ClientEarth

16 November 2020

Belgian capacity mechanism

ClientEarth's observations on Commission opening decision of 21.09.2020 (SA.54915)

- Belgium shall **update its national resource adequacy assessment** in light of the recently published **ACER's methodology on the European resource adequacy assessment**, or the scheme and authorisation thereof would breach EU Electricity Market Regulation requirements. Belgium cannot organise the first auctions in 2021 on the basis of an outdated and non-compliant national resource adequacy assessment. In principle, the CRM should not even be implemented pending the release of the European resource adequacy assessment. Likewise, the national reliability standard shall also be revised using **ACER's methodology on the reliability standard**.

- The national resource adequacy assessment shall also be **revised in accordance with the Commission's recommendations** on Belgium's implementation plan and with **realistic demand and supply forecast**. This requires adjusting a number of parameters, like limiting the climate database to 30 historical years or using expected market revenues (instead of median revenues). These adjustments can easily be implemented and would lead to a re-evaluation of an adequacy problem much lower or potentially non-existent compared to what the Belgian authorities currently project, with average LoLE even falling below 3 hours for 2025 and 2028.

- The large share left for gas capacity in the CRM **is not compatible with the objectives to decarbonise the Union and phase out fossil fuel subsidies** of the European Green Deal, the State aid guidelines on State aid for environmental protection and energy and Belgium's federal government's support for climate neutrality by 2050.

- In conclusion, **the Commission cannot authorise the CRM** as notified based on the EU Electricity Market Regulation and the State aid guidelines for environmental protection and energy.

Introduction

1. ClientEarth is a non-profit European environmental law organisation with offices in Brussels, London, Madrid, Berlin, Warsaw and Luxembourg (as well as Beijing and Los Angeles). In total, ClientEarth currently has over 200 staff working on projects in more than 50 countries. Using the power of the law, we develop legal strategies and tools to address major environmental issues and use the courts where necessary to enforce environmental law.

   ClientEarth welcomes the opening of a formal investigation on the Belgian capacity remuneration mechanism (CRM) as we had recommended in our observations of 11 March 2020.[1]

2. Since our previous observations, the following points have been clarified by the Belgian authorities:

   - **The financing of the scheme**: the Belgian Parliament voted in July 2020 that the scheme would be financed by a parafiscal levy charged on all consumers bills, collected by energy providers and ultimately paid to the TSO Elia to compensate its public service obligation of managing the CRM. It confirms that the financing of the scheme is imputable to the State. We also welcome the efforts of the Belgian authorities to limit the impact of the levy on small consumers including households' bills.[2] It is however unsure if tariffs will be unequal between consumers since they seem to depend on the roll-out of smart meters, which will greatly vary between the three regions.[3]

   - **The auctions would run according to a pay-as-bid rule**. Since this system generally ensure that capacity contracts are awarded at the lowest price, it seems in line with the EEAG and previous Commission's decisions. Changing to a pay-as-cleared system after the first delivery period (2025 and 2026) is not excluded though; Belgium should notify such potential change to the Commission in due time.

3. However, **doubts as to the compatibility of the CRM with the internal market remain and new ones** are even created by recent announcements of the Belgian authorities that are not or not sufficiently addressed in the opening decision. The following observations are complementary to our observations of 11 March 2020 and therefore do not always repeat past comments.

[1] Commission Registration: 2020/030156. Available at: https://www.documents.clientearth.org/library/download-info/clientearths-observations-on-the-planned-belgian-capacity-mechanism/

[2] ClientEarth notes that the Belgian authorities have not notified any exemption from the future levy for certain consumers (the electro-intensive ones), although a possible "degressivity" was largely debated. The compatibility with the internal market of such degressivity/reduction scheme, if ever proposed by the Belgian authority, would raise doubts since it is not expressly mentioned in the EEAG and could go against the purpose of, and increase the cost of, the CRM. See Commission's opening decision of 15 April 2019 on the Polish scheme (SA.51502). In any case, it would need to be notified to the Commission.

[3] Commission opening decision, para. 176

1 Summary of breaches of EU law and State aid rules

4. As detailed throughout our observations, the notified CRM appears to breach at least the following provisions of the EU Electricity Market Regulation (EMR), several of which are formal requirements:

   - **Articles 20(3)(c) and 23(5)(e):** whereas there is no price cap on the Belgian electricity market and a scarcity pricing function is expected in Belgium in 2022, the national resource adequacy assessment does not take these parameters into account in its scenarii

   - **Article 21(4)**: a CRM can be introduced only when both the European and the national resource adequacy assessments identify adequacy concerns. But the ERAA is still not available

   - **Article 21(7)**: there is no provision for the phase-out of the CRM in the legislative/regulatory acts

   - **Article 24(1)**:
     - the NRAA must be based on the ERAA's methodology, which is not the case
     - the assessment of foreign adequacy in the Belgian NRAA is inconsistent with the own projections of the member states concerned, France and Germany

   - **Article 25(4)**: the amount of capacity procured in the capacity mechanism shall be approved on the basis of a proposal of the regulatory authority and not by the State, as it was the case

5. As for the Guidelines on State aid for environmental protection and energy (EEAG):

   - **Paragraph 220:** the CRM is designed to leave an unnecessarily large share to gas capacity

   - **Paragraphs 222-223**: taking into account market developments and reforms as well as all parameters prescribed by the new methodology on the European resource adequacy assessment, the Belgian resource adequacy assessment should not identify adequacy issues that justify the introduction of a market-wide CRM from 2025

2 Compatibility of the national resource adequacy assessment with the EU Electricity Market Regulation

2.1 Need to wait for the European resource adequacy assessment

6. Article 21(4) Electricity Market Regulation (EMR) clearly provides that "*Member States **shall not introduce** capacity mechanisms where **both** the European resource adequacy assessment and the national resource adequacy assessment, or in the absence of a national resource adequacy assessment, the European resource adequacy assessment have not identified a resource adequacy concern*." Even though the methodology for the European resource adequacy assessment (ERAA)

has been published on 2 October 2020 by ACER (the Methodology)[4], the ERAA itself is not adopted yet.

