

35th Grid Connection European Stakeholder Committee (GC ESC)

11 September 2024, 09:30-17:00, hybrid

Location: ACER Premises, TR3, Trg republike 3, 1000 Ljubljana, Slovenia

Participants		
Uros Gabrijel	ACER	Chairperson
Georgios Antonopoulos	ACER	Member
Evangelia Vasilaki	ACER	Observer
Maria Barroso Gomez	ACER	Member
Adriana Pop	ACEA	Member
Leonhard Bartsch	ACEA	Member Substitute
Didier Deruy	ACEA	Member Substitute
Lorenzo Corcione	APPLiA	Member Substitute
Marco Pasqua di Bisceglie	ARERA	Member
Nawid Sadighi	BnetzA	Member Substitute
Tobias des Santos	BnetzA	Member Substitute
Marc Malbrancke	CEDEC	Member
Thomas Schaupp	CENELEC	Member
Alberto Cerretti	CENELEC	Member
Julian Treichel	CharIN	Member
Alexander Tudoriu	COGEN Europe	Member Substitute
Gunnar Kaestle	COGEN Europe	Member
Tony Hearne	DSO Entity	Member
Serdar Bolat	DSO Entity	Member
Tommaso Carbone	DSO Entity	Member Substitute
Florentien Benedict	DSO Entity	Member
Andrea Hamzova	DSO Entity	Member Substitute
Tony Kim Yeat	EASE	Member
Bernhard Schowe-von der Brelie	EFAC	Member

Freddy Alcazar	EUGINE	Member
Veerle Beelaerts	EHI	Member
Adeline Houtart	EHPA	Member
Mario Ndreko	ENTSO-E - TenneT	Member
Marco Zaccaria	ENTSO-E	Member
Fleming Brinch Neilsen	ENTSO-E	Member Substitute
Lazaros Exizidis	ENTSO-E	Member Substitute
Sergio Martinez Villanueva	ENTSO-E - REE	Member
Luca Guenzi	EU Turbine	Member
Herve Biellman	EU Turbines	Member Substitute
Steffen Eckstein	EU Turbines	Member Substitute
Assiet Aren	Eugine	Member Substitute
Raju Srinivasa	Eugine	Member Substitute
Emma Menegatti	EUI	Member Substitute
Thierry Vinas	Eurelectric	Member
Elaine O'Connell	European Commission	Member
Keith Chambers	Europgen	Member
Mike Kay	Geode/ EU DSO Entity	Member
Isabel Alcalde	Hydrogen Europe	Member
Michael van Bossuyt	IFIEC	Member
Catarina Augusto	Solar Power Europe	Member Substitute
Klaus Oberhauser	VGBE	Member
Roman Bertle	VGBE	Member Substitute
Vidushi Dembi	Wind Europe	Member

1. Opening – Agenda/ Last meeting minutes/Actions review

1.1 Review of the current agenda

The Chair (Uros Gabrijel, ACER) opens the meeting and reviews the agenda by mentioning that he has received three requests for AOB:

- First from EUGINE – simulation software monitoring for the EU grid connection network codes;
- Second from Freddy Alcazar (EUGINE) – industry call for clarifications on aggregation concept and compliance scheme;
- Third point from System Operators reaction to the joint industry statement on SPGMs.

Mike Kay (as DSO Entity) and Marco Zaccaria (ENTSO-E) clarify point 7 “Update on Certification EG”.

The Chair mentions that Elaine O'Connell from the European Commission is in the meeting and will intervene under point 6 “ACER: information/discussion streams update”.

Furthermore, Georgios Antonopoulos (ACER) will present the HVDC NC process update under AOB.

As for audience questions, The Chair clarifies that the implications of NC Demand Response to SOGL will be covered under the SO ESC the day after, 12.09.2024– *please see the [slide deck of SO ESC](#).*

1.2. Approval of last meeting minutes and actions review

Marco Zaccaria (ENTSO-E) mentions that there was only one comment from Julian Treichel (CharIN), highlighting the discussion on the topic of standards related to EVs and EV infrastructure. The Chair confirms that the uploaded minutes include ACER’s clarification under point 11. The minutes are approved.

