

ACER consultation on ERAA/VOLL/CONE/RS methodologies

A Eurelectric response paper

Eurelectric represents the interests of the electricity industry in Europe. Our work covers all major issues affecting our sector. Our members represent the electricity industry in over 30 European countries.

We cover the entire industry from electricity generation and markets to distribution networks and customer issues. We also have affiliates active on several other continents and business associates from a wide variety of sectors with a direct interest in the electricity industry.

We stand for

The vision of the European power sector is to enable and sustain:

- A vibrant competitive European economy, reliably powered by clean, carbon-neutral energy
- A smart, energy efficient and truly sustainable society for all citizens of Europe

We are committed to lead a cost-effective energy transition by:

investing in clean power generation and transition-enabling solutions, to reduce emissions and actively pursue efforts to become carbon-neutral well before mid-century, taking into account different starting points and commercial availability of key transition technologies;

transforming the energy system to make it more responsive, resilient and efficient. This includes increased use of renewable energy, digitalisation, demand side response and reinforcement of grids so they can function as platforms and enablers for customers, cities and communities;

accelerating the energy transition in other economic sectors by offering competitive electricity as a transformation tool for transport, heating and industry;

embedding sustainability in all parts of our value chain and take measures to support the transformation of existing assets towards a zero carbon society;

innovating to discover the cutting-edge business models and develop the breakthrough technologies that are indispensable to allow our industry to lead this transition.

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1. On ERAA Proposal

Pursuant to Article 23(3) of Regulation (EU) 2019/943, ENTSO-E shall submit (by 5 January 2020) to the Electricity Coordination Group and ACER a draft methodology for the European resource adequacy assessment based on the principles provided for in Article 23(5) of Regulation (EU) 2019 /943. ENTSO-E submitted the draft methodology on 4 May 2020. According to the same Article, such methodology “shall ensure that the resource assessment:

- (a) is carried out on each bidding zone level covering at least all Member States;*
- (b) is based on appropriate central reference scenarios of projected demand and supply including an economic assessment of the likelihood of retirement, mothballing, new-build of generation assets and measures to reach energy efficiency and electricity interconnection targets and appropriate sensitivities on extreme weather events, hydrological conditions, wholesale prices and carbon price developments;*
- (c) contains separate scenarios reflecting the differing likelihoods of the occurrence of resource adequacy concerns which the different types of capacity mechanisms are designed to address;*
- (d) appropriately takes account of the contribution of all resources including existing and future possibilities for generation, energy storage, sectoral integration, demand response, and import and export and their contribution to flexible system operation;*
- (e) anticipates the likely impact of the measures referred in Article 20(3) of Reg. (EU) 2019/943;*
- (f) includes variants without existing or planned capacity mechanisms and, where applicable, variants with such mechanisms;*
- (g) is based on a market model using the flow-based approach, where applicable; (h) applies probabilistic calculations;*
- (i) applies a single modelling tool;*
- (j) includes at least the following indicators referred to in Article 25 of Reg. (EU) 2019/943: ‘expected energy not served’ and ‘loss of load expectation’;*
- (k) identifies the sources of possible resource adequacy concerns, in particular whether it is a network constraint, a resource constraint, or both;*
- (l) takes into account real network development;*
- (m) ensures that the national characteristics of generation, demand flexibility and energy storage, the availability of primary resources and the level of interconnection are properly taken into consideration.”*

The methodology shall also be the basis for carrying out national resource adequacy assessment according to the provisions set in Article 24 of Reg. (EU) 2019/943.

ACER seeks the opinion of stakeholders with respect to the following topics.

1.1 Do you think that policies and measures contributing to indirectly restricting wholesale price formation (as referred to in Article 10(4) of Reg. (EU) 2019/943) should be reflected in ERAA?

- ☒ Yes
☐ No

1.2 Please elaborate on your previous answer

We believe that at least measures identified by the NRAs, restricting wholesale price formation, should be taken into account in ERAA as they are factors resulting in a “missing money” phenomenon which is a main purpose of the need to apply capacity mechanisms.

