31st Grid Connection European Stakeholder Committee (GC ESC)

28 September 2023 from 09:30-17:00
ACER premises (Ljubljana) & Microsoft Teams

Minutes of the meeting

Participants		
Alcazar Barrientos	Freddy Eduardo	EUGINE / EG HFC Chair
Antonopoulos	Georgios	ACER
Aren	Assiet	EUGINE
Barroso Gomes	Maria	ACER
Benedict	Florentien	CEDEC
Biellmann	Herve	EUTurbines
Cerretti	Alberto	CENELEC
Chambers	Keith	Europgen
Dekinderen	Eric	VGBE
Dembi	Vidushi	WindEurope
Eckstein	Steffen	EUTurbines
Gabrijel	**Uros**	**ACER / Chair of GC ESC**
Gallego	Santiago	EDSO for smart grids
Glapiak	Aleksander	ACER
Guenzi	Luca	EUTurbine - Solar Turbine
Hearne	Tony	EURELECTRIC
Kaestle	Gunnar	COGEN
Kay	Mike	GEODE
Martines Villanueva	Sergio	ENTSO-E
Melnychenko	Mariia	ACER
Moreira	Joao	ENTSO-E
Massman	Janek	ENTSO-E

Ndreko	Mario	ENTSO-E / EG CROS Chair
O'Connell	Elaine	DG ENER
Oberhauser	Klaus	VGBE
Pasquadibisceglie	Marco	Arera
Raju	Srinivasa	EUGINE
Schowe-von der Brelie	Bernhard	EFAC / VAZ (FGH)
Stanko	Jankovic	ENTSO-E
Stoessl	Martin	Orgalim
Treichel	Julian	CharIN
VASILAKI	Evangelia	ACER
Van Bossuyt	Michaël	IFIEC Europe
Vinas	Thierry	EURELECTRIC
Yuen	Cherry	ENTSO-E
Zastavnetchi	Dmitri	ENTSO-E

1. Opening

1. Review of Agenda

The Chair welcomes the participants to the 31th GC ESC meeting and reviews the participants list to ensure that only members of the Committee or/and alternates that have informed the Chair are present or connected.

The agenda is presented and approved (available here).

The Chair asks for any additional topics to be covered under AOB. No additional requests from members are made.

2. Approval of the minutes

The minutes are presented and approved (available here).

3. Follow-up actions from previous meeting/ new additions to Issue Logger (available here):

Dmitri Zastavnetchi (ENTSO-E) presents the follow-up actions and their status from the previous meeting. The Chair informs that ACER reached out to the Commission on HVDC network code amendment process and it is decided to proceed with the HVDC network code amendment very shortly after the submission of the recommendation to the Commission on RfG and DCC. To this end, a public consultation will not take place in order to collect stakeholders' proposals for amendments of the HVDC network code. However, the public consultation will take on ACER's draft amendment proposal which be based on the expert group reports. Hence, the process on the HVDC topic will be quicker than for the RfG and DCC. Luca Guenzi (EUTurbines) mentions a discussion regarding a delegated regulation instead of normal regulation and explains that there are different rules in the applicability of the requirements or how they are deployed. He provides an example on how it is implemented at the national level. The Chair refers to Elaine O'Connell (DG ENER) for clarifications on the process on the Commission side.

NOTE: Elaine O'Connell (DG ENER) explains the process after the submission of ACER's proposal in point 3 of the current minutes.

2. GC ESC Expert Groups

2a. Identification of Connection Requirements for Offshore Systems (EG CROS)

Mario Ndreko (ENTSO-E) presents the slides (available here)

Gunnar Kaestle (COGEN) asks about the existence of any kind of legal aspect regarding TSO ownership of HVDC systems. Mario Ndreko (ENTSO-E) replies that any party different from a TSO can be the owner of those systems. The Chair adds that in order to operate the transmission system, to be certified as a system operator is needed and it depends on the investors whether they want to pursue that avenue.