Authorising the Belgian CRM whereas the ERAA is not adopted would be a formal breach of the EMR. It would moreover create serious legal uncertainty for eligible capacity providers if the ERAA would not conclude to an adequacy concern and if, as a result, the CRM would had to be amended or cancelled.[5]

2.2 Need to revise the NRAA in light of ACER's methodology

7. In any case, it is an obligation under Article 24(1) EMR that national resource adequacy assessments (NRAAs) are carried out pursuant to the Methodology. Consequently:

    - **Belgium must revise its NRAA** of June 2019 in line with the Methodology, re-notify it to the Commission and draw the consequences of a new reliability standard for the design of the CRM and of the auctions - including the first T-4 auctions for 2021. A CRM based on a non-updated NRAA would breach the EMR[6];

    - A Commission's decision adopted on the basis of the NRAA of June 2019 would not comply with the EMR, for authorising a scheme based on a NRAA that is not compliant with the EMR;

8. Surprisingly, the Commission seems to implicitly accept, in the opening decision, Belgium's commitment to update the NRAA's reliability standard before the first auctions ***only if*** the methodology were released by 15 September 2020.[7] This date is arbitrary and such (unilateral) flexibility is not permitted by the EMR - even existing CRMs need to be revised according to the Methodology.[8]

9. In practice, while Belgium says it is following the proposal of Entso-E to calculate the reliability standard, using LoLE = CoNE / VoLL, the national regulatory authority CREG disputes the calculation of the VoLL, which is used in the calculation of the LoLE-threshold. In its proposal 2064[9], the Belgian regulator seems to agree with the value of the CoNE, but explains that the current calculation of the VoLL by the Belgian Planning Bureau is incorrect[10] and the result should be much lower, leading to a reliability standard of 6 hours or higher. The determination of the VoLL according to the new ACER methodology is foreseen 3 months after the ACER decision on the methodology, which was on 2 October 2019. This means the deadline for the calculation of the VoLL is 2 January 2021. That **leaves**

[4] ACER decision n° 23/2020 of 2 October 2020 on the methodology for calculating the value of lost load, the cost of new entry, and the reliability standard and its Annex I "Methodology for the European resource adequacy assessment"
[5] Electricity Market Regulation, Article 23(4) requires that the NRAA be amended as per ACER's opinion in case of divergence between the ERAA and the NRAA.
[6] It is not sufficient in this respect that the methodology and data are aligned on ENTSO-E's MAF 2019 as claimed by the Belgian authorities (opening decision, para. 22) since that is not the methodology of reference in Articles 23 and 24 EMR.
[7] Opening decision, para. 10
[8] Electricity Market Regulation, Article 22(5). Belgium thus committed in its implementation plan to review the design of its strategic reserve (see Commission opinion of 30.4.2020 pursuant to Article 20(5) of Regulation (EC) No 2019/943 on the implementation plan of Belgium, C(2020) 2654 final, p. 3)
[9] See CREG proposal 2064, pages 33-35:
https://www.creg.be/sites/default/files/assets/Publications/Propositions/E2064FR.pdf
[10] See CREG proposal 2064, footnote 21

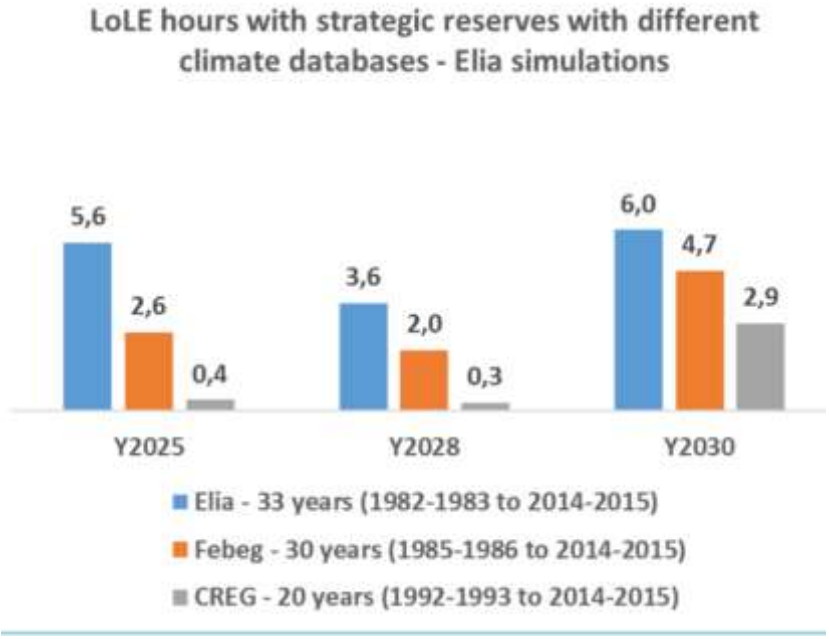
sufficient time for Belgium to update its reliability standard by 31 March 2021, the date on which the Minister has to give the instruction to organise first auctions, if a CRM were approved.

2.3 Parameters to be revised in the NRAA

10. The following elements should in particular be revised in the NRAA in light of the Methodology[11]:

"Expected frequency and magnitude of climate conditions"

11. The Methodology (art. 4(1)(f)) requires to *"rely **at most** on the 30 most recent historical climatic years*" – and not 35 years as the Belgian NRAA proposes. This update should be relatively easy to do since the CREG[12] has already calculated the results of the Belgian NRAA-study with only 30 historical climate years. The result is shown in the figure below. With a climate database of 30 years and strategic reserves[13], the average LoLE falls below 3 hours in 2025 and 2028, so **no adequacy concern is shown**. Consequently, no market-wide capacity mechanism should be introduced.



12. Experts from KULeuven-VUB also published an analysis on the fewer severe cold spells in Belgium due to climate change and the impact of this on security of supply. They have found that there is a clear correlation between simulated persistent LoLEs and days of extreme cold, but that, since 1980, the probability of observing such extremely cold days decreases in Belgium (and in neighbouring countries). Based on this analysis, they recommend including in the estimates of sufficiency of supply

[11] This list is not exhaustive and Elia should conduct a full review of ACER's methodology to put its NRAA in line with every and all elements in the methodology.
[12] See CREG proposition 2064, page 24
[13] According to article 21(3) EMR, a Member State should first assess whether an adequacy concern can be solved with strategic reserves.

in electricity the historical and future consequences of climate change by carrying out studies of sensitivity. [14]

13. In its intervention before a parliamentarian commission, Elia agreed that adequacy issues may be reduced if extreme cold winters do not arise. It nevertheless considered that extreme cold winters, even if increasingly less probable, cannot be excluded and that the CRM must prevent any scarcity situation.[15] We disagree: **the purpose of a market-wide CRM is not to address events of extremely low probability** and the Commission rightly indicated in the opening decision that a HiLo scenario is not adequate. Moreover, the strategic reserve which aims at addressing extremely cold winters has never been activated and there is no reason to believe it would need to in future given the climate change analysis presented above; in any case, such strategic reserve is a more adequate and less distortive of competition instrument to address extreme events than a CRM.