Marco Zaccaria (ENTSO-E) presents the Actions list of the [Action Points](#) from the last meeting (please see the Excel file within the link), namely:

- Action 1. DSO Entity – to make contact with [IFIIEC](#) on Grid Forming – Point 2 of the current agenda. [Post meeting note: Discussions held within the ESC meeting with Michael van Bossuyt. Action now considered closed].
- Action 2,3,4. related to the possible creation of an expert group on certification – Point 7 of the current agenda
- Action 5,6 related to IGDs development plan – Point 3 of the current agenda
- Action 7. ENTSO-E Highlights Power to gas and the urgency of associated requirements – to be shared with NRAs ongoing
- Action 8. A reminder that in December, both ESC meetings will be held in person in Brussels; ENTSO-E will host GC ESC at its premises, and SO ESC will be hosted by DSO Entity (location to be shared). The updates will also be available soon on the ESC platform.
- Action 9. Formalise ACEA representation – member list updated

2. EU DSO Entity: Grid Forming updates

Tony Hearne presented the EU DSO Entity's progress on developing the guidance (slides here) that it is intended to be available for Member States, TSOs and DSOs to help them produce the grid forming (GFC) roadmap which the draft RfG 2.0 envisages. As this was just an update on our work in progress, further updates will be given at the next ESC meetings.

Mike Kay intervened at Tony's request on the last slides presented by highlighting that the DSO Entity document shall be a guidance document, and there is a high need for the acknowledgement at Member States for the adoption of future national roadmaps at the national level.

In particular, Tony Hearne invites feedback on the proposed approach on the slide containing a table of bands of generation/load mismatch.

The discussion continued with several interventions, whereas Tony Hearne responded to comments namely from:

Assiet Aren (EUGINE) asks two questions. The first one is whether the DSO Entity is in touch with local authorities to learn their understanding of grid forming. Tony Hearne responds by saying that DSO Entity gathered information from the members of its group. Therefore, there is no direct link with local authorities. The second question is whether there is a preliminary definition, as manufacturers need time to adapt to changes.

Luca Guenzi (EU Turbines), referring to the slide on the imbalance between generation and load, asks whether the assumption is that generation always exceeds the load. Tony Hearne undertakes to follow up bilaterally with Luca on this topic.

Gunnar Kaestle (COGEN) addressed questions, focusing on page 4 of the presentation, on the islanding topic, intentional and/or unintentional islanding within DSO Grids.

Michael Van Bossuyt (IFIEC) suggests clearly making the difference between uncontrolled and controlled islands clear in the document. He points out that sometimes, a site has to go on a partial island to save some of the installations. He suggests tackling this topic at the beginning of the document. Tony Hearne acknowledged the need for the distinction to be made in the scoping section of the guidance document.

Mario Ndreko (ENTSO-E) asks whether the document will set KPIs. Therefore, he asks whether this document aims to spread knowledge or provide KPIs to support national decisions. Tony Hearne (DSO Entity) responds that the goal of the document is to try to facilitate a uniform approach to the production of the Roadmaps but not to set KPIs.

Klaus Oberhauser (VGBE) asks a question on funding for the modifications of the Grid. He also mentions the impossibility of detecting the islands in some cases.

Alberto Ceretti (CENELEC) briefly outlined some global efforts on the topic. In particular, he mentions that companies in Japan are working on new active methods of island detection as the existing methods are incompatible with grid forming. Alberto mentions a detailed study on controlled islanding conducted with Luca (Guenzi) some years ago and mentions recent studies conducted by Academia in Italy. Tony Hearne undertakes to follow up with Alberto to discuss further.

Florentien Benedict (DSO Entity) concludes that DSO Entity is asking for active feedback from all ESC members on DSO Entity work.

3. ENTSO-E: IGDs planning

Mario Ndreko (ENTSO-E) presents the slides available [here](#). Mario relates to the legal basis for IGDs, and also ENTSO-E's view of the scope and timeline for new IGDs. The law requires that IGDs are published six months after entry into force of the new regulation. Due to the available resources, the new topics will be developed in 2 subsequent waves. Therefore, ENTSO-E is planning a public consultation of each IGD included in the first wave around four months after entry into force of the amended regulation. The second wave would start after the first wave is published – and will undergo a six month development period.

The waves of IGDs will be as follows:

First wave: Grid forming, Heat pumps, Certification, Power to gas demand units.

