

2nd Grid Connection European Stakeholder Committee (GC ESC)

Monday, 6 June 2016 13:00 – 17:00

ENTSO-E, 100 avenue de Cortenbergh, Brussels

Draft Minutes

Participants			
Uros	GABRIJEL	ACER	Chair
Jeremy	VINCENT	CRE	
Will	FRANCIS	Commission	
Michael	WILCH	EDSO for Smart Grids	
Aurelio	TUBILLEJA	EDSO for Smart Grids	
Irina Mihaela	MINCIUNA	ENTSO-E	
Jean-Baptiste	PAQUEL	ENTSO-E	
Ralph	PFEIFFER	Amprion GmbH on behalf of ENTSO-E	
Sebastien	GRENARD	EURELECTRIC	
Auke	JONGBLOED	CEDEC	
Marc	MALBRANCKE	CEDEC	
Alexandra	TUDOROIU-LAKAVICE	COGEN Europe	
Brittney	BECKER	EASE	
Srinivasa	RAJU ADDALA	EUGINE	
Eric	DEKINDEREN	EURELECTRIC	
Jan	RASMUSSEN	EURELECTRIC	
Rabia	IKRAM	EURELECTRIC	
Thomas	LESCARRET	EURELECTRIC	
Luca	GUENZI	EUTurbines	
Michael	VAN BOSSUYT	IFIEC	
Ulrich	FIKAR	ORGALIME	
Klaus	OBERHAUSER	VGB Powertech	
Ton	GERAERDS	VGB Powertech	
Daniel	FRAILE	WindEurope	
Atanas	DIMOV	WindEurope (invited expert)	

1. Opening

Uros Gabriel (ACER), Chair of the GC ESC, welcomed the participants to the second GC ESC meeting. After a quick tour de table, the draft agenda was approved without additional comments.

Chair informed the members that CENELEC has started a new standardisation project on frequency measurements that includes RoCoF. Call for experts is still open.

All actions points from last meeting were followed-up.

2. Planning the adoption of the Grid Connection Network Codes (Commission)

Will Francis, representing the European Commission, provided an update on Connection Codes adoption: RfG has entered into force, DCC and HVDC will clear scrutiny in the next couple of weeks. Both codes are expected to enter into force this summer.

3. ENTSO-E presentations Active Library

ENTSO-E provided a presentation of their plan for the Active Library on connection codes implementation. The platform will include documents relevant at European level, and specific information for each country, including a list of national implementation websites, details on each national process for decisions on non-exhaustive requirements. The current Stakeholder Committee portal will be integrated as a specific section of the active library, with all documents accessible.

Stakeholders have requested the following enhancements or precisions from ENTSO-E:

- To use some national documents from countries more advanced in their process as examples
 - ENTSO-E explained that the Active Library will be a neutral place to centralise information. The GC ESC on the other hand is the right platform to identify and emphasise a particular document or decision. The "news" section of the Active Library will also allow to highlight a decision or good practice.
- Daniel Fraile of WindEurope asked to provide explanation of implementation process in each MS, plus update on how it is going.
- Ton Geraerds of VGB Powertech suggested to add a table including each non-exhaustive requirement decision per Member State, and include links to the national implementation sites, as well as visual representations of each national process, and the correspondent process owner (or where multiple owners are present the owner of each part of the process).
 - ENTSO-E agreed to develop the required table in due course, including the status of each decision (e.g. not addressed yet, proposed value, final decision). However, ENTSO-E reminded the members that in most countries, the process is not led by TSOs and may not be transparent, including restricted sites for stakeholder engagement (Jérémy Vincent from CRE mentioned that the French connection codes implementation site is not public). ACER will reach out to all NRAs to clarify the situation and remind them of transparency obligations. Chair requested that ENTSO-E does not hesitate in publishing what is to hand/available. He encouraged stakeholders to help ENTSO-E narrow the focus of the active library, and for ENTSO-E to develop the active library in accordance with stakeholder feedback. ENTSO-E will carry this message to its members, and encourage them to provide the information in the Active Library as soon as it is available.
- Marc Malbrancke of CEDEC asked what ENTSO-E's plan is for making information about national implementation continuously available? Jean-Baptiste Paquel confirmed that documents stored in the archive will be available indefinitely.
- ENTSO-E should circulate an email address for all stakeholders to provide relevant documents for the Active Library.
 - $\circ~$ Jean-Baptiste Paquel confirmed that the address will be circulated to GC ESC members when the Active Library website is launched.
- Using the documentation stored in the library does not necessarily correspond to use of the latest information available, since based on the response of the TSO.

Timing: The first phase of the Active Library will be available in the next few weeks. The requested development of a way to represent non-exhaustive requirements decisions for each MS will only happen after the summer, provided that nationally responsible bodies accept to publish provisional values.