Calculation on average revenues

14. In its opening decision, the Commission refers to the disagreement of the CREG with Elia for using median market revenues to assess whether existing capacity will stay in the market or not and whether new capacity will come to the market or not. The CREG explained extensively in its study of Elia's RAA why using median revenues dramatically underestimates the real market revenues and that Elia should use expected market prices.[16] To our knowledge, no other TSO besides Elia has used median prices to evaluate the viability of capacity. Moreover, the Methodology has decided on the use of expected market prices.

    Using expected prices instead of median prices will have a significant impact, certainly in combination with the fact that there are no price caps (see below). Besides, it could easily be implemented since Elia already calculated the percentiles of all revenues. Using the expected market revenues implies using an average of the percentiles, instead of taking the median, while running the simulations again.

No price caps in Belgium

15. At paragraphs 26-27 of the opening decision, the Commission held that there are market failures preventing efficient price signals on the Belgian electricity market, from which the Belgian authorities deduct there is a chronic shortage of revenues for plant operators and demand response operators.

16. This is a surprising view since in its Implementation Plan[17] Belgium has not identified such a market failure. On the contrary, in section 4.1.1 of its Implementation Plan, Belgium states the following: "*The day-ahead and intraday electricity prices on the wholesale markets are only limited by the harmonized technical price limits, applied by the NEMOs*", with a further reference to the decision No 04/2017 of ACER of 14 November 2017 that states that the harmonised maximum clearing price shall be increased by 1,000 EUR/MWh in the event that the clearing price exceeds a value of 60 percent of the

[14] Yao, Y., Thiery, W., & Sterl, S. H. (2020). Winter is leaving: Reduced occurrence of extremely cold days in Belgium and implications for power system planning. Vrije Universiteit Brussel: https://cris.vub.be/files/51473222/CREG_Report_FINAL.pdf

[15] Chambre des représentants de Belgique/Belgische kamer van volksvertegenwoordigers, Doc 55 0688/ (2019/2020): Rapport/Verslag « Échange de vues sur la mise en œuvre du mécanisme de rémunération de capacité pour le marché de l'électricité: état des lieux » / « Gedachtewisseling de uitvoering van het capaciteitsvergoedings - mechanisme voor de elektriciteitsmarkt: stand van zaken », p. 24

[16] CREG, Analysis by the CREG of the Elia study 'Adequacy and flexibility study for Belgium 2020 – 2030, (F)1957, pp. 19 *et seq*. at: https://www.creg.be/sites/default/files/assets/Publications/Studies/F1957EN.pdf

[17] See https://ec.europa.eu/energy/sites/ener/files/belgian-electricity-market-implementation-plan.pdf

harmonised maximum clearing price in at least one market time unit in a day in an individual bidding zone or in multiple bidding zones. This is in line with **Article 10 EMR stating there can be no price cap**, only technical limits that should be increased if these technical limits risk being hit. Moreover, as welcomed by the Commission itself in its opinion about Belgium's implementation plan, there is **no price cap in Belgium**[18]: "*The Commission welcomes that there are no price caps for day-ahead and intraday markets in Belgium other than the harmonised maximum and minimum clearing prices for single day ahead and intraday coupling* (…)". Capacity mechanisms are actually seen in Article 10(4) EMR as one measure that can "*contribute to indirectly restricting wholesale price formation*".

17. The lack of a price cap is a fundamental element to be taken into account in the decision whether or not to introduce a CRM. As the CREG shows in its reaction[19] to the Implementation Plan, there can be no adequacy concern if market prices can reach higher levels than the level of the VoLL that is being used to calculate the reliability standard. That market prices can reach these levels is a direct consequence of the compliance with Article 10 EMR. In combination with the absence of price cap in Belgium, **no adequacy concern** can be identified on that basis.

    Given this is a fundamental issue regarding market functioning, if the Commission should **justify in the final decision** how it thinks there can be an adequacy concern when there are no price caps on the wholesale market. This should also be assessed in view of the Commission's opinion on the Implementation Plan, together with Articles 20(3) and 23(5)(e) EMR.

Taking into account a scarcity (or shortage) pricing function

18. The Commission nevertheless recommends the introduction of a scarcity pricing function, for the reasons mentioned in recital (22) EMR: "*Effective scarcity pricing will encourage market participants to react to market signals and **to be available when the market most needs them** and ensures that they recover their costs in the wholesale market. (…)The Commission, however, invites Belgium to consider whether the scarcity pricing function should apply not only to BRPs but also to balancing service providers (BSPs). **This may support security of supply** by ensuring that BRPs and BSPs face the same price for the energy produced/consumed, as price differentiation may result in inefficient arbitrage from market players. (…)*."[20]

    The introduction of scarcity pricing is indeed an objective of the EMR that recognised that "*When fully embedded in the market structure, short-term markets and **scarcity pricing contribute to the removal of other market distortive measures, such as capacity mechanisms,** in order to ensure security of supply*."[21] The Methodology of 2 October 2020 prescribes that shortage pricing functions for balancing energy must be reflected in the ERAA and NRAAs.[22]

19. The Belgian regulatory authority CREG will adopt such function in 2022 – before the first capacity delivery year (2025).[23] It means that this potential market failure would be remedied before the CRM starts being activated in 2025. This current market failure is thus not sufficient nor a proper basis for

