**33rd System Operation European Stakeholder Committee (SO ESC)**

04 June 2025, 13:00 - 16:00

**Location:** Brussels, Thon Hotel EU - Rue de la Loi 75

**Minutes**

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| Name | Affiliation  | Role |
| Uros Gabrijel | ACER | Chairperson |
| Georgios Antonopoulos | ACER | Observer |
| Evangelia Vasilaki | ACER | Observer |
| Domen Kodric | ACER | Observer |
| Marco Pasqua di Bisceglie | ARERA | Observer |
| Serdar Bolat  | DSO Entity | Member |
| Andrea Hamzová | DSO Entity | Member |
| Florentien Benedict | DSO Entity | Member |
| Hanna Ljungberg | ENTSO-E | Member |
| Cherry Yuen | ENTSO-E | Member |
| Lazaros Exizidis | ENTSO-E | Member |
| Klaus Kaschnitz | ENTSO-E | Guest presenter |
| Richárd Balog | ENTSO-E | Guest |
| Luca Ortolano | ENTSO-E | Member |
| Laurent Rosseel | ENTSO-E | Member |
| Albino Marques | ENTSO-E | Member |
| Habir Paré Nsangou | ENTSO-E | Member |
| Kacper Kepka | ENTSO-E | guest |
| Luca Guenzi | EU Turbines | Member |
| Steffen Eckstein | EU Turbines | Member Substitute |
| Thierry Vinas | EURELECTRIC | Member |
| Jakub Fijalkowski | European Commission | Observer |
| Elaine O'Conell | European Commission | Observer |
| Christof Lessenich | European Commission | Guest presenter |
| Pavla Erhartova | Europex | Member |
| Emma Menegatti | FSR  | Observer  |
| Herve Biellmann | General Electric  | Member substitute |
| Klaus Oberhauser | VGB Powertech | Member |
| Vidushi Dembi | WindEurope | Member |
| Abel Santamaria Rivera | EDSO for smart grids |  Member |
| Santiago Gallego Amores | EDSO for smart grids | Member substitute |
| Martin Stoessl | Siemens  | Member |
| Gunnar Kaestle | COGEN | Member |
| Stein Øvstebø | IFIEC | Member |

1. ***Opening***
	1. ***Review of the agenda, approval of last meeting minutes***

The Chair (Uros Gabrijel) opens the meeting and asks for comments on the agenda.

The updated agenda is approved with the additions of:

* An intervention of the EC on the RfG amendment process;
* An AoB topic on the *Wind Eclipse* project
* A topic related to the North Macedonia incident of 18 May 2025 (covered under Topic 2)

The minutes of the last meeting are approved with no further comments.

* 1. ***Review of Actions***

Cherry Yuen (ENTSO-E ) presents the pending actions from the previous meeting.

* An update on DFD will be provided in the next SO ESC meeting.
* The topic related to the new expert group on RoCoF will be covered by the GC ESC meeting on 5 June.
* Thierry Vinas (Eurelectric) requested more detailed information related to his questions on Wind Eclipse raised via e-mail. Thierry Vinas and ENTSO-E will follow-up bilaterally on this topic.

**Action**: ENTSO-E to provide more detailed answers to Eurelectric on the questions raised related to the Wind Eclipse project.

1. ***Update on the implementation actions at pan EU level***

Cherry Yuen (ENTSO-E) presented this topic. There are no implementation actions and upcoming reports for the moment.

Cherry Yuen (ENTSO-E) presents information on the North Macedonia incident. The incident is categorized as a scale 3 incident according to the ICS methodology. An expert panel is being formed at the moment. ENTSO-E will have more information to share in the next SO ESC meeting.

No other implementation actions to be shared at this moment by ENTSO-E.

No comments received.

1. ***Report on CGM Implementation***

Habir Paré Nsangou (ENTSO-E) gave a presentation on the achievements and the on-going actions, as well as, presented the timeline for the CGM-based services go-live.

No comments received.

1. ***Update on probabilistic FCR dimensioning and LLFD analysis***

Luca Ortolano gives an update on the probabilistic FCR dimensioning and FCR by Limited Energy Reservoirs. The CE NRAs approved the proposal of CE Transmission System Operators.

