

## 21<sup>st</sup> System Operation European Stakeholder Committee (SO ESC)

14 June 2022, 14:00-17:00

Hybrid meeting at ENTSO-E Premises

### Draft Minutes

Participants		
Uros	Gabrijel	ACER (Chair)
Eric	Dekinderen	VGB Powertech
Maria	Barroso Gomes	ACER
Pavla	Erhartova	Europex
Florentien	Benedict	CEDEC
Gunnar	Kaestle	COGEN Europe
Klaus	Oberhauser	VGB Powertech
Luca	Guenzi	EUTurbine
Marco	Pasquadibisceglie	ARERA
Thierry	Vinas	Eurelectric
Marie	Bourrousse	Eurelectric
Mike	Key	GEODE
Assiet	Aren	CAT
Claire	Vanderwalle	EU DSO Entity
Alcazar	Barrios	Eugine
Raju	Srinivasa	Wartsila
Thomas	Holzer	BNetzA
Jakub	Fijalkowski	EC
Valerie	Reif	FSR, observer
Vaiva	Indilaite	WindEurope
Stefan	Eckstein	EU Solar Turbines
Vasiliki	Klonari	WindEurope
Jonathan	Boyer	ENTSO-E/Coreso
Cherry	Yuen	ENTSO-E / Swissgrid
Maja	Lundback	ENTSO-E
Victor	Charbonnier	ENTSO-E
Luca	Ortolano	ENTSO-E / Terna
Bernard	Malfliet	ENTSO-E / Elia
Christophe	Druet	ENTSO-E
Walter	Sattinger	ENTSO-E/ Swissgrid
Elma	Leto	ENTSO-E
Ivan	Taleski	ENTSO-E
Gamze	Dogan	ENTSO-E
Anna	Butenko	ENTSO-E

## 1. Opening

### 1.1. Review of the agenda and approval of minutes

The Chair (Uros Gabrijel) opens the meeting. He initiates a tour around the table with the participants. The agenda is confirmed. The minutes of the last meeting are approved.

The Chair requests ENTSO-E to update the website with the latest information.

Action: ENTSO-E secretariat shall update the website.

### **1.2. Review of Actions**

ENTSO-E (Cherry Yuen) presents the pending actions from previous meeting. All actions were considered done, except inviting stakeholders to the internal group within ENTSO-E who analyses the wind eclipse. The action is postponed due to emergency synchronisation project.

## **2. Update on implementation actions at pan EU level**

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ENTSO-E (Cherry Yuen) presents the updates on the implementation actions.

- CSAm: development of a data collection tool for the methodology on Probabilistic Risk Assessment
- Ukraine-Moldova synchronisation: see AOB
- KORRR: analysis on SO GL data exchange framework and notably the KORRR methodology
- Network Code Emergency & Restoration: ACER has published an NCER implementation report. The ENTSO-E NCER expert team has identified points for discussions with ACER.

Mike Kay asks about the rationale and status of amendments to KORRR methodology. Cherry Yuen explains that ENTSO-E has identified potential changes that might be necessary to this methodology and to data exchange provisions of the SO GL following the review of the Capacity Allocation and Congestion Management guidelines initiated by the European Commission (and notably the removal of the Generation and Load Data Provision Methodology).

ACER and DG ENER confirm that the review of CACM will have limited impact on SO GL. The European Commission will publish a new draft after the public consultation. The Chair proposes that the European Commission informs the SO ESC about the planning and stakeholders' involvement.

The Chair explains that ACER aims at issuing an implementation monitoring report on SO GL and KORRR implementation ahead of the summer break.

Action: EC to inform about their planning and stakeholder involvement on SO ESC September meeting for updates in SO GL.

## **3. Cybersecurity Network Code**

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ACER (Stefano Bracco) provides an update on the development of the network code. ACER was supported by an expert group of regulators and stakeholders throughout this process. The adoption procedure will be completed by mid-July 2022 and the proposal then immediately submitted to the European Commission. Having in mind that the NIS 2 Directive is expected in Q4 2022, the Network Code may be adopted at the earliest late in 2022 or in 2023.

Main changes of the review pertain to:

- Elements to be included in TCM
- Risk assessment cycle – Reverted from 2 years to 3 years (Original ENTSO-E - EU DSO proposal)
- Principles for methodologies
- ToR for the governance (Monitoring WG)
- Concept of distributed attacks against the grid
- Concept of guidelines for exchange of information
- Cross-reference to NIS and NIS2D directive SPOCs
- Use of responsible disclosure as in NIS II for zero day vulnerabilities
- Exemptions clauses for national security reasons

WindEurope asks if another public consultation will be organised, and ACER confirms this will be the case alongside other relevant stakeholders involvements.

#### ***4. Report on CGM Implementation***

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ENTSO-E (Jonathan Boyer) provides an overview of the different business services of Regional Coordination Centres and the interaction between them:

- CSA
- CCC
- STA
- OPC
- CGM

He explains that the related exchange of data for CGM build process is supported by a digital infrastructure: OPDE. He further describes the timeframes for the consolidation of CGMs by RCC based on TSOs inputs.