[18] See page 4 of the opinion: https://ec.europa.eu/energy/sites/ener/files/documents/adopted_opinion_be_en_0.pdf; See also EEAG, para. 217
[19] See paragraph 17 and further: https://www.creg.be/sites/default/files/assets/Publications/Notes/Z2050EN.pdf
[20] Commission opinion of 30.4.2020 pursuant to Article 20(5) of Regulation (EC) No 2019/943 on the implementation plan of Belgium, C(2020) 2654 final, p.4
[21] Electricity Market Regulation, recital (24)
[22] ACER decision n° 23/2020 of 2 October 2020, Annex I "Methodology for the European resource adequacy assessment", Article 4(9)
[23] See e.g. CREG's note Z(2050) of 16 January 2020, "Reaction to the consultation organised by DG Energy (European Commission) on Belgium's market reform plan", para. 39-49 (https://www.creg.be/sites/default/files/assets/Publications/Notes/Z2050EN.pdf)

justifying the necessity for a CRM. Moreover, Article 23(5)(e) states that the ERAA/NRAA should anticipate the likely impact of the measures referred to in Article 20(3). This article refers to the measures in the Implementation Plan, where scarcity pricing is part of. However, the Belgian NRAA has not anticipated on this measure, which is **a clear violation of the EMR**. Nevertheless, since Elia is actually working on the design of a scarcity pricing function and should release the study report by 23 December 2020[24], we do not see how it could not adapt its NRAA on that basis.

20. In its Implementation Plan, Belgium mentions the so-called alpha-component as some sort of scarcity pricing. In section 4.2.2, Belgium also refers to the revision of this alpha-component, with two modifications that are planned as from 1st January 2020. Neither the alpha-component, nor these modifications, are anticipated in the Belgian NRAA, violating Article 23(5)(e) EMR. The CREG assessed the impact of the alpha-component since 1st January 2020 at 3,9 €/MWh[25], which is high. This means that **anticipating the alpha-component could significantly change the outcome of the NRAA.**

2.4 Decreasing adequacy

21. In its proposal 2064, the CREG points out that the expected energy not served (EENS)[26] that is avoided by a CRM dramatically decreases over time in Elia's simulations, from 19,7GWh in 2025 to 3,6GWh (see figure below[27]). The EENS is the volume that is expected to be disconnected and is therefore a better measure of the adequacy problem. The evolution of the EENS shows that the adequacy concern is temporary.

22. In its decision on the UK market-wide CRM, the Commission stated the following: "(262) *As explained in the Final Report of the Sector Inquiry on Capacity Mechanisms, long-term intervention is not needed if adequacy assessments show and policy makers are convinced that, in the long run, the market can be reformed to ensure sufficient investment incentives and there is sufficient capacity available to ensure security of supply until then. However, there might be a need to ensure that existing capacity is not closing prematurely. In such circumstances, a strategic reserve is likely to be the most appropriate response because it can help to control the amount of existing capacity leaving the market.* ***Where long-term adequacy concerns are identified, the most appropriate capacity mechanism to address the problem is likely to be a volume-based, market-wide scheme***."

23. The figure below shows the sharply decreasing adequacy with only 3,6GWh of EENS in 2030. Even with a VoLL of 10,000 EUR/MWh, this results in a cost to consumers from this EENS of only 36 MEUR, while cost projections for the Belgian market-wide CM range from 350 MEUR to almost 1,000 MEUR, or ten to 30 times higher. This shows that the proposed solution of a market-wide CRM is **disproportionate.**

24. The proposal by the CREG takes this into account. However, this proposal has been rejected by the Belgian state and replaced by its own proposal (see figure below).

[24] https://www.elia.be/nl/publieke-consultaties/20200930-public-consultation-on-elia-is-findings-regarding-the-design
[25] See question 10: https://www.creg.be/sites/default/files/assets/Publications/Notes/Z2111EN.pdf
[26] The expected energy not served is "the energy which is [expected] not supplied due to insufficient capacity resources to meet the demand" (ACER's ERAA methodology, Article 2(t))
[27] See page 36 of the CREG-proposal 2064: https://www.creg.be/sites/default/files/assets/Publications/Propositions/E2064FR.pdf

Source : Elia (sur base des simulations d'Elia)

2.5 Requirement that the NRAA take into account foreign capacity

25. In paragraphs 237-245 of the opening decision, the Commission expressed doubts as to the compliance of the scheme with Articles 24(1) and 22(1) EMR because the NRAA takes into account sensitivities about *foreign* (French and German) capacity and not only *national* capacity. The Commission's interpretation of these provisions appear erroneous and should be rectified in the final decision.

    Article 24(1) EMR clearly provides that NRAAs "*shall have **a regional scope***". It indicates the methodology to follow when the NRAA assesses "*the contribution of **capacity providers located in another Member State***" – which confirms this should be the case – and NRAAs "*may: (a) make assumptions taking into account the particularities of national electricity demand **and supply***".

    In respect of the latter phrase, the Commission omits at paragraphs 238-239 that supply is simply defined in the EU Electricity Directive as the sale of electricity to consumers, without discrimination as to its sources.[28] In fact, supply in a member state encompasses both national resources **and electricity produced in other countries** that are interconnected with it. The more a member state is interconnected with neighbouring countries (from the EU or not), the more electricity from foreign origin contributes to its supply and therefore, to its security of supply. Belgium is an example of a member state that is well-interconnected with its neighbours (21% in 2020[29], 33% expected by 2030[30]) and that imports and exports electricity across its borders.

[28] Directive 2019/944 on common rules for the internal market for electricity, OJ L 158, 14.6.2019, p. 125, Article 2(12)
[29] Commission opinion of 30.4.2020 pursuant to Article 20(5) of Regulation (EC) No 2019/943 on the implementation plan of Belgium, C(2020) 2654 final, p. 3
[30] Commission Staff Working Document, Assessment of the final national energy and climate plan of Belgium, 14 October 2020, SWD(2020) 900 final, p. 3

The Commission staff working document assessing Belgium's final national energy and climate plan (NECP) underlines **as a positive feature** that "*when considering risks [of security of supply], the plan does take into account the plans of other connected member states*."[31]

26. Belgium's NRAA of June 2019 is based on a Central Belgium Scenario that assesses Belgium's domestic capacity and on **complementary sensitivities about neighbouring capacity** in France and in Germany in particular. Without prejudice to our conclusions on the assessment of those sensitivities, that we believe are partly erroneous[32], the NRAA cannot be found in breach of Articles 22(1) and 24(1) EMR by reason that it takes into account foreign capacity.