Herve Biellman (EUTurbines) asks for a clarification about sub synchronous resonance interactions, wondering if the EG CROS document addresses such phenomena prevention, since they are appearing more and more in the future in grids evolutions. Mario Ndreko (ENTSO-E) replies that the EG ISSM has already provided requirements and in particular the EMT requirements for HVDC systems at European level. Moreover, the existing regulation ensures how the relevant studies would be done by the TSO which is responsible and is responsible also for the data sharing part performing studies. In conclusion, ENTSO-E agrees with this topic.

Erik Dekinderen (VGBE) states that the problem of sub synchronous torsional interactions exists, and, at this moment, it is not mentioned in the current legislation, but it must be added in the legislation itself. VGBE proposed in the RfG code an article to address that situation, for instance when an operator of a synchronous power plant wants to perform something in the vicinity of an existing HVDC terminal. Mario Ndreko (ENTSO-E) replies that assuming that the grid forming would be mandatory, ENTSO-E believes that control interaction studies are needed, and responsibility of the new facility owner should be there. Therefore, this topic deserves a careful approach for the new PGMs coming to the

system. Herve Biellman (EUTurbines) agrees with this need and mentions that each TSO will have to perform a study for that using input data from the HVDC connection and potential synchronous power generator shaft line connected nearby. At the same time, he asks for more clarifications on responsibilities. Mario Ndreko (ENTSO-E) replies that the new coming connection is going to take responsibility of fixing this issue. On the other hand, if something has to be changed in existing HVDC systems, which are characterized by billions of projects, retrofit actions has to be performed with relative more cost. Mario Ndreko (ENTSO-E) believes that this topic is missing from RfG today for SPGMs, assuming that type D will be mandatory in the future, at least for the big one, the topic is addressed for PPMs in the grid forming part. Herve Biellman (EUTurbines) adds that there's not so much flexibility we have in the design of the synchronous power generator to operate with such phenomena. Hence, it's not sufficient to say that a new unit would need to provide a solution to cope with that since except some protections to prevent the shaft line, we have no control on the phenomena with the design of the shaft line. Mario Ndreko (ENTSO-E) replies that it needs to be designed on national level since it is a local issue, even it might have global effects. Erik Dekinderen (VGBE) disagrees on the need of a local level solution asking a further discussion on the topic. Mario Ndreko (ENTSO-E) replies that for new coming PGMs an equivalent of Article 29 in RfG is needed to close this gap.

2.b Harmonization of Product Family Grouping and Acceptance of Equipment Certificates in European Level (EG HCF) – status from ENTSO-E

Sergio Martinez Villanueva (ENTSO-E) presents the slides (available here)

Sergio Martinez Villanueva (ENTSO-E) reports on ENTSO-E proposals to EG HCF amendments to RfG legal text regarding certification of PGMs topic. ACER encouraged ENTSO-E and EG HCF to organise a couple of meetings to review the legal text proposal and try to reach an alignment. During the meeting, ENTSO-E encouraged EG HCF to reduce dramatically the level of details and the content of the amendments proposed, as well as proposing to work on three topics that could be included in a very high level in the wording of the RfG regarding certification: (1) compliance scheme to be defined by the relevant TSO, (2) the possibility to accept equipment certificates within European Union issued by certification Bodies under the accreditation of EA, which is the European Accreditation Body (in the case the relevant system operator considers that the requirement in another member State is more equally or more stringent), (3) families of Power Generating Units and components that could be eligible for the same certificate and the utilisation of such families. ENTSO-E general thoughts about this certification topic is that everything or the detail should rely in a compliance scheme defined at national level. Other topics were out of the scope and the IGDs or the implementation guidelines are the best legal vehicle to contain such details. Regarding the so-called Article 44, containing common provision on equipment certificates, would be included in Chapter one, Compliance Monitoring, which is under title 4, Compliance. This draft article introduces new terms that are not present in the RfG since the code deals with PGM's and not with PGUs or components, thus it was necessary to introduce new definitions such as power generating unit, components, compliance scheme, etc. Additional discussion is scheduled among ENTSO-E and EG HFC within the next two weeks (according to two additional weeks granted by ACER from the 25th of September) to achieve a final common position on the legal text amendments.