The model underpinning the ERAA should reflect as best as possible the market fundamentals and market design it is representing, either directly through the model, or through post-processing of the modeling results. This modelling exercise could indeed include policies and measures that may restrict wholesale price formation, and should result in an exhaustive lists of measures which are concerned and of where they are applied.

However, this should only be done to the extent that it applies to the market in question and the modelling can be done objectively. Policies that are too complex to model such as restrictions on dominant market participants, will be hard to include in the ERAA in a quantified way.

We believe that measures identified by the NRAs, restricting wholesale price formation, should in particular be taken into account in ERAA as they are factors that can increase the “missing money” phenomenon which is a main purpose of the need to apply capacity mechanisms.

On the other hand, we underline that even removing these price restrictions, the missing money problem would not necessarily be solved -i.e. the inherent uncertainty in predicting scarcity events and related difficulty in budgeting new peak investment or even discourage retirement decisions on the mere basis of scarcity rent expectations.

In any way, an appropriate visibility should be provided on the impacts of these deviations from the target market design on the model outcomes.

1.3 How should policies and measures contributing to indirectly restricting wholesale price formation be reflected in ERAA?

Concerned policies and measures could be included following a 3-steps approach :

1. Where possible, they should be included directly in the model to best reflect and represent the market dynamics. However, care should be given to the benefits of including such measures in the model – improved representation of the market outcome – and the possible drawbacks – more complex model that risks becoming a black box of which the results are impossible to explain or interpret.

2. An alternative to direct inclusion would be to post-process the model results, e.g. impose ex-post some market price caps during moments of scarcity, and to report on the impacts of this post-processing (cfr impact assessment versus a target market design).

3. Policies that cannot be included in a quantified way should be listed, as well as the potential impact they may have on (the profitability) of assets or market outcome.

While following this approach, a distinction between the impact on short-term operation (e.g. scarcity situation resulting from the non-activation of a DSR measure with high strike price because a price cap prevents such an activation) and on the long-term investment incentives

could be made. However, to ensure that the ERAA focuses only on decided investments, the long-term investment dimension should only be included in step 3.

1.4 What would be the impact on price formation during scarcity hours?

The scope of this question is not clear, as there is no clear indication to what impact is being referred to.

Regarding the impact of (removing) limitations to wholesale electricity price formation, given the uncertainty surrounding the occurrence of such scarcity hours over the time horizon of the ERAA, the broader impact on market participant behavior of such restrictive policies and measures is questionable when compared to other evolutions of market fundamentals (demand, supply, commodity prices, network, weather conditions) that are affecting the prices on a daily basis.

1.5 Do you think that, actions taken by a regulatory authority or designated competent authority aimed to eliminate identified policies or measures which could serve to restrict wholesale price formation (as referred to in Article 10(5) of Reg. (EU) 2019/943) should be reflected in ERAA?

☐ Yes

☒ No

1.6 Please elaborate on your previous answer

The objective of the ERAA should be to reflect as best as possible the market and all design and policies measures shaping it, as expected on the ERAA horizon. As such, only decisions taken or whose implementation is legally imposed with a clear timeline and detailed scope should be included in the ERAA. If the implementation timeline or the detailed scope of actual measures are not clear, they seem to be impossible to implement in the ERAA.

If undecided actions by competent authorities were to be included in the ERAA, it should be as part of the set of sensitivity scenario's, in order to show the impact of alternative measures or designs compared to the current market. The measures included in the sensitivity scenario's should also be clearly explained, including the assumptions and the likelihood of their adoption and implementation.

1.7 Do you think that scenarios for ERAA should reflect the timeline for adopting measures to eliminate any identified regulatory distortions or market failures as a part of the State aid process included in the implementation plans as referred to in Article 20(3) of Reg. (EU) 2019/943?