27. However, **the assumptions made about foreign capacity are erroneous**. As the CREG points out[33], Belgium's import capacity will reach 7,500 MW within a few years. Belgium's NRAA shows that in 2025 it is expected that less than 2,500 MW on average will be imported, if Belgium were to have a problem with security of supply. Import capacity will therefore still be available, also during periods of scarcity. Consequently, Elia concludes that Belgium only has scarcity when at least one other country also has scarcity, mostly France and Germany. But France has a CRM, which should protect it from scarcity. This means that even if nuclear capacity would have a lower assessment by France itself, this will be automatically compensated by other capacities in France through the CRM mechanism. Therefore, the discussion on lower availability of French nuclear capacity or not has no significance for Belgium's NRAA.

    Regarding Germany, the German ministry published its own NRAA assessing the adequacy in Germany and surrounding countries[34]. This German study concludes there is no adequacy concern foreseen the coming decade, not in Germany nor in Belgium. This clearly contradicts Belgium's NRAA, not the least because there would still be capacity and network capacity available to export to Belgium.

    This German adequacy study can also be viewed as questioning the Belgian NRAA's assumption on demand response in Germany. While the German study shows there is 16 GW of technically available load reduction potentials of industry in Germany under 10.000 €/MWh (see page 29 of the German adequacy study), it is unclear how much demand response in Germany (and elsewhere) is assumed in Belgium's NRAA. There is no transparency on this data. Criticising the Elia's assumptions and lack of transparency on this topic, CREG[35] refers to what is being used in the MAF study from Entso-E where apparently only 1,4 GW demand response is assumed for Germany for 2025, being more than 10 times lower than the potential that is shown in the German adequacy study.

28. To conclude, as the Commission rightly points out, Belgium cannot take assumptions on the available capacity of France that are different from the ones adopted by the respective countries themselves. For this reason, **the Belgian NRAA breaches Article 24(1) EMR.**

[31] Commission Staff Working Document, Assessment of the final national energy and climate plan of Belgium, 14 October 2020, SWD(2020) 900 final, p.11
[32] In particular, as the Commission notes in the opening decision, the projections concerning unavailability of nuclear power in France in the HiLo scenario.
[33] See page 12: https://www.creg.be/sites/default/files/assets/Publications/Studies/F1957EN.pdf
[34] See page 173: https://www.bmwi.de/Redaktion/EN/Publikationen/Studien/definition-and-monitoring-of-security-of-supply-on-the-european-electricity-markets-from-2017-to-2019.pdf?__blob=publicationFile&v=9
[35] See page 30: https://www.creg.be/sites/default/files/assets/Publications/Studies/F1957EN.pdf

3 On the absence of necessity for a CRM as recommended in the NRAA

29. ClientEarth welcomes the expression of doubts in the opening decision about the volume of capacity, 3.9GW, that Elia considers is needed to ensure security of supply in the country in 2025. As we had raised in our previous observations and as the Commission points out, this capacity gap between demand and supply for 2025-2030 appears **largely overstated**. Moreover, assessing resource adequacy issues based on a low probability scenario is not adequate.

3.1 Market reforms and update of the NRAA

30. A further implementation of market reforms and clarification on Belgium's plans for its energy mix and flexibility of its market are still missing and should be implemented before a CRM is even considered. The Commission's assessment of Belgium's final NECP clearly states that "*the final plan lacks specific policy objectives and measures related to the internal energy market (in particular related to the non-discriminatory participation of renewable energy, demand-response, storage, aggregation, real-time price signals, smart grids, consumer protection and competition of the retail energy market)*", that all are resources contributing to security of supply[36] and which should be increased or developed in priority before a CRM, a last resort measure, can be put in place.

31. An update of the NRAA in light of ACER's methodology, by revising all relevant parameters and in particular, the ones underlined above, should result in the absence of adequacy concern.

32. The following market failures identified by the Belgian authorities should and can also be addressed before 2025 – thus seriously diminishing the need for a CRM:

- **Efficient price signals**: as mentioned above, the scarcity pricing function expected for 2022 should contribute to increase price signals and unlock demand response capacity;
- **Low demand response**: demand response levels in Belgium are actually not as low as the Belgian authorities suggest. The fact that the strategic reserve was never activated is a result of the high level of demand response during the relevant periods.[37] Moreover, rolling-out smart meters at a faster pace and systematically across the whole country (not only in very limited circumstances without any target) would help "increase price-based demand response", "reduce peak loads" and "serve the interests of the energy system as a whole" – all these considerations are from the Commission itself.[38] In Belgium, a lack of adequacy would only occur in 2025, so the impact of a faster roll out of smart meters needs to be anticipated – and in fact, it has been sped up (compared to what is stated in the Commission's opening decision) and should be finalised in Flanders in 2025. This is different for the situation of the UK where the Commission acknowledges that large parts of consumers cannot react on price signals and thus a state intervention can be justified[39]. This will not be the case in Belgium in 2025, so this

[36] Commission Staff Working Document, Assessment of the final national energy and climate plan of Belgium, 14 October 2020, SWD(2020) 900 final, p.12 and 20
[37] See ClientEarth's previous observations of 11 March 2020, para. 33
[38] Commission opinion of 30.4.2020 pursuant to Article 20(5) of Regulation (EC) No 2019/943 on the implementation plan of Belgium, C(2020) 2654 final, p. 5
[39] See recital (254) of the Commission's decision SA.35980 - 2019/C: https://ec.europa.eu/competition/state_aid/cases1/201945/278880_2105752_352_2.pdf

argument does not hold for Belgium. Moreover, a market-wide CRM will dampen the scarcity price signals that incentivise the development of (distributed) demand response and will impede a fast development of demand response.

- **Risk aversion of investors**: the alleged regulatory uncertainties are only due to the Belgian authorities; they therefore cannot avail themselves of market failures they are creating. One recent example is the contradictory signals given in the government's agreement of 30 September 2020 of a clear decision to phase out nuclear power by 2025 balanced by the suggestion that the schedule could be revised if the first CRM auctions in 2021 do not provide adequate capacity (see more on this below). The phase out of nuclear power is also not a "brutal shock"[40] for investors since it has been decided in 2003 Additionally, while it is true that an increased risk aversion increases the cost of new capacity (CoNE), an increase of CoNE, however, also leads to a less strict reliability standard, since the latter is calculated as LoLE = CoNE / VoLL, meaning that an increase of CoNE implies less capacity is needed to reach the reliability standard.