Thierry Vinas (Eurelectric) asks clarification about the deadline. Luca responds that there is clear starting point that can set the deadline, which is when all NRAs send the information to the corresponding TSOs. An unofficial dialogue will start with NRAs before the formal deadline. Marco Pasqua di Bisceglie (ARERA) complements that the Baltic Synchronisation, which was not included in the common NRAs decision in January, triggers now some additional process in the Baltic states which adds more complexity and will take some time. Most NRAs have completed the process but some are still missing.

Rainer Fronius (VGB Powertech) asks whether it is the right moment to ask a question on the voltage limits, the fact that these are not the same in the Baltic states and how this topic is approached.

Cherry Yuen (ENTSO-E) responds that ENTSO-E will take this question with the relevant experts and give a response in the next SO ESC in September 2025.

**Action**: ENTSO-E to consider the question on the different voltage limits in the Baltic States and provide insights in the next SO ESC meeting.

1. ***Updates from DSO Entity***

Florentien Benedict (DSO Entity) presents updates from DSO Entity, which include DSOs view on Grid Forming, Certification on EV, the expected timeline for the entry into force of the Connection Network Codes (CNC) 2.0. Florentien B. offers to support the EC if needed, for accelerating the entry into force of CNC 2.0 and closes the presentation with insights on the impact of NCDR to SOGL and other guidelines.

Luca Guenzi (EU Turbines) recommends, in absence of CNC 2.0, to try leverage on standardisation (European standardization) to come into play to foster harmonisation and help with the technical requirements. Present and future RfG are already referencing to the use of applicable European standardisation.

Cherry Yuen (ENTSO-E) poses the question on whether there should be different requirements for the integration of different types of storage, for example electric vehicles and power to gas.

Cherry Yuen (ENTSO-E) asks whether it is possible for the DSO Entity to share the report on Grid Forming reflecting the track changes so that it is clear what were the changes and how they were accounted for.

Gunnar Kaestle (COGEN) makes a comment in the same direction with Luca G. on the available standardisation. CENELEC offers to provide support if needed.

Florentien Benedict (DSO Entity) acknowledges the usefulness of the work on standards. Florentien B. highlights that there is also some complexity as different NCs are managed by different DGs in the European Commission. All efforts, including the standards, are useful but we all need to work together with these three DGs and decide what is the right process.

Uros Gabrijel (Chair) asks how the DSO Entity is going to reach out to all the European DSOs regarding the topic on Grid Forming Roadmaps (incl. those that are not members of the association). Florentien B. (DSO Entity) responds that at least one DSO per Member State (MS) is a member of the Entity and the DSO Entity might approach this communication via the MS. ACER offers to support via reaching out to the regulators, if this is considered helpful by the DSO Entity.

1. ***Iberian Incident***

Klaus Kaschnitz (ENTSO-E) presents the slides.

Abel Santamaria Rivera (E.DSO) asks whether ENTSO-E has considered the events registries of the previous days and weeks. The DSOs has been experiencing and reporting to REE problems in the power system, frequency and over-voltages, leading also to a problem in the train network of 22 April. In most of the cases these issues were taking place at the same time with significant changes in the international exchanges. Abel Santamaria Rivera (E.DSO) expresses his different views, based on DSO information/knowledge, on what appeared to be as a statement that at the moment of the incident there was no problem in the voltage. Klaus Kaschnitz (ENTSO-E) responds that the expert panel is still collecting information and data, which is not yet completed. Regarding the voltage violations, this is still under investigation and conclusions are to be confirmed after all information is available and the investigation takes place.

Thierry Vienas (Eurelectric) makes a remark on the impact in France. RTE published a communication which explains that the incident impact was moderate and Thierry V. informs that a nuclear plant in southeast of France was disconnected. Thierry V. (Eurelectric) asks whether the communication between system operations was good with respect to the restoration process.

Klaus Kaschnitz (ENTSO-E) responds that for the moment the investigation is focusing on the root causes. Analysis of the restoration process will follow later on.

Gunnar Kaestle (COGEN) mentions that there were also significant power flow oscillations and asks if the expert panel has seen similar events. Klaus Kaschnitz (ENTSO-E) responds that these are interesting remarks and the expert panel is taking everything into consideration and conclusion will be communicated in due course.