☐ Yes

☒ No

1.8 Please elaborate on your previous answer

In line with the answer to the question 1.6, only decided or very likely actions should be included in the reference scenario of the ERAA. If undecided actions by competent authorities were to be included in the ERAA, it should be as part of the set of sensitivity scenario's. Assumptions regarding their potential timeline of adoption could be included in the sensitivity.

However, one should keep in mind that market failures are exactly the reasons why the economic theory and/or the associated modelling exercise are not delivering in practice the right market signals for short-term operations and long-term investment signals. By nature, they are therefore impossible to model in practice. The same holds for some of the uncertainties faced by market participants.

1.9 How should scenarios for ERAA reflect the timeline for adopting measures to eliminate any identified regulatory distortions or market failures as a part of the State aid process included in the implementation plans?

In line with the answer to questions 1.6 and 1.7, only decisions taken or whose implementation is legally imposed with a clear timeline and detailed scope of the measure should be included in the reference scenario of the ERAA, in accordance with their expected implementation timeline. Other potential and not decided measures, such as the adoption timeline, should only be included as part of a set of sensitivity scenario's.

1.10 How do you expect the measures referred to in questions 1.1 and 1.5 would affect price formation, especially during scarcity situations (i.e. when unserved energy occurs)?

As the measures explicitly cover restrictions of the wholesale market price formation, their adoption could be expected to affect price formation during scarcity situations.

However, given the extremely limited amount of historical scarcity situations and the high degree of uncertainty surrounding their future occurrence, the modelling of these situations and the impact of these measures on long-term, fundamental market outcomes is doubtful.

The implementation of such measures should therefore better be assessed on their contribution to the well-functioning of short-term energy markets, instead of their ability to affect the long-term, fundamental market outcomes. The latter are in large part driven by (shifts in) dependable market revenues that occur on a daily basis and on which basis a bankable business plan can (or cannot) be formed.

1.11 The Proposal for ERAA mentions that Replacement Reserve (RR) is fully available to avoid unserved energy, whereas FRR is fully unavailable for this purpose. Do you agree with this proposal?

- ☒ Yes
☐ No

1.12 Please elaborate on your previous answer

Such solution seems relevant, as the FRR and FCR are types of reserves designed for everyday system balancing, not to solve adequacy issues. In case of scarcity situation FCR and FRR are

still needed for operational balancing, therefore they should not be taken into account for adequacy issues.

1.13 What do you think should be the FRR purpose (and use) at times of unserved energy and how should ERAA reflect this use?

The SOGL requirements regarding FRR clearly provide that TSOs should at all times ensure the necessary volumes of FRR to comply with the frequency quality criteria. As such, TSOs cannot deploy FRR for any other purposes than for reacting to short-term frequency fluctuations, and any use of FRR for adequacy purposes should therefore be excluded. This would otherwise deprive TSOs of the ability to remedy short-term frequency fluctuations which continue to occur even during scarcity moments with unserved energy.

Moreover, the ERAA has a time granularity of 1 hour, while FRR volumes are deployed for a period of maximum 15 minutes. The ERAA simulations are therefore not able to replicate or see the short-term frequency fluctuations that are present in reality. The FRR volumes modelled in the ERAA should therefore only be represented as capacity that cannot be deployed for adequacy but has to remain free to deal with these short-term frequency fluctuations. This is also consistent with the choice made for the ERAA to focus on “market scarcity” (i.e. situations where market resources are not able to cover demand) rather than on physical adequacy.

1.14 Do you think taking into account unused (normatively estimated based on the historical difference between available and activated for other purposes, see example below) Frequency Restoration Reserves (FRR) upwards as resource to be used in ERAA with the aim to reduce unserved energy (which ultimately materialises as imbalance)?