2.b Harmonization of Product Family Grouping and Acceptance of Equipment Certificates in European Level (EG HCF) – EG HCF reaction

Freddy Alcazar (EUGINE) on behalf of EG HCF presents the slides (available here)

Freddy Alcazar (EUGINE) reports on the counter proposal on the legal text amendments drafted after receiving ENTSO-E first feedbacks, highlighting (1) very small changes in definitions, (2) considerable change on definition of compliance scheme, (3) additional definitions had to be proposed to give a better understanding to the overall proposal. New Article 44 clarifies specified requirements and provides the possibility to accept certificates from other member states and finally the possibility to accept capability certificates.

Freddy Alcazar (EUGINE) believes that text finalization in very near and consequently asks Sergio Martinez Villanueva (ENTSO-E) on behalf of ENTSO-E to schedule the next meeting. Sergio Martinez Villanueva (ENTSO-E) replies that the internal discussion to provide final replies to EG HCF comments is still ongoing and he will try to come back today to Freddy for a meeting proposal. Luca Guenzi (EUTurbines) asks about how the timeline could be flexible and relative

deadline. The Chair points to a very tight schedule to prepare the recommendations to European Commission. Luca Guenzi (EUTurbines) suggests ENTSO-E to share the draft document under discussion for approval, in parallel to specific points that need further internal discussion, unless this could create confusion.

Keith Chambers (Europgen) asks for more detail about the potential inclusion in IGDs of some of the details which will not be included in the legal text and the relative process. Sergio Martinez Villanueva (ENTSO-E) replies that as of today there is a list of potential topics for 2024 IGDs, but no specific plan is already agreed within ENTSO-E. Furthermore, a specific IGD for instance on compliance scheme topic will be included only if needed and ensuring added value, on top of the legal text if not exhaustive by itself. Freddy Alcazar (EUGINE) asks if the potential IGD would include external stakeholders' perspective in addition to ENTSO-E one. Mario Ndreko (ENTSO-E) replies that every IGD are drafted by ENTSO-E but at the same undergoes a public consultation phase. Sergio Martinez Villanueva (ENTSO-E) adds that IGDs are drafted by ENTSO-E since they give guidance to TSO on how to implement something. Mike Kay (GEODE) highlights his point of view regarding IGD drafting responsibility, suggesting the opportunity to subcontract it to a group of experts that include ENTSO-E as well.

Luca Guenzi (EUTurbines) emphasises that many of the details from the original text was taken out because they do not belong to the regulation, but at the same time it is important to take into account such level of details in the proper place, avoiding the loss of valued information. Mario Ndreko (ENTSO-E) replies that drafting IGDs together with external stakeholders cannot be pursued since IGDs are legally mandated to be fulfilled by ENTSO-E itself. Raju Srinivasa (EUGINE) highlights that even ENTSO-E has the final responsibility to draft IGDs, few articles on which stakeholders are taken onboard could be identified. Furthermore, Bernhard Schowe (EFAC/VAZ (FGH)) states that there is a need for a comprehensive and additional explanation for all the communities, for all the branches, especially for the DSOs how to handle this new Article 44 if it comes into the legal text. Hence, Bernhard Schowe (EFAC/VAZ (FGH)) believes that there is a need for revision of the IGD, since some very specific terms and definitions are still missing (e.g. specified requirements, the acceptance of certificates). The Chair mentions that IGDs are an important vehicle to deliver harmonization and more clarity on details. In this sense, the ESC will still be used as a platform to discuss the process for the development of the IGDs and stakeholders' involvement.

Freddy Alcazar (EUGINE) asks if ENTSO-E has considered the possibility of reducing the P at high voltages. Sergio Martinez Villanueva (ENTSO-E) replies that reduction of active power related to high voltages is considered in RfG1, not necessary to change anything now: in Article 13.4 – active power delivery for low frequencies. Therefore, for low frequencies, it is possible to go to Article 13.1(a)(ii) where combined variations of U-f can be applied. Then, for low frequencies, it is advisable for cutting the corners for high voltages and low frequencies as IEC61400-34 provides to avoid Risk of magnetic over-fluxing of stator core.