Second wave: Forced oscillations, Electrical storage modules, Aggregation of different types of generating units, LFDD.

IGDs to be updated: RoCoF withstand capability, Automatic connection/reconnection and admissible active power ramp in, FSM, LFSM, Parameters of non exhaustive requirements, Special issues for Type A generators.

Reacting to a comment from Thierry Vinas (EURELECTRIC) on stakeholders' involvement in the process before the IGDs consultation, Mario Ndreko (ENTSO-E) remarks that stakeholders are so far involved in the preliminary discussions on grid forming and forced oscillations to collect inputs for supporting the drafting phase of the relative IGDs. No further Groups promoted by ENTSO-E are foreseen on other topics. Stakeholders will always be involved in the consultation phase of each IGD within the GC ESC.

Vidushi Dembi (Wind Europe) asks whether these IGDs are drafted by ENTSO-E only or in partnership with the EU DSO Entity. Mario Ndreko (ENTSO-E) replies that they will be drafted by ENTSO-E only and consulted with stakeholders, according to the existing legal mandate.

Gunnar Kaestle (COGEN), with reference to grid forming in slide 4 of the presentation, invites ENTSO-E to get involved in IEC standardisation, especially conformity assessment followed by certification. Mario Ndreko (ENTSO-E) agrees and remarks that CENELEC is an active stakeholder in the project on grid forming led by ENTSO-E. In addition, it is remarked that overseas countries cannot be forced to follow the European perspective and that the governance to vote on standards, which is very different from the process of updating regulations, should be taken into account.

Leonhard Bartsch (ACEA) asks whether the development of IGDs will also involve EVs at some point. Mario Ndreko (ENTSO-E) replies that the IGD on certification will be based on the EG HCF output, only related to NC RfG, not NC DC; EVs and heat pumps issues can be integrated later (see the discussion on the expert group on certification, point 7).

Raju Srinivasa (EUGINE) asks whether a template to comment for stakeholders will be available in the public consultation. Mario Ndreko (ENTSO-E) replies that each IGD draft will be consulted sharing a protocol format to provide comments for 4 weeks consultation. ENTSO-E will reply to the comments received: inputs received may be integrated in the final text to be published; ENTSO-E will provide answers and justifications to each comment.

Freddy Alcazar (EUGINE) and Bernhard Schowe (EFAC) ask whether the upcoming consultation will involve all IGDs or only the first wave of IGDs. Mario Ndreko (ENTSO-E) responds that the first consultation will involve the first wave of 4 abovementioned IGDs. Freddy Alcazar (EUGINE) remarks that experts from the EG HCF are open to support if ENTSO-E believes it is useful. Mario Ndreko (ENTSO-E) states that, in case of any need of discussion, the EG HCF experts will be consulted. Moreover, any clarifications shall be asked during the GC ESC consultation.

Michaël Van Bossuyt (IFIEC), referring to the IGD on the aggregation of different types of facilities (slide 5), asks to take into account the closed distribution system. Mario Ndreko (ENTSO-E) agrees.

Adeline Houtart (EHPA) asks to foresee more time for the consultation period (i.e., 4 weeks) as some members may have to be involved in the review process of more than one IGD at the same time. Mario Ndreko (ENTSO-E) replies that it may be possible to discuss a prolongation of the consultation period a bit, but it depends on ACER. The Chair responds that it's in the hands of the European Commission to make a decision on extending the timeline. Stakeholders can react in the upcoming EC consultation for any remarks on this issue.

4. Hydrogen Europe: NC DC Impact on Scaleup of Hydrogen Economy

Isabel Alcalde (Hydrogen Europe) presents the [slides here](#) regarding the impact of the NC DC on the scaleup of hydrogen economy. Regarding the fault ride-through (FRT) capability requirement for electrolyzers, it is stated that it presents significant challenges for the hydrogen industry. Moreover, the timeline for the approval of the updated NC DC (i.e., a review of the proposed regulation by the European Commission and implementation at the national level between 2026 and 2028) is not considered in line with the industry needs to fulfil the related compliance and certification.