☐ Yes

☒ No

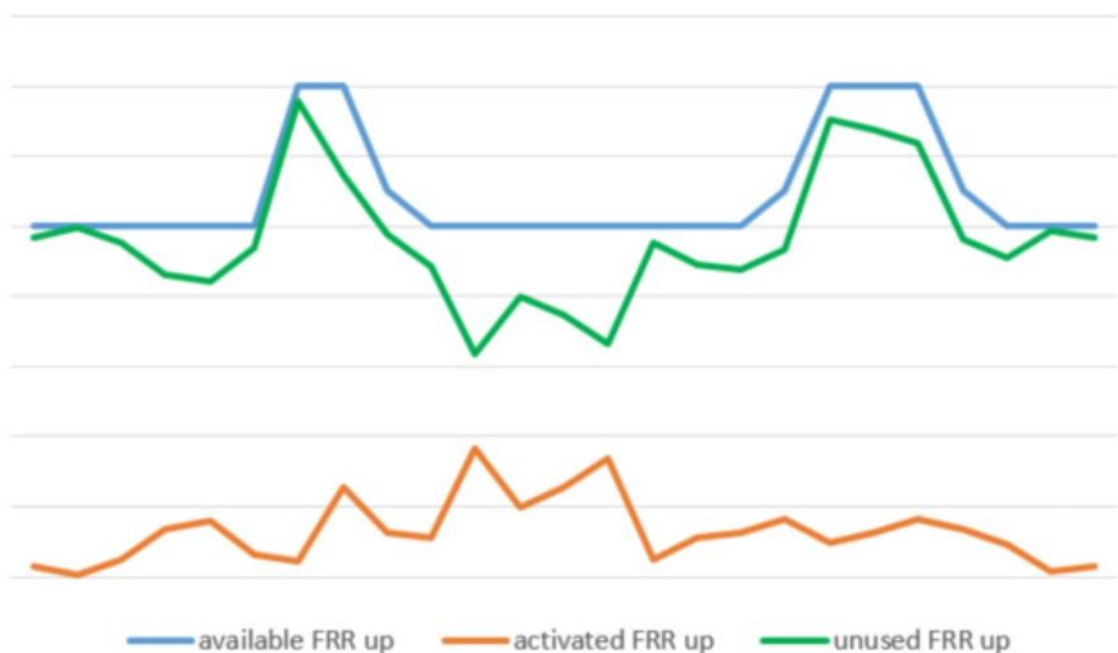
1.14 Please elaborate on your previous answer

As explained in the answer to question 1.13, the SOGL obliges TSOs to ensure the necessary volumes of FRR to deal with frequency variations at all times. The volumes of FRR resulting from the dimensioning rules of SOGL (which have to be adequately reflected in the ERAA over its time horizon) act as an insurance against an event that would have an extreme impact but whose timing cannot be predicted, only the probability of its occurrence.

In that sense, the reference to “normatively estimated” historical difference between available and activated FRR for other purposes ignores the objective of the FRR to act exactly against high-impact events of which the exact occurrence cannot be predicted. Historical perspective does not seem to be the proper reference for scarcity situations, as each case of system stress is different and therefore the operational security of the system requires that the whole volume of FRR and FCR imposed by the SO GL should be dedicated only to operational system balancing.

Such use would therefore not only violate the requirements of the SOGL, but also erode the ability of TSOs to safeguard grid integrity at moments where TSOs are already under tremendous pressures to continue to operate the grid safely.

It is also worth pointing out that unserved energy does not materialise as imbalance, as stated in the consultation. Imbalances can only be created by served loads that deviates from the injection of the Balance Responsible Parties. Unserved load – as part of a controlled brown-out – on the other hand would not result in physical imbalances that would have to be remedied by balancing capacity such as FRR.



1.15 Please elaborate on your previous answer, eventually with a proposal for the normative estimation of unused FRR.

As explained in the answer to question 1.14, we do not consider the use of FRR for adequacy purposes appropriate. It would violate the requirements of the SOGL and further endanger grid integrity at moments where it is already under tremendous pressures.

