

## Febeliec answer to the Elia consultation on the input data for the dimensioning of the volumes of strategic reserve for winter 2021-2022

Febeliec would like to thank Elia for this consultation on the input for the dimensioning of the volumes of strategic reserve for winter 2021-2022. Febeliec has been involved in similar and other consultations involving adequacy assessments in previous years as well as in workshops and studies on certain aspects related to this consultation and also wants to refer to its answers in those consultations and discussions.

On the consulted excel file with data and the corresponding explanation document concerning the assumptions, Febeliec would like to express following comments:

- On the sheet 1.2 on the individually modelled thermal production, Febeliec understands that the granularity of the overview is on complete winter periods. Nevertheless, for example for Tihange 2, as the decommissioning according to the current law is foreseen from 01/02/2023, Tihange 2 will be available for a substantial part of winter 2022-2023. Febeliec strongly invites Elia to apply a more refined granularity in the volume determination calculations, taking into account availability of power plants (or all other sources of flexibility) during partial winter periods.
- On sheet 1.3 on renewable production, Febeliec has at this point no specific remarks on PV and wind capacity, but hopes these evolutions are monitored closely, even despite the sometimes very limited value from an adequacy perspective. With regard to the biofuel category, Febeliec is very surprised to see a very steep decline (almost 120 MW in the next three winters or more than 20% of installed capacity for profiled biofuel) and would like to get a quantitative argumentation for this proposal by Elia. When addressed during the Task Force of 31/08/2020, Elia argued that this steep decline was proposed in order to align the data with the values proposed in the (in the mean time outdated) NECP. Febeliec does not accept this approach and expects from Elia a reasoned and quantified analysis. Febeliec also refers to slide 8 of the explanatory document, where it is shown that the Elia database, looking at existing and operational installed capacity in the Regions, shows an extreme divergence with the numbers reported by the Regions (more than 350 MW higher), giving at least a reasonable doubt about the values known and used by the Regions and thus the values provided in the NECP.
- On sheet 1.4 on pumped storage, Febeliec has at this point no specific comments on the provided data. Febeliec appreciates that Elia has provided in the mean time an update of the spreadsheet with other storage is treated separately by Elia. Nevertheless, Febeliec regrets that it is still not yet clear how this data is correlated with the data on market response (where presumably part of the storage is integrated), while at the same time it is also unclear on which basis or analysis the newly provided data is based. This approach does not allow to evaluate the assumptions taken by Elia for storage. While one could argue that in the very near future (one year ahead) the impact might be small (although a great number of parties are working on storage projects), the impact two or three winters ahead might be much larger, especially if certain technologies such as e.g. electric vehicles with vehicle2grid capabilities or home batteries (e.g. under new governmental incentive schemes or obligations) would show an increased available storage capacity.
- On sheet 1.5 on profiled thermal production, Febeliec would like to point out that the data in the spreadsheet does not correspond with the table provided in the explanatory note. Moreover, Febeliec is very surprised to see that for gas and other category between winter 2022-2023 and 2023-2024, no increases at all are expected, which seems rather strange in light of e.g. existing or discussed incentive schemes or tariff regimes for small (shared) cogeneration facilities. Moreover, Febeliec also wonders whether several industrial investment projects are taken into account also from the side of generation, as Febeliec does not see much new generation capacity at industrial location included in the data (either profiled or individually modelled thermal production), except for Borealis Kallo and Indaver E-wood. Does Elia not consider any additional capacity to be installed or does it estimate that it would only become available in the period post winter 2023-2024?
- On sheet 1.6 on forced outage rates, Febeliec remains surprised of the very high values for some categories (e.g. CCGT, GT, Classical), which seems to be shared also by some producers during the Task Force of 31/08/2020. Febeliec is also surprised that Elia for some categories between the last volume determination and this consultation increases the forced outage rate of almost all categories (e.g. waste, CHP, TJ, classical and CCGT). With the closure of assets, most of them presumably the oldest assets in their respective categories, it seems strange that by removing those older assets, which are presumably also more prone to outages due to aging of the asset, the forced outage rate would actually increase! As voiced during the Task Force of 31/08/2020, Febeliec strongly urges Elia to reconsider its current approach with a statistical quantification on

historical data per category, as this approach could lead to ever increasing deviations towards the future, especially if in some categories in the future large volumes of newbuilt capacity were to be added. Febeliec suggest for example an approach where the historical data is filtered for those units that remain in the system, so excluding the outages of units that have been or will be closed in the timeframe of the current analysis, as the outage rates of those units presumably is less relevant for the analysis. Alternatively, but more complex, the outage rate of the remaining and new units could be taken into account with the application for each year of an aging factor on their outage rates (which could lead to higher outages for those units in the future compared to their outage rate in the past), although Febeliec doubts whether for an exercise looking towards three future winters the impact hereof would be significant (as compared to the impact of taking historical data into account of assets that are decades older than those retained in the system).