3.2 Clarification of the consequences of prolonging nuclear power on the CRM and capacity contracts

33. On 30 September 2020, just a few days after the Commission released its opening decision, the Belgian government released an agreement not closing the door to the prolongation of up to 2GW of nuclear power if the assessment report on the first capacity auctions reveals an "*unexpected problem of security of supply*". The calendar of nuclear plant closure could then be adapted and "*a possible negative impact of this adaptation for the projects selected under the CRM will be examined and, if necessary, compensated appropriately*."[41]

34. This raises several issue about the **need and design** of the CRM; **discrimination** of capacity providers and **potential State aid** to capacity providers whose contracts would be adjusted or cancelled:

    - The NRAA is based on the assumption that nuclear power will not be prolonged. If 2GW or nuclear power end up being prolonged because the first capacity auctions do not address the alleged security of supply issue, it would reveal that the auctions have not been properly designed;

    - The T-1 auctions to be organised in 2024 should, in principle, fill the gap of the first T-4 auctions. Precisely, 2 to 3GW of capacity would be reserved for these auctions.[42] The government agreement does not specify whether the T-1 auctions would be cancelled – which seems to be a possibility since nuclear power would then be considered to provide the required capacity (or part thereof) and thus annul the need for the CRM. However, if the CRM were to be implemented, the T-1 auctions would be crucial since they are the ones to which demand side response specifically is expected to bid in and balance the share of baseload generation

[40] Commission opening decision, para. 29
[41] Accord de gouvernement, 30 September 2020, p. 57, at : https://www.belgium.be/sites/default/files/Accord_de_gouvernement_2020.pdf
[42] Commission opening decision, para. 56-57

(including new gas capacity) in capacity contracts.[43] If the CRM were maintained, even for a lower volume, after the first auctions and an adjustment of nuclear plants closing schedule and if the T-1 auctions are cancelled, the CRM would need to be deeply revised so future auctions fully integrate T-1 capacity providers (that would otherwise be discriminated);

- **Compensations for capacity providers** that are negatively affected[44] by an adaptation (i.e. prolongation of nuclear power) are envisaged. Such compensations may constitute an advantage for their beneficiaries and thus **State aid**. As a reference, in its final decision on aid for the construction of Hinkley Point C nuclear power plant, the Commission considered that a clause in a contract between the State and the beneficiary providing for a compensation "*in case the HPC plant were to be shut down for reasons not directly imputable to its operations, and in particular due to changes in government policy*" constituted "*a special agreement safeguarding a certain company from such risk in a specific manner* [that] *appears to relieve such company of any spent fees and time lost in the enforcement of its rights deriving from general principles under UK and EU law in court or out of court.* ***Underpinning a legal right with a specific contractual right appears to bring an advantage to the entity enjoying such right*** *especially since it appears to be the only one in this situation*." (emphasis added) The Commission concluded that it entailed an advantage and thus State aid.[45]

35. The Belgian authorities should thus provide the Commission with the following information:

a) If adjusting the calendar for nuclear plants closure is able to substitute auctions for the CRM and may lead to reducing/cancelling capacity contracts, why do the Belgian authorities persist to present a NRAA that identifies an adequacy gap of 3.9GW?

b) If the nuclear power closure schedule is revised, will the Belgian authorities commit to submit an updated NRAA to the Commission, in accordance with Article 22(5) EMR?

c) why is there a risk that first T-4 auctions do not provide the adequate capacity (based on the volume to be reserved for these auctions)?

d) why wouldn't the **T-1 auctions fill the gap** potentially identified after the T-4 auctions, since that it is their purpose?[46]

e) If the T-1 auctions risk to be cancelled, **how technology-neutrality and preference to low-carbon resources will be guaranteed** since it is recognised that some providers in particular demand response operators may face difficulties (even though are not prohibited) to participate in the T-4 auctions? Also, the decision to revise the schedule of nuclear power closure and adapt the CRM would only be taken after the first T-4 auctions have taken place, so demand response operators and others would have missed their chance to bid.

[43] All capacity providers are allowed to bid in the T-4 auctions but the Belgian authorities recognise, as mentioned in the opening decision, that some operators like demand response operators would have more facility to participate in the T-1 auctions and this is also why a certain volume is reserved for the T-1 auctions.
[44] We assume this applies if the resource providers are required to provide less capacity and will correlatively receive less capacity remuneration.
[45] Commission decision of 8 October 2015 on SA.34947 on Support to the Hinkley Point C Nuclear Power Station, para. 322
[46] See Commission opening decision, para. 56 (a) in particular

f) why could the auction system not be adapted to face a gap in security of supply identified after the first T-4 auctions, rather than adapting the calendar of closure of nuclear power?

g) **what is "a negative impact"** on capacity providers selected in the first auctions: is it envisaged to cancel the full capacity agreements (or promise thereof) or only reduce them proportionally to what remains required after nuclear power is prolonged?

h) how compensations would be calculated to ensure they are proportionate to the damage? What precise formula would be used to ensure that there is **no overcompensation**?

i) will all providers selected in the first auctions be equally eligible to the compensations or will some selection, and thus **discrimination**, be made and on what criteria? If the compensations can be discriminatory, how do the Belgian authorities justify their compatibility with the internal market?

4 Support to new gas capacity in the CRM

36. As raised in our previous observations, the CRM anticipates the building of new fossil gas capacity in Belgium. Supporting new gas capacity in Belgium with the CRM is **not compatible** with the EU and Belgian objectives to phase out fossil fuel subsidies and breaches paragraph 220 EEAG. It is also **not necessary** to ensure security of supply in Belgium, due to other resources available and perspective of new gas capacity being built without capacity contracts.