Jakub Fijalkowski (EC) asks whether the expert panel has received all necessary data from REE. Jakub Fijalkowski (EC) states that when the issue is important and gets political attention, the investigation can go faster and compares this with the investigation for the 2006 split incident. Jakub Fijalkowski (EC) asks what can be done from the EC side to accelerate the process. Klaus Kaschnitz (ENTSO-E) answers that the 2006 split incident was of different nature and the main difference, which complicates the process in this incident, is that also third party data is needed as only data owned by TSOs won’t be sufficient. An incident of this complexity takes time to investigate, especially to allow collection of all necessary data.

Jakub Fijalkowski (EC) asks whether all data from REE were delivered to the Expert Panel. Klaus Kaschnitz (ENTSO-E) clarifies that there is no clear answer on what is defined as a complete dataset needed for the investigation at this stage, because additional data could be required later during investigation, as this was already the case at the beginning of investigation.

Stein Øvstebø (IFIEC) asks what were the consequences for the industry during this incident. Klaus Kaschnitz (ENTSO-E) responds that generally the impact of a blackout on consumers can be of different levels, e.g. depending on the consumer type. This is not something that can be answered from the perspective of the expert panel.

Santiago Gallego (E.DSO) highlights DSOs are not only offering the necessary data but also explaining the data and analysing them. E.DSO offers to support the panel in the investigations and conclusions by providing their analyses. Klaus Kaschnitz (ENTSO-E) welcomes the offer from the DSOs.

Rainer Fronius (VGB Powertech) points out on the importance of exchanging data points, especially in the new context of distributed devices that are installed in the modern power system.

Klaus Kaschnitz (ENTSO-E) agrees that data exchange is of increasing importance. However, he also clarifies that for this kind of investigations data with much higher resolution is needed.

Luca Guenzi (EU Turbines) mentions that EU Turbines has already introduced this topic of data exchange in a proposal for the RfG amendment and asks whether simulations will be performed.

Klaus Kaschnitz (ENTSO-E) responds that simulations will be performed where necessary.

Gunnar Kaestle (COGEN) makes a remark regarding disaster preparedness by switching into island mode and the way we can incentivize introduction of such features (switches/controls) on co-generation that can lead to island mode and protect local consumption.

No further comments.

1. ***AOB***

*(The topic was discussed earlier than planned in the agenda)*

**On the Wind Eclipse project.**

Gunnar Kaestle (COGEN) asks if this is a final report or if there will be another follow-up. Gunnar Kaestle comments on the fact that the situation will deteriorate in the future and asks the question on what need to be done about this.

Cherry Yuen (ENTSO-E) responds that for this activity this is the final report but we have identified different activities that will carry on the study. These activities will be handled by different groups. Any updates will be shared with stakeholders.

Gunnar Kaestle (COGEN) offers to support in case there are any questions related to that.

**On the Inertia project.**

Luca Guenzi (EU Turbines) mentions that the report is a highly dense document which was challenging to comment on. Luca praises the quality of the stakeholder workshop and the material. EU Turbines made several comments to the report related to target inertia, RoCof value. The definition of the approach was not so clear in the report as it was presented in the workshop.

Jakub Fijalkowski (EC) clarifies that the report is an element for discussion. The report will be updated according to the feedback received during the workshop.

**On the CNC 2.0 process**

Christof Lessenich (EC) makes an intervention to update the SO ESC on the CNC 2.0 Process. Christof L. (EC) states that the EC has now been focusing on topics related to the affordable energy action plan, network charges, on CACM guidelines as well as FCA guidelines and as a result of these different workstreams, the work on the CNC can only take place after these projects are completed. The EC recognizes the importance of moving forward with the CNC 2.0 entry into force and acknowledges the concerns raised by the ESC. However, it will take some time to proceed, as this timeline is dictated by political decisions and priorities.

Florentien Benedict (DSO Entity) emphasizes the importance of the topic. It would become more expensive if decisions on technical requirements are not taken quickly. If the technical requirements are not there, then system operators might need to take unharmonized approaches and implement their own requirements.

Gunnar Kaestle (COGEN) highlights the importance of the codes and states that the development of standards could be helpful but the EC doesn’t seem to account them. Gunnar K. also mentions that the Iberian Peninsula Incident might be linked to the use of outdated rules to connect generation facilities to the grid. Christof L. (EC) responds that the EC finds standards useful but they do not replace network codes and binding rules. Regarding the Blackout Incident, the EC cannot draw any conclusions as it is too early for that before the official investigation concludes.

The Chair closes the meeting.