Implementation Guidelines (IGDs)

ENTSO-E provided updates on IGDs status and process. A consultation on IGDs from RfG perspective will start in July. The IGDs will be consulted from HVDC and DCC perspective after entry into force of these CNCs.

Regarding the IGDs, following changes have been decided by ENTSO-E:

 Removal of the IGD on 'voltage stability in a convertor dominated system', since this topic is covered by other IGDs.



- IGD 'interactions between HVDC controllers' will be developed later, once NC HVDC is final.
- New IGD: 'existing versus new': what to do in the interim period?
- New IGD: 'what is left for the national level': more detailed/ more stringent requirements in the MS than in the NCs?

ENTSO-E informed the meeting participants that a public workshop should take place on 13 September on IGDs updates. The link to the registration page will be circulated to members of the GC ESC as soon as it is available.

ENTSO-E confirmed that some CENELEC standards are not in line with the NC RfG provisions. ENTSO-E has no influence on CENELEC, but can provide explanations and recommendations, and has started work on this topic.

Questions from stakeholders:

- In each MS, which is the valid version of the code in case of discrepancy between the English and translated versions?
 - Will Francis explained that the intent of the legislator has been expressed in the English version of the text, which was the basis of the network code development and therefore the translation to which any court will look at. In each MS the national version shall apply since it shall reflect the intent of the legislator as expressed in the English version. The EC has the power to review a translation in case of discrepancy.
 - o It has been noted that some national translations are already different from the English version and it has been questioned which is the process to inform the EC in case of discrepancies and the process (ongoing or not) to review a translation. EC will study how to work out this process.
- What happens if standards do not follow legislation fast enough? Shall state-owned companies (which applies to most TSOs) adhere to European Standards and are they entitled to require anything which goes beyond or is not in line with such Standards?
 - o ENTSO-E will answer this question at the next GC ESC meeting.

4. SEDC Presentation

SEDC provided an introduction to their structure and the position they held during the DCC development.

SEDC asked 2 questions which which will be answered at the next GC ESC meeting:

- Should an aggregator update the TSO about any change to his portfolio (and what is considered a change in the portfolio, e.g. change of demand electric equipment)?
 - Art. 31. "The demand facility owner or the CDSO shall notify, directly or indirectly, through a third party, the relevant system operator or relevant TSO, in advance of any decision to cease offering demand response services and/or about the permanent removal of the demand unit with demand response. This information may be aggregated as specified by the relevant system operator or relevant TSO."
- Do templates exist for 'installation documents' and 'demand response unit documents' (DRUDs)?
 - Art. 32. 1. "The operational notification procedure for a demand unit within a demand facility or a closed distribution system connected at a voltage level of or below 1000V shall comprise an installation document."

5. CRE Presentation on Emerging Technology Guidance

CRE provided a presentation on emerging technologies. CRE developed a Guidance Document for the submission of applications to be eligible for emerging technology status, and aligned its Guidance Document with that of Ofgem's.

The Guidance Document provides general context information and explanations on the main provisions of RfG applicable to different PGM types. It explains the process and criteria to designate a technology as emerging. In particular, PGMs must be of type A, commercially available, and hold less than a set maximum share of sales of the technology within the synchronous area. Regarding the definition of commercial availability, ADEME (French Environment and Energy Management Agency) provides a technology readiness level, but it is not certain this interpretation will be maintained as CRE proposes that the Ofgem version of the document in English is used in other MSs (and Ofgem takes a different interpretation of commercially available).

The Guidance Document also provides a questionnaire for applicants. The Guidance Document will be published in June for a two month stakeholder consultation. The final decision in coordination with other NRAs must be taken in May 2017.

Questions and remarks:

- Cogen Europe has produced a paper on emerging technologies classification (uploaded to the ENTSO-E online portal prior to the meeting). Cogen calls for an inclusive definition of the "commercial availability" criteria, in order not to discriminate against technologies who are in the pipeline. Cogen also recommends that a single guidance for applications is made at the EU level and proposes submissions of manufacturers' requests be sent to ACER instead to individual NRAs.
 - ACER reply: so far NRAs have not agreed on common guidance nor seen the benefit of doing so, even though all NRAs will learn from the Ofgem document made available to all NRAs. Hopefully, the new Cogen input via the paper on emerging technologies classification will facilitate NRAs coordination. ACER will promote NRA coordination. Nevertheless, manufacturers should also liaise directly and without further delays with each NRA.
- As some figures from the ENTSO-E statistical factsheet might contain combined values of two synchronous areas, Chair proposed to involve ENTSO-E to calculate the exact value of maximum installed capacity per MS for the technology to be eligible. The resulting table could be published on the dedicated ENTSO-E webpage.