Other considerations included the fact that electrolyser plants must restore full load operation (90%-100% capacity) within seconds of a voltage drop, as this affects their chemical processes and can create explosive atmospheres. Safety protocols include a controlled nitrogen purging shutdown. A proposal suggests a multiyear development approach for electrolyzers modelled on best practices from wind turbine grid forming capabilities. This would establish a clear timeline for manufacturers to develop, test, and certify new technologies, benefiting the electrolyser manufacturing process.

Gunnar Kaestle (COGEN) raises questions regarding current grid behaviour after a voltage dip, mentioning potential technological solutions like choppers, and transitioning to transistor-based technology for rectifiers. The need for further testing of possible solutions and the complexity of implementing these in largescale electrolyzers are highlighted by Hydrogen Europe.

Mike Kay (DSO entity) indicates that in slide 4 there is a mistake in the wording “The most critical part of the regulation is the demand that, in the event of a voltage drop, electrolyser plants must be able to resume full load operation (pre fault active power level) within seconds, achieving at least 90-100% of their operational capacity.” As this is something that is not written in NC DC like this, it is up to the relevant TSO to define the time and magnitude for active power recovery.

Thierry Vinas (EURELECTRIC) asks whether the FRT issue would be relevant for all Types. Isabel Alcalde (Hydrogen Europe) replies that more time to test the technologies is needed to provide an answer.

Raju Srinivasa (EUGINE) asks for clarification on the electrolyser complete shutdown behaviour. Isabel Alcalde (Hydrogen Europe) replies that shut down procedure exists already; however, it is not feasible to be performed in 3 seconds. Including a backup energy storage would represent an option; however, it would be really challenging in case of big capacity electrolyzers. The need to perform tests on the shutdown to assess safety is remarked.

Mario Ndreko (ENTSO-E) remarks the potential benefit of foreseeing only one harmonized requirement at EU level, rather than non-exhaustive requirement to be further assessed at national level.

The Chair suggests that the issues are further discussed in the proposed Power-to-Gas Workstream.

5. ACEA: Automotive industry views on NC DC

Leonhard Barsch (ACEA) presents an update on NC demand connection and NC RfG [slides here](#).

The presentation notes that current regulations fail to distinguish between vehicles and electric vehicle supply equipment (EVSE), and do not differentiate between AC and DC systems. This impacts vehicle design and integration with EVSE, requiring varied education and certification.

While the regulation covers all vehicles, the significance of the EV1 class is low, as most vehicles are charged with over 800 watts. It's unclear if new certification requirements or vehicle registration changes will be addressed later.

A debate regarding certification takes place. Certification usually involves confirming compliance with specific standards, whereas homologation ensures adherence to vehicle regulations. The need to distinguish between these processes is considered crucial for understanding compliance requirements. Additionally, certification may involve regional or standard specific processes.

A wide discussion on LFSM takes place, particularly on the requirements reducing the reaction time to 0.5 seconds. This need may imply ensuring some functionalities are in the vehicle rather than the EVSE to the EV, potentially leading to interoperability issues with older EVSEs. A more structured discussion is considered suitable to be included into the standardisation and certification process. The overall goal is to ensure interoperability between EVSEs and EVs, including older vehicles and those sold outside the EU. A standard or certification process is needed to guarantee this interoperability. The formation of a dedicated Expert Group to address these issues regularly is proposed. In response, Thomas Schaupp (CENELEC) confirmed that, although working group 3 does not currently include automotive industry experts, they are encouraged to join. He also noted that while EN50549 is not explicitly mandated by the NC RfG, it can be used to verify compliance. Flemming Brinch Nielsen (ENTSO-E), regarding standards not mentioned in the regulation, remarks that standards should mirror the requirements set by the regulation. Gunnar Kaestle (COGEN Europe) adds that the standardisation processes are open and encouraged automotive industry involvement.

6. ACER: information/discussion streams update

The Chair informs the stakeholders of the progress in the four discussion streams (SPGMs, Power2Gas, EVs&EVSEs, and Heat Pumps) that were formed following the previous GC ESC meeting. One of the objectives of these discussion streams is to improve ACER's understanding on specific issues raised by the stakeholders after the NCs recommendation to the EC: the Chair clarifies that ACER aims at be informed on the issues so as to be able to support the EC during the NCs adoption phase if so requested. Moreover, the outcomes of these workstreams may be used by stakeholders and shared to the EC. Calls for experts are open until September 2024. The Power2Gas work stream has been paused for the time being as industry representatives haven't sent their nominations and meeting materials yet. However, Hydrogen Europe informs the ESC that they are interested in starting these discussions. The Chair will work together with Hydrogen Europe to find a suitable kick-off date for this workstream.