If it is the assessment of ACER that the dimensioning rules of the SOGL leaves FRR capacity structurally unused, this should be addressed directly through the SOGL. However, until such changes, the volumes of FRR that the SOGL requires to ensure grid integrity should not be (assumed) used for other purposes

1.16 What should be the price for unused FRR in ERAA?

In line with our answer to questions 1.14 and 1.15, (assumed unused) FRR volumes should not be deployed for adequacy purposes.

1.17 Do you have any views for the selection of a relevant and representative set of climate years as input for the Monte Carlo approach?

This discussion on a relevant and representative set of climate years should be principally done by experts in this field. It seems to go far beyond the scope of ACER, NRAs, ENTSO-E and TSOs.

However, there are additional considerations that should be included as part of a selection process to ensure the applicability to the ERAA process:

- The selection should be consistent at a European level, as otherwise there would be discrepancies between the outcomes of individual countries. This would undermine the added value of the ERAA, which is to provide a holistic, cross-border view on adequacy across Europe.
- Adequacy assessment exercises have to look at extreme events, not averages. Therefore, also the underlying climate variations – and thus set of climate years – that are included should be as broad/wide as possible. A limited set of climate years is therefore not advisable, as it risks the omission of more extreme weather events that do not occur every 1, 5 or even 10 years.
- In any case, a restriction of historical climate years considered in the ERAA exercise should not be motivated by a desire to affect the outcome of the analysis.

1.18 Do you have any other major observation on the ERAA Proposal? (if so, please indicate clearly the related Article, paragraph of the proposal, and add a sufficient explanation)

As a general comment, Eurelectric would like to point out that other essential aspects of the methodology should be revised in order to guarantee that the methodology is fit-for-purpose. As stated in our [answer to the ENTSO-E consultation](#), several parameters should be modified to ensure that generation assets included in the scenarios are economically viable to operate and that the economic viability assessment's results are not distorted (in particular, scenarios should not incorporate new assets based on their estimated economic viability, given the quasi-impossibility to properly model investment risk). Assumptions taken to build the central scenarios should also be revised or made clearer (e.g. it should be ensured that the modelled network and the calculated exchange capacities adequately reflect what can reasonably be expected over the ERAA horizon).

Such revisions are essential to ensure that the methodology is efficiently designed and fit for purpose.

Other specific remarks on the content of the methodology can also be made:

- Art1§4: It should be made clear that NRAA and regional exercises could consider different assumptions outside their countries of interest.
- Art2 §2c: It should be clarified that the model objective function could also include other costs beyond the total short-term system operating cost in some cases – i.e. economic assessments, where avoidable fixed costs should be considered to take into consideration the option for mothballing or decommissioning decisions.

- The proposal does not provide a specific rules for sensitivity scenarios. In our opinion the base case scenario should already reflect the currently applied legal regimes (such as EU ETS, EPS550 etc.) and sensitivity scenarios provided by the TSOs should reflect additional future burdens and difficulties for the service providers (generators, storage, DSRs), that may be possibly implemented in coming years.
- Art. 5.10: the imbalance costs are not mentioned in this article but they should be considered in the Economic Viability Assessment because they are relevant and expected to increase in coming years as the balancing effort will grow due to non-programmable RES widespread.
- Art.6.3 b): the only assets that should be excluded by the viability check are the ones subsidised for all the time horizon of the EERA or at least to an extent sufficient to cover their fixed costs
- The Economic viability check should be done using forward market prices. These markets usually give visibility to market participants for a 3-4 years time horizon. Being the assessment done by ENTSO-E on a 10 years time period, this lack of visibility on market prices should be considered in the simulation, together with the consequent increase of risk perceived by investors relying only on revenues from energy markets.
- The effects of limited wholesale prices on implicit DSR (meant as pure spot-price responsiveness without CRM) could be reflected on the CRM parameters (e.g. adequacy demand by the TSO), whilst it is not expected to have a significant impact on the necessity of the CRM itself. In fact, scarcity prices, as widely recognised, do not solve the missing money issue (i.e. the inherent uncertainty in predicting scarcity events and related difficulty in budgeting new peak investment on the mere basis of scarcity rent expectations). Summarising, these reforms do not affect the need of CRM but only the quantification of some relevant parameters of the CRM design (i.e. demand for capacity and VOLL level).
- We also note that the effect of measures such as bidding zone reconfiguration are i) difficult to predict (regulatory risk), ii) likely to challenge fundamentally the outcomes of the ERAA in specific regions due to their impact on cross-zonal capacities (in particular if the 70% rule is to be applied for capacity calculation). It is therefore key that the methodology to be defined by ACER addresses the consideration of this type of measures in the ERAA