CRE is encouraged to directly contact the manufacturers' associations, and intends to do so through ADEME (French Environment and Energy Management Agency).

Orgalime encouraged CRE and other NRAs to involve manufacturers and the national manufacturers' associations throughout the implementation process. Orgalime is offering to provide contacts to national manufacturers' associations to all NRAs.

6. Wind Europe presentation on implementation guidelines

WindEurope emphasised the risks created by misinterpretation of translations and hasty copy pasting of other countries' requirements. WindEurope provided a document on recommendations for RfG implementation, available on ENTSO-E's GC ESC webpage. The report focuses on:

- Fault Ride Through requirements
- Reactive power requirements

ENTSO-E replied that these 2 examples have been heavily discussed, e.g. shape of the reactive power profile. WindEurope expressed concerns that some countries will need further guidance as they do not seem to have the resources necessary to get into the detail of non-exhaustive requirements implementation.

7. EURELECTRIC Presentation: RfG and DCC Network Codes

Eurelectric raised questions:

- Can a MS impose more stringent requirements than imposed by codes?
 - o ENTSO-E indicated that a legal statement will be made within the IGDs.
 - CRE proposed to share an analysis made in France by RTE and agreed at national level by the relevant stakeholder group: for cross border issues, the code is relevant. For national issues, requirements may be stronger.
- Is pump storage PGMs in pumping mode considered a demand facility?
 - ENTSO-E responded that Article 2 of DCC states that "storage facilities consuming are not considered a demand facility."
- What is the status of derogations granted nationally before the RfG came into force?
 - ENTSO-E replied that since existing generators are out of the focus of RfG, this does not apply. In case of a refurbishment, derogations may be inconsistent with NC provisions and therefore may be lifted.



ENTSO-E and ACER reminded the members that they are not competent in legal aspects, but may provide their personal views, which will not pre-empt any decisions which may be taken by courts.

- Eric Dekinderen proposed that a separate classification should be allowed in each MS for synchronous PGMs and PPMs.
 - O ACER reminded the members that the process is driven by MSs, and not by ACER or ENTSO-E. Chair however proposed that ENTSO-E covers this topic in the IGDs.
 - ENTSO-E replied that although they would try to address this, legal advice is not the objective of IGDs as this would exceed the mandate of ENTSO-E. ENTSO-E asked stakeholders not to hesitate to participate in the consultation organised soon and to request further explanation on any topic. GC ESC members are reminded that the GC ESC is not the right mechanism for proposing amendments. The formal procedure for proposing amendments is provided for in Regulation 714 (Article 7).
 - ENTSO-E explained that the initial intention was NOT to have separate classifications.
- Eurelectric proposed to create a sub group of the ESC to address the derogation process, in particular the CBAs and the "criteria for granting a derogation".
 - Chair replied that such a request would be equivalent to excluding some stakeholders from the discussion and therefore did not recommend to create such a group on top of the planned IGD consultations. ENTSO-E proposed to postpone discussion on sub groups until IGDs are available and criteria for derogations are developed. Moreover, as it is impossible to issue derogations on provisions that are not implemented. Chair proposed this discussion is taken up during the next meeting in September.

On DCC: the code imposes technical requirements and operational notification requirements to a 'demand unit' (defined as "an indivisible set of installations containing equipment which can be actively controlled") which will participate in DSR services (either individually or via an aggregator).

Since the code applies to these extremely small consumptions units, several questions can be raised:

- How to make sure that such small units respect the DCC requirements?
- What is an « equipment certificate" for these units (Art. 32 & 33)?
- How do we collect them without leading to an extremely complex and expensive solution?
- DCC code= connection code. Therefore, the requirements only apply to new demand units (Art. 3.1.d). What is a new demand unit at this level? What if an aggregator has a portfolio of demand units, some being new and some others being old: does the code apply only to the new ones?
- Which type of equipment/devices did ENTSO-E think would volunteer to participate to DSR? We understood that fridges were one of the main targets. But does it include light bulbs? Heat pumps? Etc. Is there a list?
 - o ENTSO-E will reply to all these questions at the next meeting in September

8. Eugine presentation

- Certification process, need clarification (who, when, how, duration, costs, contact...)
- Eugine requested a written confirmation of the interpretation of the code: "requirements apply at engine level, not at power plant level".
 - o ENTSO-E agreed with this interpretation, and refers to the definitions of PGM, synchronous PGM and PPM in RfG but is not in a position to confirm correct legal interpretation of the NC in writing.
 - o Marc Malbrancke mentioned this topic was discussed at the Belgium national implementation group and offered the related slides be uploaded.

