proof on the owner/manufacturer, while the questions raised on the first suggestion would still be relevant in the national derogation process.

COGEN Europe states that more clarification is needed on the enhanced criteria that would be used in both suggestions before one can say which option is best. In any case it should allow a sufficient window of opportunity for small units to adapt.

ENTSO-E notes that also in the transition period, the temporarily exempted units would need to be covered by additional balancing services, covered by all grid users. E.g. in GB a 100MW exemption could result in 20M GBP/year. COGEN Europe suggests to use the impact of this shifted costs to define a threshold.

b. Justification of the significant deviations from existing standards and requirements

ENTSO-E demonstrates the general need for FRT capability by embedded generation units, by means of several system studies (simulations and real event analyses). As the ACER Opinion asks to compare the present requirement for each type B unit, with the option of setting a requirement at the T/D interface, this will be discussed more in-depth with the DSO Technical Expert Group.

Eurelectric WG Thermal / VGB Powertech questions the need for these strong requirements overall as three phase transmission faults are considered to occur only once in a few decades. ENTSO-E notes that three phase faults occur much more frequently. Nevertheless, the need for the requirements is not based on occurrence but on system impact when it does occur.

EWEA does not deny the usefulness of FRT requirements but questions how it will be specified at national level.

CENELEC fully acknowledges FRT requirements for embedded generators. In its technical specification under development (prTS 50549-1 and -2), it is included for MV connections and LV connections above 16A. As such CENELEC questions why FRT requirements were not imposed on type A units. ENTSO-E does not deny the usefulness for type A units as well, but states this is not needed overall from a cross-border perspective.

EUROMOT states that the main difficulty with the FRT requirement is when the national implementation would require a 250ms fault clearance time. ENTSO-E responds that in any case, the national implementation by Art 4(3) would likely cover the need to have a justification on the eventual choices made.

The EC stresses that the lack of cost implications of the requirement is critical and asks why stakeholders have not delivered costs. The consultant who will be contracted to assess the NC RfG may have to cover these questions.

EHI and Eurelectric WG Thermal / VGB Powertech ask ACER whether there is need to justify more requirements than the two addressed in Section 2 of ACER's Opinion (FRT requirement as such for type B units and exemption of industrial CHP). ACER confirms that for these two targeted issues further justification is deemed needed.

c. Regulatory concerns

ENTSO-E notes that discussions with ACER are ongoing to address the wording/application of Art 4(3) and the cost recovery by regulated Network Operators in line with the national regulatory framework.

6. Summary

ENTSO-E thanks all participants for the viewpoints shared. The feedback received on the four priority areas and the suggestions for further stakeholder engagement are taken on board for consideration. Next steps will be communicated shortly.

End of meeting.