3. *Grid Connection NC amendments – public consultation overview, early assessment, and next steps*

Antonopoulos Georgios (ACER) presents the slides (available here).

Antonopoulos Georgios (ACER) reports an overview of the amendment proposals to NC RfG and and NC DC during public consultation, as well as some statistics. 94 contributions in total out of 62 stakeholders for a public consultation lasted for 10 weeks, new stakeholders contributed compared to the previous year. Contributions comes from system operators, regulatory authorities, other stakeholders, manufacturers, generators, consumers and research institutions. Comments are under evaluation and internal assessment within ACER. Based on these inputs, ACER will prepare recommendation for GC NCs amendments to the European Commission by the end of 2023. ACER highlights that the evaluation report will be uploaded on ACER website providing ACER positioning justifying potential comments which were not taken into account.

Bernhard Schowe (EFAC/VAZ (FGH)) asks for a clarification on the expected deadline of six months for European Commission publication on public journals. Elaine O'Connell (DG ENER) replies that in theory is possible, even these amendments have to be subsequential to others that are currently under revision such as electricity market design ones. Regarding the process, Elaine O'Connell (DG ENER) highlights that after an assessment on ACER

recommendations, Member States experts will be involved and a short public consultation on Have your say[1] platform will take place for one month (public feedback usually carried out for delegated acts, which is lighter than a conventional public consultation). Commission internal procedures will be carried out to adopt the final text to be submitted to Council and Parliament lasting two additional months. Elaine O'Connell (DG ENER) encourages all stakeholders to achieve a good level of compromise in the proposal, in order to reduce European Commission time for assessment activities and consequently final text publication. Erik Dekinderen (VGBE) asks for clarification about the profile of the aforementioned Member States experts. Elaine O'Connell (DG ENER) replies the legal requirement is to consult people who are working on these topics within the Member State Governments working on these issues. Moreover, from practical perspective regulators are expected to be involved too. Furthermore, Elain O'Connell (DG ENER) states that an implementing act or a delegated act are different processes, but legal value at the end is the same, i.e., Commission regulation.

10 minutes break.

4. *EU DSO Entity: Response on ACER's public consultation*

Response on NC RfG and NC DC amendments

Florentine Benedict (EG ACPPM) presents the slides (available here).

Erik Dekinderen (VGBE), commenting potential issues related to Pmax highlighted during EU DSO Entity presentation, proposes a different approach by defining Pmax at unit level and not at connection point level. He proposes to send a detailed email to share other comments to EU DSO Entity. Regarding other comments on Pmax issue, Mike Kay (GEODE) clarifies that managing the flow across the connection point is a DSO issue, while the characteristics of the device exhaustive requirements set by TSO because of the effect on the total system.

Gunnar Kaestle (COGEN) asks a question related to reactive power (see page n. 13 of the presentation) and on cross-border issue, stating that such kind of topics should affect TSOs. In addition, regarding reactive power control for Type A PGMs, he asks to DSO Entity to not pursue the position to include relative requirements in the EN 50549-1, suggesting keeping more general and leaving several options that can be fulfilled by standardizations. Gunnar Kaestle (COGEN) shares also a concern regarding LFSM blocking introduction for Type A PGMs, not understanding the need of blocking this self-regulating behaviour which is beneficial.

Response on Electromobility amendments

Florentine Benedict (EG ACPPM) presents the slides (available here).

Michael Van Bossuyt (IFIEC Europe) highlights potential capabilities issues related to supply equipment when vehicles are not connected. The discussion among stakeholders highlights that the capability cannot be indeed provided to the network unless there is some other storage in terms of battery on site, which must be operated independently of the charge. As of today, the proposal does not differentiate between the electric vehicle and the supply equipment, unlike EU DSOs proposal. Stakeholders believe that it's important to keep those splits.