2. On VoLL/CoNE/RS Proposal

Pursuant to Article 23(6) of Regulation (EU) 2019/943, ENTSO-E shall submit (by 5 January 2020) to

ACER a “[...] *draft methodology for calculating:*

1. *the value of lost load;*
2. *the cost of new entry for generation, or demand response;*
3. *and the reliability standard referred to in Article 25.”*

ENTSO-E submitted the draft methodology on 4 May 2020.

Pursuant to Article 25(1) of Regulation (EU) 2019/943, “When applying capacity mechanisms Member States shall have a reliability standard in place. A reliability standard shall indicate the necessary level of security of supply of the Member State in a transparent manner [...]”. According to paragraph 2 of the same Article “The reliability standard shall be based on the methodology set out in Article 23(6).” while in paragraph 3 it is stated that “The reliability standard shall be calculated using at least the value of lost load and the cost of new entry over a given timeframe and shall be expressed as ‘expected energy not served’ and ‘loss of load expectation’.”

Pursuant to Article 11(1) of Regulation (EU) 2019/943, “By 5 July 2020 where required for the purpose of setting a reliability standard in accordance with Article 25 regulatory authorities or, where a Member State has designated another competent authority for that purpose, such designated competent authorities shall determine a single estimate of the value of lost load for their territory. That estimate shall be made publically available. Regulatory authorities or other designated competent authorities may determine different estimates per bidding zone if they have more than one bidding zone in their territory. Where a bidding zone consists of territories of more than one Member State, the concerned regulatory authorities or other designated competent authorities shall determine a single estimate of the value of lost load for that bidding zone. In determining the single estimate of the value of lost load, regulatory authorities or other designated competent authorities shall apply the methodology referred to in Article 23(6).”

Pursuant to Article 11(1) of Regulation (EU) 2019/943, “Regulatory authorities and designated competent authorities shall update their estimate of the value of lost load at least every five years, or earlier where they observe a significant change.”

ACER seeks the opinion of stakeholders with respect to the following topics.

2.1 In the CoNE Proposal, an initial list of technologies is set up; only technologies which fulfil criteria to become candidate Reference Technologies are then thoroughly studied. Do you agree with the way some technologies (e.g. Demand Side Response (DSR), RES, storage, etc.) are considered in the methodology for calculating the CoNE (Title 3 of VoLL/CoNE/RS Proposal)?

- ☒ Yes
☐ No

2.2 Please elaborate on your previous answer

We deem sufficient a selection approach based on economic efficiency as the one mentioned in art. 16. Even if DSR and storage contribute to achieve adequacy target by participating in CRM, the use of these technologies as reference technologies for the calculation of CoNE should be carefully assessed,

In particular, when assessing the DSR as possible new entrant, we highlight the need to duly evaluate all the peculiarities of this technology (availability during stress event, contribution to the system adequacy, the potential for developing new capacity in each Member States, etc.), which must be carefully reflected in the de-rating coefficient. Moreover, DSR may not be sufficiently standardised and replicable as requested in Art 3 b) of the proposal.

Finally, it should be considered that both DSR and storage need generation capacity available to effectively contribute to security of supply.

Finally, differences between countries may emerge because of the different availability of policy asset (subsidised with schemes other than CRM) and grid constraints. The same given technology could provide different adequacy contribution as a result of the mentioned factors.