Elaine O'Connell (DG ENER) informs the GC ESC on the status of the adoption process of the NC RfG and NC DC 2.0. work. The EC is currently focusing on reviewing the network code capacity allocation and congestion management (CACM), which is considered a priority. Given the above and also considering a lack of resources, the EC expects to postpone the NC RfG and NC DC 2.0 "Have your say" consultation until at least early 2025, after this, they will send to the Parliament the NCs. The EC welcomes the establishment of the four discussion streams promoted by ACER. Elaine O'Connell (DG

ENER) remarks that any proposal related to the topics discussed within the ACER's workstreams may be shared with the EC by each individual association; nevertheless, a consolidated view from the stakeholders joining the workstreams shared to the EC in a timely manner, would be considered much more valuable.

The Chair shares that the three ongoing workstreams will ideally get to some conclusions by the end of October 2024, while the Power-to-Gas one, since it is not operational yet, may be subjected to a slight delay. The Chair asks Hydrogen Europe to nominate experts to be involved in the latter. Operators' participant's nominees. (As a Note, after 11.09.2024 all the other workstreams have been extended by end of October 2024)

Catarina Augusto (Solar Power Europe) asks the Chair why the non-synchronous generation workstream was never created and asked for the next actions. The Chair responds that this specific workstream wasn't created mainly because of workload issues, and he chose to add these topics be discussed under the SPGMs workstream at a later stage. This topic was, discussed in the AOB and the first workstream meeting anyway.

Luca Guenzi (EU Turbines) asks for clarification regarding the process underpinning the revision of the NC RfG and NC DC 2.0. In particular, according to his understanding, the EC has delegated ACER to collect comments from stakeholders with the establishment of the four abovementioned discussion streams. The Chair replies that ACER has never received such delegation from the EC, neither formal or informal, and those four streams serve as an informal platform for stakeholders to discuss technical topics and, in case, reach common conclusions. Elaine O'Connell (DG ENER) adds that comments already sent by stakeholders to the EC will be reviewed. Moreover, stakeholders are still on time to share additional input with the EC. Considering the recommendation from ACER and stakeholders' comments, the EC will publish an amended text proposal on its website. The EC will consult with member states' experts, and stakeholders will have another chance to provide their comments through the "Have Your Say" platform for four weeks.

Flemming Brinch Nielsen (ENTSO-E) asks when the amended regulation is expected to enter into force. Elaine O'Connell (DG ENER) replies that the consultation is foreseen in early 2025. The comments received from stakeholders will be evaluated by the EC with the Member States experts support. Elaine O'Connell (DG ENER) takes note about Fleming Brinch Nielsen (ENTSO-E) remark on the urgent need to amend the current regulation to set the new requirements.

Vidushi Dembi (WindEurope) asks for CACM updates to Elaine O'Connell (DG ENER) and replies that the Market ESC is handling the matter.

7. ESC – Update on certification of EVs and HP

Mike Kay (DSO Entity) presents the slides, which are available [here](#). Mike Kay mentions that at the June ESC GC meeting, [the draft ToR](#) was shared. Comments received, sets of formal comments and volunteers from EHI and ENTSO-E have been included in the document.

Mike Kay (DSO Entity) suggests splitting the structure of this expert group up into 3 or 4 work areas. For instance, treating certification for heat pumps and EVs in two different workstreams may be needed.

Thomas Schaupp (CENELEC) welcomes the topic of CE marking, which was brought up in the conversation. Elaine O'Connell (EC) responds that EC is happy to receive comments, either directly or within this EG.

Veerle Beelaerts (EHI) points out that CE marking could be tackled under other regulations involving heat pumps. Veerle Beelaerts (EHI) mentions that CE marking is under the ECO Design requirements

and also under EU regulation. Moreover, she points out that EHI will certainly provide a list of experts interested in taking part in this expert group.