Regarding AC&DC EVs definitions proposed by the Entity, Gunnar Kaestle (COGEN) comments that it's difficult to identify an AC electric vehicle or a DC one, since most vehicles which have an AC connection, or a DC connection can do also both. He believes that it should be differentiated between AC and DC but referring to charging, especially when one means that the converter is part of the vehicle and, on the other one, the converter is part of the fixed installation, which is the EV supply equipment.

Michael Van Bossuyt (IFIEC Europe) arises a comment on Slide 6 concerning if the compliance for the DC charging V2G types, considered a very onerous operation notification procedure requirement, would apply also for very small DC charging wall boxes of for example capacity of eight kilowatts. Mike Kay (GEODE) replies that where there is an

[1] https://ec.europa.eu/info/law/better-regulation/have-your-say_en

equipment certificate, the notification process should be very simple and any administration for both the DSO and the customer should be absolutely minimised.

Eric Dekinderen (VGBE) asks to EU DSO Entity if they are considering one general set of requirements for EVs independently of the voltage at the connection point (e.g., below or above 110 kV), claiming that, in general, requirements are different (since above 110 kV Type D shall be used). Mike Kay replies that EVs are treated the same as any other equipment and he wouldn't expect any voltage differentiation for DC connected; for AC connected the voltage criteria would not have any effect.

5. *ENTSO-E: Response on ACER's public Consultation*

Mario Ndreko (ENTSO-E) presents the slides (available here).

Mario Ndreko (ENTSO-E) highlights that ENTSO-E appreciates the effort of ACER and of all the stakeholders to improve the connection network codes and, aiming at ensuring future reliable stable power systems.

Thierry Vinas (EURELECTRIC) askes clarification on ENTSO-E position about RoCoF. Mario Ndreko (ENTSO-E) clarifies that, understanding the position turbines manufacturer, the proposal should allow that in case of an issue of compliance with the requirements, this should be addressed on project specific basis, providing more flexibility. Erik Dekinderen (VGBE) believes that RoCoF is an issue for grid operators rather than grid users, even in ENTSO-E proposal the grid user has to accept new values. Erik Dekinderen (VGBE) adds this could represent a responsibility issue. Mario Ndreko (ENTSO-E) replies that TSOs are not escaping from 2Hz/s responsibility, just foreseen to make exemption from that on project specific basis if justified, following the need of some new PGM's that can face issues on that. Luca Guenzi (EUTurbines) prefers the proposal made by ACER rather than the ENTSO-E one, still considering interesting to better understand the aforementioned exception.

Luca Guenzi (EUTurbines) continues commenting frequency ranges proposed by ENTSO-E (ref. article 13.12) highlighting that 51,5 HZ-52 Hz for 15 minutes should not be considered as transitioning, as well as the transient at 52 Hz for 10 seconds, suggesting fewer seconds in order to be considered as a transient.

Gunnar Kaestle (COGEN) adds a comment supporting ENTSO-E position when saying that grid forming will be introduced step by step and at high voltage level first, and then the smaller units. DSOs and also some manufacturers need more time to develop and refine the technology and also the equipment in the grids itself which may cope with unintentional islands in the distribution grids. Caterina (Solar Power Europe) appreciates ENTSO-E proposal on grid forming.

Mario Ndreko (ENTSO-E) reports that data centres are growing in size, and they are often at transmission level, thus there is a need of robustness requirements. A stakeholder states that ENTSO-E proposal for a peculiar definition of data centre demand seems to be too generic. Moreover, singling out technologies such as data centre is considered not useful, as data centre are considered base load.

Regarding aggregation of SPGMs behind the connection point, Freddy Alcazar (EUGINE) highlights the need of a definition of SPGM at EU level, since it can have a significant impact on requirements (e.g. individual unit aggregation could lead to different SPGM Types depending on the member State and, hence, to different requirements). Mario Ndreko (ENTSO-E) replies that to decide whether it's an aggregated capacity or individual unit should be left to a national level. Moreover, Keith Chambers (Europgen) disagrees with this comment, since it's very difficult for manufacturers to design a product for a mass market given that there are different rules and different requirements that apply in different member states, because there isn't an alignment on the type of classification definition.