4.1 Inconsistency with the European Green Deal, the State of the Energy Union report and Belgium's own objectives to phase out fossil fuel subsidies

37. In its final decision, the Commission should clarify how State aid in the form of capacity payments to fossil gas, in particular new gas capacity, complies with EU laws relating to the environment[47] that encompass legislation on climate.[48]

38. The European Green Deal and the State of the Energy Union report released on 14 October 2020 both prescribe the end of fossil fuel subsidies. Phasing these subsidies out means both putting an end to existing ones and **not allowing the grant of new ones**. As the Commission is seeking to ensure coherence between the Green Deal objectives and its state aid rules and decisional practice, it would be **incoherent** to allow a design of the CRM that is, under the veil of technology-neutrality, encouraging the construction of new gas capacity.

    The new federal Belgian government aims at reaching climate neutrality by 2050[49], which makes the choice of subsidising new gas capacity inconsistent with this policy given the high levels of greenhouse gases emitted by fossil gas. Furthermore, Belgian's final NECP indicates that Belgium will "*create an*

[47] Judgment of 22 September 2020, *Austria v. Commission*, C-594/18P, para. 44-45 and 100
[48] TFEU, Article 191(1). See notably the Paris Agreement the Union is a party to; the 2030 energy and climate targets ; the future European Climate Law. The fact that Article 22(4) EMR only prohibits capacity payments to coal units, by reason if the set emissions performance standard, is not an obstacle to finding support to gas capacity non-compliant with other legislation including environmental and climate law.
[49] Rapport des Formateurs P. Magnette et A. de Croo (FR), 30 September 2020, p. 59

action plan around 2021 for a gradual removal of fossil fuel subsidies", without proposing a target year though.[50] The high levels of greenhouse gases emitted by fossil gas and its support through capacity payments are incoherent with the perspective of a reasonably ambitious (and a Paris- and Green Deal-compliant) phase-out plan. The Belgian authorities should thus clarify how awarding capacity contracts to gas capacity providers is compatible with their own policies and commitment to reduce its greenhouse gas emissions and phase out fossil fuel subsidies, including in its NECP.

39. In light of the above, the Commission should control that the design of the CRM is consistent and able to achieve:

    - The EU Green Deal and the 2020 State of the Energy Union report objectives and trajectories;
    - The potential for alternative resources such as renewable energy sources, interconnectors, demand response and flexibility, which all are to be increased in the coming year and to a large extent before 2025 (the first delivery year under the CRM).

4.2 Incompatibility with paragraph 220 EEAG

40. At paragraph 192 of its opening decision, the Commission stated that "In order to be considered necessary and contributing to an objective of common interest, the measure should meet several conditions of sections 3.9.1 and 3.9.2 EEAG; (…) iv) the Member State must have considered alternative options to address the problem to avoid missing the objective of phasing out environmentally harmful subsidies".

    At paragraph 194, the Commission deducts from the market reforms the Belgian authorities committed to (strengthening the balancing market, facilitating demand side response and increasing interconnection capacity) that the criteria of paragraph 220 EEAG appeared to be met.

41. What is missing from the Commission's reasoning though is **an analysis of the design of the CRM** itself. As already raised in our previous observations, paragraph 220 EEAG does not only require that a Member State seeks ways to ensure resource adequacy by less environmentally and economically harmful means than a capacity mechanism; it also requires that when a resource adequacy scheme is found necessary, **it is designed in a manner that limits as much as possible subsidies to fossil fuels**.

    This interpretation is consistent with paragraph 233(e) EEAG prescribing that **preference should be given in the scheme to low-carbon technologies** in case of equivalent technical and economic

[50] Commission Staff Working Document, Assessment of the final national energy and climate plan of Belgium, 14 October 2020, SWD(2020) 900 final, p. 3

parameters. It is also is the approach adopted by the Commission in examining the British[51], Polish[52] and Italian[53] capacity mechanisms – regardless of the conclusions reached in those cases.

Interpreting paragraph 220 EEAG only in light of market reforms or support to low carbon technologies that are external to the design of a CRM, as the Commission does in paragraph 194 of the opening decision, can result in justifying a CRM that supports high-carbon technologies like fossil gas capacity in Belgium, under the auspices of market reforms made elsewhere – and be incoherent with the objective to phase out fossil fuel subsidies as said above.

5 Doubts as to other features of the CRM design

5.1 Eligible costs

42. The Royal decree of 12 December 2019 includes within eligible cost: "*For existing capacity, expenditure which has the effect of offering additional capacity is (i) expenditure made necessary to enable the capacity to comply with environmental standards and thus to maintain it on the market*".[54] Although this is not assessed by the Commission in the opening decision[55], we find this potentially incompatible with paragraphs 225, 227, 49 and 53 EEAG.

43. First, such feature seems to disguise an **aid to meet environmental standards**. A member state cannot grant aid for complying with EU environmental standards that are in force. Aid can only be granted for complying with national standards that are going beyond Union standards or for a significantly early implementation of EU environmental standards. CREG's proposal seems to imply

[51] Commission decision of 24 October 2019 on SA.35980, para. 249: "Furthermore the Commission notes that the generation adequacy assessment – conducted on an annual basis – takes into account the amount of generation, the contribution of interconnectors **while being open to all types of capacity providers, including DSR operators. As a result**, the Commission considers that the UK has sufficiently explored means of mitigating the negative impacts that the measure may have on the objective of phasing out environmentally harmful subsidies, in line with paragraph (220) of the EEAG." (emphasis added)

[52] Commission decision of 7 February 2018 on SA.46100, para. 139: "…aid for generation adequacy appears necessary, as shown in Section 3.3.2 below. The Commission notes that the Polish capacity mechanism is a technology neutral scheme open to all potential capacity providers and therefore may involve payments to all capacity providers, including conventional generation based on fossil fuels such as coal. Against this background, the Polish authorities have introduced a number of design features within the proposed mechanism to preserve the objective of phasing out environmentally harmful subsidies. The green bonus, in particular, will enable capacity emitting less than 450 kg CO2/MWh to have access to cheaper finance and bid lower prices in the capacity auctions. (…) Moreover, in case of a tie in a capacity auction, preference will also be given to lower emissions capacity. **These design features contribute to creating favourable conditions for lower emissions capacities** to penetrate the Polish market and progressively replace more polluting ones." (emphasis added)

[53] Commission decision of 14 June 2019 on SA.53821, para.104: "The notified amendments [the CO2 emissions limits required in the Electricity Market Regulation, mainly] will strengthen the common interest objective as defined in paragraph (220) of the EEAG, since they will prevent the granting of subsidies to the most environmentally harmful capacity."