2.3 How would you suggest that these technologies should be considered?

2.4 Do you agree with the provisions of Article 15 of the VoLL/CoNE/RS Proposal according to which a Member State can rely on their own relevant, recent and representative WACC estimates, or should there be a binding common methodology to calculate the WACC for all Member States?

- ☒ Yes
☐ No

2.5 Please elaborate on your previous answer

Given the different market realities in the different Member States, the main objective should be to use the same methodology to obtain WACC estimates, but not necessarily to obtain the same WACC estimate values.

It can however be relevant to perform a benchmarking on the outcomes of the methodologies to ensure that different estimates are indeed reflective of different underlying realities and their divergences can be justified.

In practice, WACC calculation should also account for: (a) risks inherent for assets' main sources of net cash flow, e.g. generation asset based on FiT/FiP/CfD for renewables or capacity remunerations are much more predictable (less risky to the investor) than a merchant power plant; (b) technology specific risks stemming from both national and European regulatory framework.

2.6 Do you think that the main technical parameters used to calculate CoNE should be harmonised across MSs?

- ☒ Yes
☐ No

2.7 Please elaborate on your previous answer

There are no reasons to assume that the list of technical parameters to calculate the CoNE would be different across Member States. However, the value of these parameters could vary between Member States, as there can be different conditions regionally.

2.8 What are the main technical parameters used to calculate CoNE that could be different?

As explained in our answer to question 2.7, this could apply to any technical or non-technical parameter where conditions can vary regionally (e.g. net power output, net efficiency, local labor costs, tax rates, depreciation rules, etc.)

2.9 Do you think that renewal or prolongation of existing resource capacity should be considered as a candidate technology that can address the required capacity needs and thus be taken into account in the calculation of the reliability standard (Annex 2(iii) of VoLL/CoNE/RS Proposal)?

- ☐ Yes
☒ No

2.10 Please elaborate on your previous answer

The CoNE provides a back-stop on the calculation of the Reliability Standard in the form of new capacity entering the market to ensure adequacy. This back-stop cannot be performed by existing capacity, as it is limited in volume compared to new capacity. Therefore, the candidate technologies for CoNE should be limited to the New Entry that its name implies.

2.11 Do you agree with the provisions Annex 3 of the VoLL/CoNE/RS Proposal that a range of values of VoLL and CoNE should be used to define the reliability standard?

- ☒ Yes
☐ No

2.12 Please elaborate on your previous answer

The VoLL and CoNE calculations are based on numerous assumptions that can contain significant (uncertainty) ranges. Furthermore, Security of Supply remains a core Member State competence. As a result and given the possible ranges on the underlying assumptions, it seems only logical that the VoLL and CoNE should also be communicated in ranges, which will also

result in a range of reliability standards, leaving the ultimate translation of these values a political question for each individual Member State.

2.13 How should the methodology define the approach for extracting a single value from each range when defining the reliability standard?

This choice for a single value is a political choice that falls within the competences of Member States. It is of course important that the ranges are aligned and based on the same, underlying methodologies. But within these constraints and to the degree of uncertainty on underlying assumptions, the extraction of the single value should remain a decision taken by the government of each Member State.

2.14 Do you have any other major observation on the VoLL/CoNE/RS Proposal? (if so, please indicate clearly the related Article, paragraph of the proposal, and add a sufficient explanation)

We would like to point out the proposed manner for calculating LOLE target ($LOLE_{\text{target}} = \text{CoNE/VoLL}$), is in our opinion not sufficient for seeing the very specific codependences we are seeking to capture in resource adequacy study, namely:

- a. This approach does not capture the actual economic effect resulting from market failure in the event of blackout as it allows for scenarios where reserves are close to zero.
- b. The proposed approach does not capture the effect of increased risk of network-related overloads, due to stresses caused by local capacity imbalances in the system.

The proposed approach seems to be poorly suited for the more interconnected and digitalised economies of the future. When facing a brownout (or a blackout) there are collateral effects, i.e. consequences felt and seen not only for a limited time duration of the event, but also for many hours later as the wide range of interconnected vessels of the economy are affected.

