ACER
European Union Agency for the Cooperation of Energy Regulators

4th Workshop on Scenario Guidelines

Scenario(s) alignment with NECPs, Fit for 55, REpowerEU

02 August 2022, from 14.00 to 17.00

AGENCY SUMMARY NOTES

Represented institutions	Remarks
ACER	
particular stakeholders* in the meaning of Article 12(1) of Regulation (EU) 2022/869 *the Commission, the Member States, the ENTSO for Electricity, the ENTSO for Gas, the EU DSO entity and at least the organisations representing associations involved in electricity, gas and hydrogen markets, heating and cooling, carbon capture and storage and carbon capture and utilisation stakeholders, independent aggregators, demand-response operators, organisations involved in energy efficiency solutions, energy consumer associations and civil society representatives	An overview of participating organisations is published separately

Disclaimer: these ACER summary notes serve to inform stakeholders and the public in broad terms about the discussions taking place during the workshop. The notes are not a transcript of the discussion and do not represent final positions or views of either the Agency or the participating organisations.

1. OPENING

ACER opened the workshop on **the scenario(s) alignment with NECPs, Fit for 55, REpowerEU,** with the presentation of the agenda, followed by an introduction of the workshop's topic.

2. STAKEHOLDERS' IDEAS ON THE SCENARIO(S) ALIGNMENT WITH NECPS, FIT FOR 55, REPOWEREU

ACER invited stakeholders to present their views and had circulated guiding questions to help stakeholders prepare their interventions. ACER also invited ENTSO-E and ENTSOG to clarify how scenarios fit in the TYNDP process.

The following stakeholders presented their views:

- Climate Action Network Europe (CAN Europe)
- Ember
- CurrENT
- Eurelectric
- Eurogas

Presentation by ENTSOG on how scenarios fit into the TYNDP process

- ENTSOG explained how the main purpose of scenarios is to provide sound assumptions on future demand and supply when carrying out the TYNDP assessment.
- Scenarios include a holistic approach of the EUs' energy system and different energy carriers.
- During the scenario development process, ENTSOs ensure a sufficient level of stakeholder engagement and alignment with EU's strategies.
- The TYNDP assessment checks whether the network can deliver supply to where the demand is located.
- Scenarios are used for individual project assessment.
- The need for new infrastructure is not provided by scenarios themselves as the assessment of infrastructure happens in another later process that uses the scenarios.

Stakeholder comments on the ENTSOs presentation:

- Noting that the goal of scenarios should be to enable a system assessment of the ability of the network to deal with the demand and supply assumptions and test resilience; it is not an exercise in setting high ambitions.
- Noting an inefficiency on the decarbonisation measures taken, requesting assumptions that are more prudent and constraining hypothesis in order to cope with the future trends.
- Noting that in many cases, scenarios are actually used by many NDPs, especially for electricity projects.
- Demanding a more realistic approach, assessing policies and in case where policies are missing, promote them through scenarios.
- ENTSOs clarified that the different scenarios cover the main sensitivities; when the pace would be faster, the impact of a particular year as assessed would happen sooner.

- ACER commented that the specific purpose of scenarios is to enable network assessment, namely targeting the PCI selection. Scenarios cannot be tailored to accommodate many different preferences (also due to ENTSOs resource limitations) and it is important to stay realistic. For scenarios without a policy goal, contrasting views fit better. However, in case a policy objective is determined, scenarios must align with it. Concrete sensitivity analysis can better fit into the CBA then the scenario process.
- System development is focusing too much on PCIs, while there is a need for another and diverse system assessment that may not be used for PCIs, to hear what are the investments needed in order to deal with risks.
- There is a need for more resilience in the electricity systems, which scenarios should try to incorporate.
- It is important to think about the energy efficiency first principle beyond efficient consumption and infrastructure development, but this principle should also be reflected in terms of energy production and energy carriers.
- The current visibility of the model for the future is limited, making impossible to assess investments candidates in the future.

Presentation by Climate Action Network Europe (CAN Europe):

- Need to abstract TYNDP2024 scenarios from the higher-level scenarios.
- In resilience vs policy, REPowerEU is a reflection of security issues.
- The starting point should be that the EU ambitions are implemented with success.
- Scenarios should include also extreme alternatives; not only stay in the middle without ambition.
- Paris agreement and its implications for the climate should also be a priority.
- Scenarios need to clarify whether they build on TSOs' estimates, governments' objectives or reflect other policy constraints and targets.
- The most prudent approach would be alignement with a fit for 1.5 ^{o}C.
- 'Global Ambition' (GA) and 'Distributed Energy' (DE) are not contrasting enough; at least one of the scenarios should not overshoot the carbon budget.
- Include a cost analysis of different carbon removal technologies.
- Review the methodology of the cost benefit analysis in order to allow for short-term updates of cost indicators (note: the CBA process is beyond the scope of the scenario guidelines).
- Acknowledge the dilemma posed by asking a broader debate and wanting the process to be faster; suggestion to include open data and licence TYNDP modelling in order to enable updates and sensitivity analysis through external researchers who can help with assessments.

Comments on the issues raised in CAN Europe's presentation:

- Scenarios do not serve to challenge the EU ambitions; they should enable a check of supply and demand to match relying on the energy infrastructure.