In accordance with the CGM methodology, the CGM programme went live in 2021 de facto establishing the technical environment for the development of RCC services. In 2022, ENTSO-E and RCCs will focus on a number of key areas:

- Further description of the CGM rotational principle
- New process for building CGM in the week-ahead timeframe
- Process for quality check of data and model validation
- Technical security requirements
- Development of OPC, STA and CSA
- Extension to intraday
- Central Authentication solution

He then presents the roadmap for use of CGM OPDE in RSC services. There will be a gradual phase in of the services until 2026 for each CCR. Further information will be provided as part of the annual report on regional coordination assessment (according to article 17 of SO GL) to be published beginning of 2023. The report will cover the CGM business process for the year of operation 2022. Next report will be provided to SO ESC in December 2022.

Luca Guenzi asks what details / parameters the CGM provides regarding generation assets such as operational ramp rates (in normal system state). Jonathan explains that parameters related to dynamic behaviour are not considered in the scope of the RCC services.

#### ***5. Resilience of the EU generation infrastructure to weather-related hazards***

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ACER (Aleksander Glapiak) informs that they received three inputs to the circulated survey. A policy paper will be finalised and published by a public consultation in September. The first impression from the received answers was that one of three participants misunderstood the questions.

COGEN Europe (Gunnar Kaestle) asked what the hazards are to be investigated. The Chair replies this will be tackled in the policy paper which will published by September.

#### ***6. High level update on synchronisation of Ukraine***

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ENTSO-E (Walter Sattinger) provides an update on the efforts of ENTSO-E and TSOs for synchronising the Ukrainian and Moldavian power system to the Continental Europe power system. A key technical challenge is related to the occurrence of poorly damped inter-area oscillations due to the increase size of the power system. This implies to conduct a thorough investigation of protection settings, a constant monitoring of dynamic stability and the implementation of damping measures by Ukrenergó in difficult and constrained conditions. The situation can be even more challenging when cross-border power exchanges will progressively increase in the next months (new NTC values). Damping measures (STATCOM, SVCs) will have to be implemented not only by Ukrenergó but also other TSOs notably in the Iberian Peninsula.

Eric Dekinderen asks if electricity imports from Russia are stopped. Walter explains that there is only one (DC) connection between Finland and Russia and this was stopped a few weeks ago. There is also the planned synchronisation of the Baltic countries, but the procedure will not be accelerated because they have not yet the capability to operate in islanding mode.

Thierry Vinas asks if ENTSO-E has performed sensitivity analysis about the loss of the largest nuclear power plant site (total of 6 GW). Walter clarifies that this nuclear power site is still operated by Ukrenergo operators at the moment but only 2 out of 6 power plant is in power operation at the moment (1.5 GW). Therefore its "loss" would not impact too much the Continental European power system. Furthermore, the Ukrainian power system has a sufficient reserve of primary control from their hydro power plants to stabilise the frequency after faults in their power system.

Gunnar asks if the protection relays on the lines connecting Ukraine are the same than those in other areas or if there are extra requirements. Walter clarifies that there are no special protection schemes on this interface.

Tony Haes asks if the oscillations have any physical impacts. Walter confirms that they trigger vibrations in the equipment which need to be addressed otherwise it may create disconnection of powerplants and cause islanding situation.

About the synchronisation of the Baltic countries, the Chair asks if ENTSO-E is investigating the impact of the synchronisation. Walter clarifies that they are looking into the possible impact, but the results have so far shown that the impact on continental Europe is limited.

Luca Guenzi asks if the frequency measurements can be made available to OEM. Walter invites interested parties to reach out to him with their request and he will process them with the concerned TSOs.

## **7. AOB**

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ENTSO-E (Luca Ortolano) explains that TSOs have been asked to take into consideration long-lasting extraordinary frequency deviations and their mitigating measures in the CBA on the minimum activation period for FCR with LER.

Marie Bourrousse asks if this is the only change of parameters in the model or if other remarks by market parties were considered. Luca explains the methodology could not be fully re-opened because it was already approved by NRAs, but it can be re-run if there are significant changes in the input data.

Marco P. clarifies that TSOs submitted a proposal. NRAs assessed it and shared concerns that were sometimes similar than the market participants. For this reason, they estimated that the T<sub>min</sub> FCR LER was linked to the amount of long-lasting frequency deviations, whereas deterministic frequency deviations have a marginal impact. Based on this conclusion, NRAs have asked TSOs to evaluate a re-run of the CBA taking into account these deviations and how these could be mitigated.

The Chair asks if it is possible for the study to conclude that the CBA should be amended for changed input assumptions. Luca explains that impact is only on the input data (frequency data) but the results are affected even if the whole methodology is not to be reconsidered. Marco P. explains that whole CBA won't have to be resubmitted. Luca explains that only exceptional deviations of more than 15 or 30 minutes and above 50 mHz are to be assessed (Extraordinary Frequency Deviation only). Typical root causes may include inaccurate RES forecasts, software malfunctioning, etc.

Marie Bourrousse asks if the thresholds for a negative/significant impact will be defined. Luca explains that the additional time provided by NRAs will be used by TSOs also to dimension the FCR through a probabilistic approach; this overcomes the need of identifying the abovementioned threshold.

Gunnar asked why limited resources were considered in LLEFD when the duration of such fault is more than 30 min and is not LLEFD a sign that secondary and tertiary frequency control has failed. Luca answered that it is an indication that something went wrong, but it can depend on many reasons, e.g., extreme weather conditions, human errors, etc.

The Chair also announces a public consultation about a framework guideline on Demand Response ([link to public workshop](#)).

Cherry and the Chair asked ESC members to check and provide an update to the list of members on ENTSO-E webpage.

**Action:** all associations are asked to update their list of members and respecting the number of seats being allocated to them by ACER before the next ESC meeting.