6. CharIN: View on ACER's network code proposals regarding V1G (NC DC) and V2G (NC RfG):

Julian Treichel (CharIN) presents the slides (available here).

Julian Treichel (CharIN) focuses on V2G and on the certification approach, the proposal from CharIN deals with digital certificates stored in the EVs and then transferred to the wall box. The wall box for any charging point can check this certificate and only if this digital certificate is valid and the car is really certified, then it is allowed to feed in power back to the grid.

Gunnar Kaestle (COGEN) shares a comment regarding cloud connections and certificates topic, concerning about a potential use case in which an EV plugged to a wall box should be able to balance the local electricity in case of a blackout, even in absence of connection to the global server (referring to potential IT systems not working properly). Julian Treichel (CharIN) replies that this use case can be overcome using local database updated from time to time.

Mike Kay (GEODE) does not see the need for electronic certification in the aforementioned way. He believes that the requirements are exhaustive, hence there is no need to have anything set locally.

7. Joint SO-GC ESG session

Sub-Group System Protection and Dynamics by ENTSO-E

Janek Massman (ENTSO-E) presents the slides (available here).

An introduction is given and on the interconnected European power system. The system remains intact after a normal alarm operation (what happens on a day-to-day basis) without any interruption of supply, thanks to the load frequency control scheme. Studies show that future disturbances can be controlled without any problems, as long as we consider a compliance of the grid connected units and as long as they comply to the future grid code requirements. Looking at the emergency operation instead, different measures are considered, which are summarised in the system Defence Plan.

Analysing some incidents occurred, ENTSO-E highlights that as long as the European power system is interconnected, there is not a need for additional inertia. Hence, the system defence plan is reliable also for quite high imbalances, up to 5% of the system load. Moreover, the requirements are strongly dependent on the topology of the system split is considered for these kinds of events. And this requires an assessment of the inertia and of the system defence for each of the subsystems, depending on the detailed topology for each system split. This is the reason why ENTSO-E launched project Inertia Phase two, which aims for a definition of relevant systems split scenarios on which analyse the local needs for inertia and the local needs for the system defence plan for additional measures and highlight the future needs.

Thierry Vinas (EURELECTRIC) asks if inertia could be a service that big synchronous machines or other assets could be paid for. Janek Massman (ENTSO-E) believes that inertia is an important topic, but depending on Country-to-Country, leading to move this discussion to national level. Luca Guenzi (EUTurbines) reports that there is a plan on German market to integrate by 2025 local inertia to address local system stability. Janek Massman (ENTSO-E) clarifies that no need of additional inertia is foreseen only for interconnected systems. Gunnar Kaestle (COGEN) adds a comment suggesting that anyway additional inertia could be helpful, no matter how installed, in case some bad issues happen.

Update of inertia phase II project by ENTSO-E

Joao Moreira (ENTSO-E) presents the slide (available here).

Main results are presented, and some remarks are highlighted. A need to establish foundational measures which can provide a given level of resilience (limit of initial RoCoF to reduce impact and possibility of black-out). Moreover, many other situations of possible splits that trigger blackouts of parts of the system can occur, hence there is an absolute need to maintain withstand capability in power generating modules. In more details, even if we increase the resilience

of the system decreasing RoCoF to avoid global severe splits, we can face many cases where subsystems will experience high RoCoF values (higher than 1 Hz/s). Regarding foundational measures, all the possible means would be necessary since the established technology is synchronous condensers. STATCOMs or PPMs with grid forming capability will be necessary as well, as soon as possible.

Gunnar Kaestle (COGEN) highlights that extra inertia can be fulfilled by batteries having synthetic inertia controller and, in the future, there will be millions of small-scale units available to raise the level of dispersed inertia in a dispersed way.

Joao Moreira (ENTSO-E) emphasises that the current study evaluates system needs and the way to translate that needs into actual equipment in the system itself, but still needs to be assessed from an economic perspective to guide the best choice in terms of assets.