Vidushi Dembi (WindEurope) asks whether this expert group on certification is specifically about heat pumps and EVs in relation to the revised NC DC or if it is somehow connected to the work on IGDs performed by ENTSO-E. Mike Kay (DSO Entity) responds that this remains to be seen, saying that there may be an overlap.

Mike Kay (DSO Entity) wraps up the conversation, saying that this is an urgent topic, and that manufacturers should make sure that they are selling legal equipment to the public three years after entering into force of the updated legislation. The next steps involve finding chairs and secretarial support for this expert group. At the next ESC meeting in December, he will probably present a report explaining the progress made in line with the ToR. The Chair asks whether the ToR should be further polished before the final approval of the ESC. After a brief discussion, the Chair suggests that the ToR be approved, subject to amendments in the future and that the DSO Entity chairs this newly created expert group in the interim until a decision take place at the ESC meeting.

Gunnar Kaestle (COGEN) shortly mentions the outcomes and the need for meetings with EC DG GROW to confirm any further compliance with EU legislation.

The Chair asks Mike Kay for the next steps, and Mike Kay responds by identifying the timing when to start. Also, he mentions that the DSO Entity should not necessarily be in the lead of these activities, but sure, the DSO Entity will take the interim lead for now and hopefully come back by December GC ESC with the progress.

Mike Kay (DSO Entity) comments that, in case of any further need for amendments to the ToR, it should be accommodated, considering an extensive work plan. The interim leadership of this ESC EG is to be led for the initial meetings by Mike Kay, representing the DSO Entity. In the long term, the lead of the TF within the ESC shall be decided within the ESC expert group.

Florentien Benedict (DSO Entity) asks how to ensure that all stakeholders are aware of the creation of this expert group so that all GC ESC members can suggest experts. Several members reply in the meeting to request active participation or nominations, which will be followed up via email as a formal nomination.

Caterina Augusto (SPE) asked questions about the scope of the ToR. Mike Kay (DSO Entity) clarifies that the EG shall discuss the overlaps with the relevant IGD. The scope of this ESC EG is within the written ToR, as the NC RfG and NC DC revision make EVs and HPs certification mandatory.

Bernhard Schowe (EFAC) says that from a certification point of view, they would like to take over as much as possible, referring to heat pumps and EVs in the IGDs.

Luca Guenzi (EU Turbine) remarks on potential associated costs “for the certification.” Mike Kay (DSO Entity) responds that the requirements set by the NC RfG shall be met.

The Chair concludes the topic. Next steps:

1. Call for experts within 14 days under the leadership of Mike Kay (DSO Entity).
2. The GC ESC approves the Terms of Reference, subject to any integrations in the December meeting and interim leadership by DSO Entity.

8. AOB

8.1 AOB Simulation models

Assiet Aren presented [the slides](#) on behalf of EUGINE.

Some changes to be considered for NC RfG 2.0 would regularise the management of PGM simulation software within which they operate. The presentation proposes a new requirement that software be **qualified** as being fit for purpose and also suggests that there is a method of transferring models between different software platforms (Functional **Mock-up** Interface).

Bernhard Schowe (EFAC) asks a question on the quality of the software and associated model validation, according to the German standards discussion. Aren Assiet responds that this is an issue.

Raju Srinivasa (EUGINE) highlights the importance of software manufacturers for harmonising requirements. Assiet Aren mentions that there is not a standard model.

Luca Guenzi (EU Turbines) highlights that we need and expect definition software to be updated on an early proposal to be shared by SO. Proposal for an EG for minimum requirements for simulation software for the future.

Bernhard Schowe (EFAC) highlights that there are no requirements for the software. The database lists issued PGU certificates (according to German grid codes) and associated models. That does not mean the software is validated, but only the model is. He highlights ENTSO-E-published common Grid models. It is important how the standard will be defined and the qualification of the software. He also addresses whether this is a topic for GC ESC or for the standardisation authorities, e.g. CENELEC.

Klaus Oberhauser (EFAC) also mentions the importance of having a clear overview, but not necessarily of simulation models.

The Chair concludes this topic by asking SOs (ENTSO-E and DSO Entity) for any further feedback in December's ESC.