9. DSOs presentation

DSOs requested an update on the progress of discussion in MS on the choice of limits between PGMs of type A B C D.

Requested feedback from ENTSO-E at each ESC on the work on standardisation.

How do MSs interpret a substantial modernisation of a distribution network?

Marc Malbrancke raised the issue that the current 'connection agreements' in the Netherlands are agreements between the relevant system operator and the 'user of the connection', who is not necessarily the owner of the demand facility/PGM.

Reactive power management: DSO organisations informed the members that guidance is expected from ENTSO-E on reactive power management at TSO/DSO interface based on discussions between TSOs and DSOs already organised in a specific workshop.

o IFIEC expressed frustration and concerns that CDSOs have not been involved in the workshop, and requested that ENTSO-E invites the CDSOs at any further workshop.

How to make sure that all MS include stakeholders in implementation?

• ENTSO-E responded that it is a legal obligation to do so. However, the national processes are not prescribed by the codes, but left to the Member States discretion.

10. AOB

Eurelectric asked why battery storage is excluded from RfG

 ENTSO-E explained that in 2009, at the beginning of the drafting process, this was not considered a major issue. The absence of requirements on storage in the CNCs does not prohibit any MS to set up national requirements.

What is the involvement of the ESC during the drafting of the IGDs?

ENTSO-E explained that within the short period of 6 months, a scoping consultation was organised and workshops were organised on each of the topics, leaving not enough time to specifically involve the ESC. However, all members of the ESC can and should participate in the upcoming consultation. Any concern that was already expressed during the ESC meeting should preferably be repeated in the public consultation.

Is there a general view within EU TSOs regarding derogations?

o ENTSO-E answered that it does not have a full overview on this question.

A call is permanently open for possible sub groups of the ESC. Members can address their requests to the Chair.

Daniel Fraile of WindEurope asked for clarification on the structure and length of the IGDs. Irina Minciuna of ENTSO-E responded that the IGDs will be $\sim \! 10$ pages in length. Legal and technical comments will be taken at the upcoming consultation.

Follow-up actions:

At the next CG ESC meeting, ENTSO-E will provide answers to the following questions:

- IGDs:
 - What happens if standards do not follow legislation fast enough? State owned organisation cannot purchase equipment not supported by standards, or undefined in the codes.
 - WindEurope suggested that at least the IGDs on the related topics could include a reference to the WindEurope recommendations. This at least could ensure the wind industry EU-wide recommendations are known to stakeholders at the national level (especially for those case in which wind companies are not directly involved in the process). Irina of ENTSO-E agreed that ENTSO-E would look into it and consider it.
- SEDC questions:
 - Should an aggregator update the TSO about any change to his portfolio? Shall state-owned companies (which applies to most TSOs) adhere to European Standards and are entitled to require anything which goes beyond or is not in line with such Standards?
 - Do templates exist for 'installation documents' and 'demand response unit document' (DRUD)?
- Eurelectric questions on DCC:
 - How do make sure that such small units respect the DCC requirements?
 - What is an « equipment certificate" for these units (Art. 32 & 33)?
 - o How do we collect them without leading to an extremely complex and expensive solution?
 - DCC code= connection code. Therefore, the requirements only applies to new demand units (Art. 3.1.d). What is a new demand unit at this level? What if an aggregator has a portfolio of demand units, some being new and some others being old: does the code apply only to the new ones?



 Which type of equipment/devices did ENTSO-E think would volunteer to participate in DSR? We understood that fridges were one of the main targets. But does it include light bulbs? Heat pumps? Etc. Is there a list?

Feedback slot regading CENELEC progress on standards at next meeting, and every subsequent meeting.

Active Library:

- ENTSO-E to publish in the next weeks a first version of the Active Library
- ENTSO-E to circulate an e-mail address for GC ESC members to suggest documents for the library.
- ACER to investigate on the transparency of processes in each MS. ENTSO-E to create the platform for TSOs to
 publish national temporary and final non-exhaustive requirements decisions as soon as allowed by the
 national entity in charge.

Emerging technologies guidance documents:

- ACER proposed ENTSO-E calculate the exact value of maximum installed capacity per MS for the technology to be eligible.
- CRE proposed that the Ofgem version of the document in English could be used in other MSs.
- CRE was encouraged to directly contact the manufacturers' associations, and intends to do so through ADEME.

Can a MS impose more stringent requirements than imposed by codes?

• CRE to share an analysis made in France by RTE and agreed at national level by the relevant stakeholder group.

Level of application of requirements:

• Slides related to the application of requirements from the Belgium national implementation group shall be uploaded to the ENTSO-E online portal.

Marc Malbrancke of CEDEC recommended that DSOs are allowed to present first at the next meeting.