Presentation by EMBER:

- Regarding the TYNDP, it is necessary to be in line with climate policy targets; REPowerEU will affect the 2030 targets so we should not stick to Fit for 55.
- We need the infrastructure in place that will enable REPowerEU ambitions.
- The endpoint (2050) is equally important with the 2030 point and should be taken into account.
- Comparison of 2050 climate neutrality vs 1.5 ^{o}C comparability, showing the divergence; if we want infrastructure that enables 1.5 ^{o}C then we need a scenario that aligns with that ambition level.
- Greater understanding what does 1.5 ^{o}C mean for the power systems. Incorporating comparison of different studies and their roadmap to net-zero.

Comments on the issues raised in Ember's presentation:

- The importance of open data and open model is underlined.

Presentation by CurrENT:

- Scenarios should all reach the Repower EU (2030) and Green deal targets (2050.)
- Scenarios need to be able to manage uncertainties, focus on transparency and leaving room for uncertainty, as we do not know the future.
- Time horizons should include long and short-term visions.
- Sensitivities should be discussed transparently and include solutions to "what if" questions or information on trends change, different technology portfolio etc.

Presentation by Eurelectric

- As the updated versions of NECPs are not complete, building scenarios out of them is challenging. E.g., National trend in the previous TYNDP does not meet the long-term climate goals.
- GA and DE scenarios are extreme and not very realistic, causing wide range of pathways for the decarbonisation process, making very difficult to achieve in practice
- A balanced scenario is necessary for a meaningful picture.
- Sensitivity analysis for volatile drivers is very important.
- EUs' ambitions should be reflected in the TYNDP scenarios.
- There is a need for a long-term visibility in the model for investment decisions; supporting open source/open data.

Presentation by Eurogas:

- There is a need of bridging the gap between top down and bottom up scenarios.
- The drive for investments is increasingly from the lowest levels (distribution grid) .

- Hydrogen, Biogas and liquid fuels applications should be taken into account while developing scenarios.
- REpowerEU ambitions should be included in the joint network planning by ENTSOs.

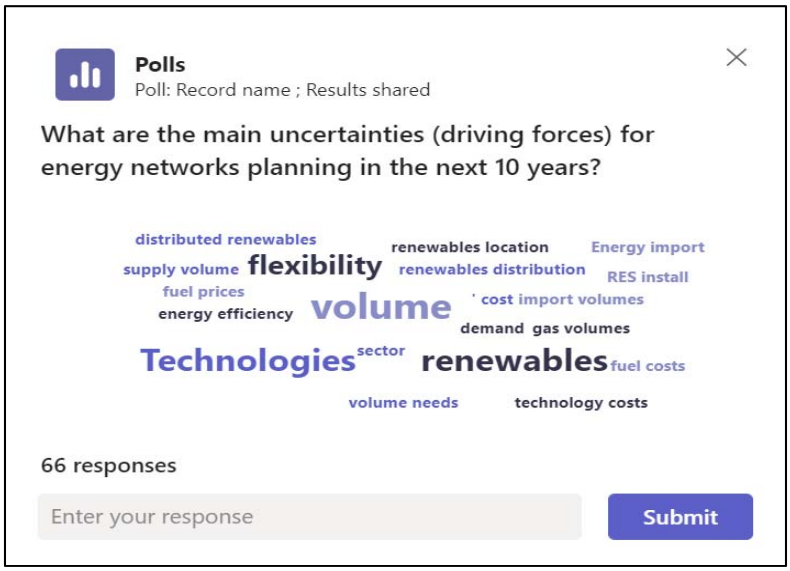
Comments on the issues raised in Eurogas' presentation:

- What is of critical importance is to align EU wide policy objectives with NECPs elevated ambitions; they might not be responsive enough but working on scenarios that push ambition to the right level for meeting 2030 and 2050 strategic objectives can help wider alignment that is of critical importance in this energy transition process.
- Would be important to include indicators regarding the point at which gas network utilisation rates drop below a technically / economically viable level.
- In terms of policy alignment: hydrogen or CCS ready is not the same as full policy alignment unless it is part of a wider strategy to ensure demand, supply and enabling network will materialise with a high degree of certainty.
- Also an announced pledges scenario as done by the IEA might be of interest
- Industry often goes faster than what policies foresee.

Further debate:

After the stakeholders' presentations, ACER launched a poll, asking stakeholders: What are main uncertainties (driving forces) for energy networks planning in the next 10 years?

66 responses in total, ten of them indicated the volume, eight the renewable energy sources and both flexibility and various technologies received seven each.



Additional comments proposed that:

- ACER noted that it shows how diverse views on main uncertainties can be; scenarios cannot deal with every single uncertainty and should best focus on a limited number of scenarios with variations based on a common denominator that explains the

differences between the scenarios; decision makers should have the level of insight the different assumptions that build the scenarios. Some assumptions have more and some other less impact; we should keep in mind that NECP have a 5-year frequency according to EU legislation while Network Development Plans in the majority of European countries and the EU TYNDPs have a 2-year frequency.

- It is needed to take the overarching policy targets (e.g. REPowerEU) Green Deal, and use the NECPs more for having an idea about national approaches. For example, it seems that some countries go for nuclear plus RES, others for Hydrogen plus RES, or other such broader categories.

3. CLOSING SESSION

During the closing session of the workshop, the topics for the remaining workshops were presented based on the schedule:

- 5/8 considering efficiency, demand-side, hydrogen etc.