- On nuclear availability, Febeliec does not see a data sheet, but the topic was covered in the explanatory note and Febeliec would like to reiterate a comment it has made last year on the outcome of the dimensioning exercise for strategic reserve (for winter 2020-2021). Elia states that for winter 2021-2022, the planned maintenance (REMIT) will be used for the nuclear availability, while it stated during the Task Force of 31/08/2020 that for the next winters it follows a “statistical projection”. While during the Task Force of 31/08/2020 a representative of the operator of the nuclear assets in Belgium stated that REMIT data also is available for periods in time further ahead, Febeliec strongly urges that a reality check be also performed on this data. Imagine the extreme scenario where the operator of the nuclear assets would indicate (e.g. in REMIT) unavailability of all of its nuclear assets during (a part of) the winter period, this would lead to a very high (and artificial) need for a strategic reserve and risk for the Belgian adequacy, while the likelihood of such situation occurring in reality would be extremely low. The same also applies to all other asset categories and the notifications in REMIT, although of course due to its size and weight this effect is most visible in the category of nuclear assets. Febeliec strongly urges Elia to take this element into account, also considering that Elia has the right to refuse or at least ask to amend the maintenance calendar of assets in light of its role to maintain a stable and reliable grid. Febeliec would strongly regret that such element would lead to a skewed outcome and thus unjustified additional costs for consumers.
- On the sheet 2.1 on demand, Febeliec is surprised to see that Elia estimates that in 2023 total electricity demand will be 87,5 TWh, or 1,8 TWh higher than 2019, despite the covid-19 crisis which has reduced Elia’s estimate for 2020 to 82 TWh. Moreover, Febeliec can only observe that the value for 2023 between the presentation before the summer, where the covid-19 sanitary crisis had not yet been taken into account, and the values proposed in this consultation, has only decreased from 88,1 TWh to 87,5 TWh, so only an overall impact of 0,6 TWh in overall electricity demand (or an impact of the average annual growth rate of 2,5% to 1,8%), and this despite many signals (e.g. Federal Planning Bureau, National Bank, OECD, ...) that a V-shaped recovery seems ever less likely. Febeliec requests that at least a scenario is also included that foresees a much less pronounced recovery of total electricity demand in 2021 and the following years (as Elia now proposes an increase of 3,66% in 2021 and 2,03% for 2022), for example in line with the economic forecasts of the Federal Planning Bureau<sup>1</sup> of June 2020, which foresees a decrease of the energy end consumption of 0,4% on an annual basis in the period 2020-2025. Febeliec also requests that Elia provides a justification of the values it obtains, as no justification nor sources are provided (other than a slide referring to an “illustrative scenario” (*sic*) in the explanatory note).
- On sheet 2.3 on Market Response, Febeliec would like to reiterate its previous comment on storage. Moreover, Febeliec also regrets that Elia has opted to take a yearly annual increase of market response (which is much larger in scope than demand side response) of only 7%, whereas the last year according to the update of the study commissioned by Elia from E-Cube<sup>2</sup> shows an increase of over 20%. While it can indeed be argued that the inclusion of an additional power exchange has a clear impact, it is also clear that even without the impact of this additional power exchange the growth rate has considerably accelerated (beyond the proposed 7%), while the impact of the roll-out of smart meters (being ever more accelerated), home batteries, ... are not taken into account by only looking at historical trend lines as these were not even present in the past and thus are not revealed at all in the trend lines. Febeliec thus urges to include at least an additional scenario with a higher growth rate of market response, in order to be able to assess the sensitivity of the outcome based on this input parameter. Moreover, Febeliec would like to point out that volumes available for market/demand response are essentially determined by the (expected) occurrence of peak prices, as most of these volumes are only

<sup>1</sup> [https://www.plan.be/uploaded/documents/202006231122450.FOR\\_MIDTERM\\_2025\\_12169\\_N.pdf](https://www.plan.be/uploaded/documents/202006231122450.FOR_MIDTERM_2025_12169_N.pdf)

<sup>2</sup> Febeliec wants to stress that it still has several fundamental issues with the methodology applied by E-Cube and has not formally accepted the methodology applied by Elia.

triggered by high prices (typically above 450-500 €/MWh). Historic figures are thus definitively not the only reliable indication of available volumes of market response, unless they are clearly linked to the effective occurrence of peak prices. Last but not least, Febeliec would like to underline the impact of the accelerating roll-out of smart meters in the regions, which will allow increasing volumes of potential market response to enter the market.

- On sheet 3 on balancing volumes, Febeliec would like to reiterate a comment it has made during the Task Force of 31/08/2020 on the proposed values. Febeliec would rather have seen the absolute values of balancing reserves, so not only provided by production units, and at the same time increase the values for market response with the corresponding volume that is now considered to be contributing to balancing reserves, as it would provide a much clearer indication. For example, market response, including market response participating to balancing reserves, was assessed by E-Cube as 1408 MW in winter 2019-2020, while Elia only takes 1041 MW into account in sheet 2.3. More correct, especially in light of future evolutions which according to Febeliec should be modelled individually in order to be able to assess them individually (e.g. on storage, demand side response, profiled generation, ...) would be to apply in sheet 2.3 the higher value of 1408 MW and in sheet 3 provide all balancing reserves, including market response, in order to avoid double or zero counting and thus unnecessarily introducing errors, especially further out in the future.
- On sheet 4 on flow-based domains, Febeliec wonders why the external constraint for Belgium in 2021 is not already further relaxed, as Alegro will have been taken into service and already part of the rest of the investment program of Elia will have been completed. Febeliec also wonders how Elia will incorporate the Belgian derogation plan in its calculations and asks that some additional information be provided on this element.