Furthermore, CRM reliability standard estimated with these methodologies should be coherent with the parameters utilised in the national network development plans since grid and generation contributes to adequacy.

3. On both Proposals

In order to ease the burden for the stakeholder, this section collects a set of questions pertaining to both Proposals.

3.1 Do you see an interplay between economic viability checks performed in ERAA and reliability standard calculation?

- ☒ Yes
☐ No

3.2 Please elaborate on your previous answer

The question is not fully clear.

There is indeed an interplay between both concepts, because both the calculation of the reliability standard and the addition/withdrawal of assets in the scenarios are based on an economic optimality research. In the absence of market failures, this can result in a circular assessment, the reliability standard being automatically fulfilled if the generation mix is adapted based on the estimated economic viability of the assets. In reality, market failures exist, and it is extremely difficult to properly model the dynamics of investment decisions, especially as regards investment risk; therefore, no new asset should be added in the scenarios based on an economic viability assessment: the ERAA should only, based on the existing generation fleet and the identified decommissioning/mothballing needs (which are much easier to assess), identify the capacity gap in each country to ensure the fulfillment of the reliability standards. This analysis being done, it's up to each country to define the appropriate means to bridge this gap.

3.3 How should this interplay affect CoNE, VoLL and maximum clearing price, in order to ensure a realistic and consistent modelling framework?

If the interplay refers to the mechanism as interpreted in our answer to the previous question, its inclusion in the modeling framework of ERAA is of limited added value. It should be avoided that the ERAA modeling enters in a circular calculation, with the number of scarcity hours that is an output of the process reinserted as an input and adjusted to ensure sufficient revenues for assets to remain economically viable. This would make the outcome of the ERAA of limited, practical value

3.4 Do you think that the proposed involvement of stakeholders in both Proposal is sufficient to guarantee robustness and transparency on scenario assumptions, input datasets, modelling approaches (e.g. with respect to the links with national energy policy targets and plans, DSR modelling), etc.?

☐ Yes

☒ No

3.5 Please elaborate on your previous answer

Full transparency should be provided on both the input data used to build the scenarios and on the ERAA model itself. This requirement could be adequately fulfilled through an open source approach (which is not contradictory with the protection of commercially sensitive information if need be).

3.6 how should stakeholders be involved to guarantee robustness and transparency on scenario assumptions, input, datasets, modelling approaches, (e.g. with respect to the links with national energy policy targets and plans, DSR modelling), etc.?

The national input to ERAA data and the overall ERAA process should be based on regular national stakeholder interaction and workshops. It would allow TSOs to use the best stakeholder knowledge and ensure stakeholder support of the ERAA work. As a consequence, the methodology should foresee that the ERAA preliminary results are presented to stakeholders

mandatorily (and not “preferably”) before the publication of the ERAA report. Otherwise, their feedback would have little chance to be taken into account in the report.

3.7 How should stakeholders be involved to support the implementation of the methodologies described in the Proposals?

To further improve the stakeholders’ trust in the European resource adequacy assessment, Eurelectric urges to ensure that ERAA preliminary results are presented and discussed before the publication of the report. Furthermore, the national input to ERAA data done by TSOs should be based on regular national stakeholder interaction and workshops.

3.8 How would you increase stakeholder interaction with the aim to improve the methodologies towards possible future updates?

To further improve the stakeholders’ trust in the European resource adequacy assessment performed, Eurelectric urges to ensure that ERAA preliminary results are presented and discussed before the publication of the report. Furthermore, the national input to ERAA data done by TSOs should be based on regular national stakeholder interaction and workshops.

Conclusion

4. Please provide any further comment

Eurelectric pursues in all its activities the application of the following sustainable development values:

Economic Development

- Growth, added-value, efficiency

Environmental Leadership

- Commitment, innovation, pro-activeness

Social Responsibility

- Transparency, ethics, accountability



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