8.2. AOB Call for clarification on aggregation and compliance.

Presentation from Freddy Alcazar (EUGINE) – [slides here](#), focusing on:

- a. Aiming to clarify the definition of SPGM and strengthening the NC RfG requirements on certification.
- b. The second item is suggesting a new requirement in the NC RfG 2.0 to endorse RSOs to publish and approve their compliance schemes within two years of enter in force of NC RfG 2.0 and to make certificates from one RSO usable by other RSOs.

No comments were made by stakeholders.

8.3. AOB ENTSO-E/EU DSO Entity – PPM Aggregation/Compounding

Mario Ndreko (ENTSO-E) presents the [slides available here](#). This is a joint input from ENTSO-E and DSO Entity on PPMs Aggregation/Compounding commenting on the Joint industry statement "NC RfG 2.0: Industry Call for Clarification on Aggregation Concept and Compliance Scheme" shared through the SPGMs workstream promoted by ACER. The initial reaction of the SOs highlights that the stakeholders' proposal would not be aligned with the proposed requirements of the NC RfG, as the aggregation of the Pmax of non-synchronous power generating units sharing a connection point (CP) is essential for sizing a PPM, given also that the NC RfG requirements apply at the CP, the aggregation of Pmax is crucial for Article 5. Therefore, any proposal will need to clarify and ensure consistency between the legal provisions and the sections of the NC RfG. A legal text proposal is shared proposing, among the others, to delete the wording "underlying technologies".

Mike Kay (DSO Entity), focusing on PPMs, remarks that the wording “installations” is confusing because it is a synonym for “facility”, but is not used in this context. To be further clarified within the ACER’s workstream.

Freddy Alcazar (EUGINE), commenting on synchronous units, remarks that there are still no clear definitions of PPMs vs SPGM on the connection point. To be further clarified within the ACER workstream.

Thomas Schaupp (CENELEC) asks for clarification on the compounding proposal (e.g., a wind PP and a PV PP to make one PPM).

Florentien Benedict (DSO Entity) highlights that on PPMs the “underlying technology” shall be deleted because it creates unclarity. Suggestion to simplify the text to make it more understandable.

Gunnar Kaestle (COGEN) Comments on the proposal mainly highlight the “underlying technology” concern.

Mario Ndreko (ENTSO-E) responds that PPM definitions do not differentiate yet, mentioning it is important to remove all the confusion.

Vidushi Dembi (Wind Europe) asks ENTSO-E whether in their proposal the agreement between SOs and facility owner is kept. Mario Ndreko (ENTSO-E) responds that there is no agreement between SOs and the facility owner in their proposal.

Georgios Antonopoulos (ACER) asks about the interpretation of the term “economic unit” as it is already in RfG 1.0. He further mentions that the ENTSO-E proposal is for deleting “underlying technology” but keeping the “economic unit” and mentions that then the decision could be at the national MS level. Furthermore, the Chair mentions that usually, the “underlying technology” shall be wrapped under the same “economic unit”, therefore the inclusion of the term “underlying technology” helps to further clarify the rules for aggregation.

Catarina Augusto (SPE) mentions that the “economic unit” when it comes to aggregate is complicated to read. She comments that, when it comes to aggregated capacity, we need to revise Pmax definitions.

Gunnar Kaestle's (COGEN) remarks on “economic unit” highlight that it should be aggregated on technical features and legal issues to be followed.

Florentien Benedict (DSO Entity) mentions the ACER presentations from ESC June on PPMs aggregation. Florentien highlights that “economic unit” and “underlying technology” are not clear as the DSO Entity aims for clarity. Request to erase “underlying technology” and to discuss further “the economic unit”. ACER responds to bring it up in the SPGMs workstream meetings.

Catarina Augusto (SPE) asks to join the SPGMs workstream. ACER agrees, and the same invitation is shared with Wind Europe experts.

8.4. AOB HVDC NC updates

Georgios Antonopoulos (ACER) mentions that the public consultation on the NC HVDC amendment proposal ended on 08.09.2024, with the visible responses uploaded on the ACER website – [link here](#).

ACER will evaluate the responses and provide the evaluation report along with the ACER recommendation once the process has been completed.

As asked in the meeting, ACER aims to publish its recommendation to the EC by the end of 2024. The new NC HVDC regulation will most probably come after the NC RfG 2.0 and NC DC 2.0 revisions.

The Chair thanks all the participants and closes the ESC GC meeting.