[54] Commission opening decision, para. 103

[55] Commission opening decision, para. 208

that the eligible costs would be those of meeting applicable standards (and not implementing standards early).[56] Hence, it is doubtful whether the scheme complies with the internal market.

44. Second, adapting to standards (EU or national ones) is not inherent to the aid for capacity availability but a requirement for old power plants to operate. Such expenditure **only maintain existing capacity and do not provide *additional* capacity**. Given that the length of contracts depend on the CAPEX, the prolonged revenue stability should favour cost-intensive modernisation of existing power plants to provide the same capacity as before, rather than favour new power generation and technologies that would lead to a reduction of market price in both off-peak (more low cost capacity) and peak periods (more total capacity). Furthermore as already raised[57], capacity providers that do not have long-term perspectives of staying on the market absent capacity payments – because in that case, they could not afford meeting the ever-higher environmental standards – are clearly not an economically sustainable means to achieve resource adequacy for the long term. **It directly contradicts the primary objective of aid in the energy sector that is to ensure a competitive, sustainable and secure energy system in a well-functioning Union energy market.**

45. Third, opposite to the Commission's assessment in paragraph 204 of the opening decision, it is doubtful whether including such expenditure meet the requirement of paragraph 225 EEAG not to remunerate the beneficiary for the sale of its electricity: financing its adaptation to environmental standards keep the plant on the market and thus enables it to keep on marketing its electricity.[58]

5.2 Phase-out

46. Article 21(7) EMR states the following: "*When designing capacity mechanisms Member States shall include a provision allowing for an efficient administrative phase-out of the capacity mechanism where no new contracts are concluded under paragraph 6 during three consecutive years*."

    To our knowledge, there is currently no provision included in the current design of the Belgian capacity mechanism to allow for an efficient administrative phase-out. This is a clear violation of EMR.

5.3 Violation of proposal competence of the national regulatory authority

47. Article 25(4) EMR states the following (own underlining): "*When applying capacity mechanisms, the parameters determining the amount of capacity procured in the capacity mechanism shall be **approved** by the Member State or by a competent authority designated by the Member State, **on the basis of a proposal of the regulatory authority.**"*

48. The CREG decided on its proposal regarding the parameters determining the amount of capacity procured in the capacity mechanism on 24 March 2020 (CREG document 2064). Belgium subsequently rejected this proposal and notified to the Commission a fundamentally different set of parameters.

[56] CREG's proposition c(1907), para. 57: "*L'offreur doit démontrer **qu'avec la configuration actuelle** de la capacité, il ne lui est **pas possible de répondre aux normes légales** identifiées et dès lors de rester dans le marché.*" It is not clear whether this refers to EU or national standards, or either ones.
[57] ClientEarth observations of 11 March 2020, para. 43
[58] That problem would not appear if the capacity were withdrawn from the market, as in a strategic reserve.

49. Belgium organised a very short consultation of only 5 days on this different set of parameters, which, according to ClientEarth, cannot be viewed as a sufficient consultation.

50. More importantly, while the Belgian state has the legal competence to reject the regulatory authority's proposal, it **cannot unilaterally change the** regulatory authority**'s proposal**. If the Belgian state does not agree with the it, it should reject the proposal and ask the regulatory authority to adapt its proposal.

    The compliance with this separation of powers is important on itself when ruled by the law. But that the proposal competence of the regulatory authority is respected regarding the parameters regarding the volume to be procured is even more important for a proper design of the market-wide capacity mechanism and to avoid over-procurement (which would lead to a disproportionate measure to solve the adequacy concern). As is recalled by the CREG in its proposal 2064[59], the Commission itself highlighted in its final report on capacity mechanisms the important role of the national regulator to curb the potentially risk-averse central authorities. In paragraphs (539) and (546), the Commission writes the following[60] (own underlining):

    > *(539) An important aspect in central buyer mechanisms – as in other volume-based mechanisms – is the need for a central body to estimate the required amount and type of generation capacity to attain the desired level of system reliability. While this minimises risks of insufficient provision of generation capacity, it risks leading to excess capacity if risk-averse central authorities set the targets for generation capacity at unnecessary high levels. This risk exists to some extent in every capacity mechanism type, however, and should be mitigated by links to a thorough and transparent adequacy assessment, and appropriate oversight of regulators or independent experts to verify the parameters set by governments and TSOs.*
    >
    > *(546) Some inefficiency may be unavoidable in any central buyer design, for example due to the complexity of carefully assessing all the design features, the dependence on central judgements by risk averse decision makers – though this can be reduced by including a role for the regulator or independent experts in the process – and the need to centrally determine the required flexibility characteristics of capacity providers through the design of the capacity product.*

    It can therefore not be viewed as a coincidence that an important competence has been given to the regulator by the EMR regarding the procurement of capacity in a capacity mechanism. This legal competence should be respected, which clearly is not the case.

51. The Commission is the first and foremost authority to enforce European legislation and thereby cannot accept this violation of EMR. If the Belgian state were to ask for a new proposal at the CREG, the Commission should be vigilant for any pressure on the NRA to make it comply with the Belgian state's set of parameters.

[59] See footnote 25 of CREG-proposal 2064: https://www.creg.be/sites/default/files/assets/Publications/Propositions/E2064FR.pdf

[60] See Final Report of the Sector Inquiry on Capacity Mechanisms (30.11.2016): https://ec.europa.eu/energy/sites/ener/files/documents/swd_2016_385_f1_other_staff_working_paper_en_v3_p1_870001.pdf

Conclusion

The proposed Belgian CRM breaches several formal and substantial provisions of the EU Electricity Market Regulation, as well as the EEAG given that the state aid compatibility assessment must be driven by, altogether, an assessment of compliance of the scheme with the EMR; its consistency with the Green Deal objectives; and the complementary assessment principles contained in section 3.7 EEAG.

In addition, the revision of Belgium's resource adequacy assessment according to the European resource adequacy assessment Methodology, as required by the EU Electricity Market Regulation, and according to projections of the evolution of the Belgian electricity market (including market reforms) lead to the conclusions that there is no adequacy issue in Belgium from 2025 that requires a market-wide CRM.

Therefore, the Commission should not authorise the proposed CRM.

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