Joao Moreira (ENTSO-E) mentions that ENTSO-E plans to carry out a report including the first stage of this phase two published by the end of 2023, coupled with a webinar to take into account stakeholder's comments, in order to finalize a proposal in the beginning of 2024. The Chair would appreciate an update and a discussion on the study results during the next joined GC-SO ESC meeting in December 2023.. In addition, the Chair asks ENTSO-E to ensure the involvement of all stakeholders via a public webinar on inertia phase II project in December 2023.

ACTION: ENTSO-E to present the study results of inertia phase II project in the next GC-SO joint session on 1st December 2023.

8. *EUTurbines: Feedback on RfG Public Consultation:*

Luca Guenzi (EUTurbines) presents the slides (available here).

Luca Guenzi (EUTurbines) highlights that, given the time especially concerning summer vacation, the proposal on new requirements should have been discussed in advance, at least in the European Stakeholder Committee framework, in order to exhaustively support the process. He adds that these new technical proposals lack consensus, since it seems they were not properly discussed in the European committee or in the expert groups. Moreover, he highlights that some requirements have the proper level of detail, some others seem to be open so to be defined somewhere else. For the sake of example, regarding RoCoF requirements, EUTurbines expected to have the chance to share positions in advance among stakeholder, since they believe that this parameter is still an open point.

Thierry Vinas (EURELECTRIC) shares a comment regarding public consultation process which could be improved, specifically on the timeline and on the efficiency of the discussion. ACER understands the point and adds a comment regarding the extension to 10 weeks of the deadline and the workshop to inform the stakeholders. Luca Guenzi (EUTurbines) adds that many of the proposals were based on IGDs that, despite being shared documents, are considered not really updated with the latest information.

9. *Eurelectric: Key points of the RfG discussions*

Thierry Vinas (EURELECTRIC) presents the slides (available here).

Thierry Vinas (EURELECTRIC) relies on the significant increase in the requirements meaning additional costs and market costs as well that must be justified by a systematic and transparent CBA analysis on the power system on any additional requirements. Moreover, regarding climate hazard resilience, EURELECTRIC believes that this topic should not be addressed within the NC RfG framework, but in the EU and national legislation instead. Regarding the increase of criteria on significant modernization, EURELECTRIC believes that too many unnecessary criteria could lead to additional and undue costs for investments and ultimately for customers. Finally, regarding requirements, for instance RoCoF withstand capability, need to take into account physical capabilities of PGMs.

10. AOB

The Chair asks for any additional topics to be covered under AOB.

Mario Ndreko (ENTSO-E) asks for clarifications on the ongoing process managed by ACER and if any workshop is foreseen by ACER itself till the end of October 2023 on particular topics. ACER replies that time is very limited and they will go through stakeholder proposals, coming back to stakeholders for any need for clarifications, without any workshops planned.

The discussion moves to agenda point 7a regarding a proposal of new EG under GC and SO ESC. The support of a consultant is discussed among stakeholders. The need of people to be very aware of the subject due to the specifics of the study is highlighted and the relative risks too. Mario Ndreko (ENTSO-E) highlights that Expert Group Terms of Reference reports a specific mandate to work on the existing legal text and articles, thus promoting expert group on a topic such as stability (mentioned during the discussion) is considered too general term. Luca Guenzi (EUTurbines) disagrees on this point, reporting for the sake of example as RoCoF discussion ongoing within the Expert Group comes from stability studies.

Elain O'Connell (ENER) clarifies that Commission is discussing with ACER on potential future studies to be carried out, completely separated to this ongoing process on NC amendments. More information will be available as soon as something useful to share will be ready, maybe in the next ESC meeting. Moreover, regarding the amendment of the two network codes as delegated acts, Elain O'Connell (ENER) clarifies that Member states don't have a vote, but they are the experts that will be consulted on the version of the text for the NCs RfG /DC.

11. Follow-up actions:

1. ENTSO-E to present the study results of inertia phase II project in the next GC-SO joint session on 1st December 2023.
2. ENTSO-E to propose GC-SO ESC meeting dates (back-to-back) for 2024 and to align with EU DSO Entity and ACER.