Volume determination of the strategic reserve for winter 2020-21:

Answer to the public consultation on input data

Contents

1. Introduction

The consultation aimed to receive any comments of market parties on the input data to be used for the strategic reserve volume determination for winter 2020-2021. The consultation period was set from Wednesday August 28th to Wednesday September 25th 2019, 18h00.

Elia received 4 non-confidential answers to the public consultation from (in alphabetical order):
- ➤ CREG
- ➤ EM
- ➤ FEBEG
- ➤ FEBELIEC

The feedback and the answers by Elia System Operator ("Elia") are grouped in four categories in this document:

- Demand assumptions
- Market response
- Generation assumptions
- List of power plants
- Flow-based

All relevant information to this consultation can be found on the following Elia webpage:

https://www.elia.be/en/public-consultation/20190828_public-consultation-strategic-reserve-input-data-for-determining

The results of this consultation will also be discussed during the next Task Force implementation Strategic Reserve (TF iSR).

2. Questions on the Demand assumptions

<u>FEBEG:</u>

[Q1] Elia expects the demand to grow with a rate of 0,49% from 2019 to 2023. These expectations are based on the forecast of IHS Markit of February 2019.

FEBEG regrets that there's no information on the expected evolution of the peak demand, as this is crucial information for assessing the adequacy. It is very likely that in the future the peak demand will increase more than the energy consumption due to, for example, increasing share of heat pumps and cooling systems in combination with more extreme weather conditions.

<u>Elia:</u>

[A1] As of this year, Elia uses the Trapunta methodology for load profiling. This new methodology has been developed in collaboration with ENTSO-E and is used for MAF 2019. The model reads different source of data (historical load profiles, temperature time series, heat pumps, electric vehicles, etc.) and provide multi-year demand forecasts in hourly resolution. This new modelling approach differs from its predecessor by the following improvements:
- multiple historical climate and load time series are used to derive forecasted load profiles for each market node. In the previous methodology, only one reference year was used during the forecasting process;
- automatic identification of different climate variables needed for the forecasting process (temperature, irradiance, wind speed, etc);
- better treatment of historical profiles used in the forecasting process (correction of holiday periods, exceptional events, etc.);
- the load forecast is decamped into temperature-dependent and temperature-independent components. This way, final load profiles are adjusted, taking into account added consumption from heat pumps and electric vehicle charging. This way, the forecasts also consider the interdependencies of historical temperatures of each climate year and historical load patterns.

Given this last bullet, the Trapunta methodology should incorporate profile changes, such as a change in peak demand, based on future expectations of installed heat pumps and electric vehicle charging.

<u>CREG:</u>

[Q2] In de tabel worden de waarden voor de vraag in 2017 als "forecast" vermeld. Dit zijn volgens de CREG historische gegevens. Ook voor 2018 zou de historische waarde voor de vraag vermeld moeten worden. In het geval de historische waarde voor 2018 sterk zouden afwijken van de voorspelde waarde dient de vraagevolutie mogelijks te worden geüpdated.

<u>Febeliec :</u>

[Q3] Febeliec wants in this framework to refer the comments it has also made in the past in the framework of the input data for the yearly study for the determination of the required volumes for strategic reserve. Based on the new moving window for the dataset (2011-2017(forecast, apparently no historical data are available?)), Febeliec can only observe that historically the growth rate was on average -0.59% (last 7 years), +0.17% (last 5 years) or 0,09% (last 3 years), yet Elia takes for its forecasts till 2023 (including for 2018, where apparently no historical data are available?) an average annual growth rate of +0,42%, adding more than 2TWh to the Belgian demand y 2023 as compared to

the last available data, without providing any justification for this forecast. The historical values show that even for economically sound years as 2016 total electricity demand can diminish, whereas Elia only (macro-economically?) discerns never-ending year-on-year increases. Febeliec reiterates previous demands to validate historical IHS forecasts with actually observed values for the recent years, in order to provide confidence in the applied methodology or, in case the IHS track record would not be so sound in predicting future electricity consumption, develop an alternative and more correct forecast tool. In any case, Febeliec observes that even after a few years of economically sound years (2011-2017), total electricity demand has still not returned to the level of 2011 (let alone pre-2008 levels!). In any case, Febeliec urges Elia strongly to include several sensitivity analyses on this point, as overestimates in total electricity demand will automatically lead to increased needs for capacity and thus a potential strategic reserve.

Elia:

[A2-3] The 2017 values are historical data. They are wrongly labeled as forecasted data. This has been corrected in the attached input data file. The historical load vector for 2018, validated after the execution of the 'cadaster' exercise was not available at the time of model building. Hence, as was done for the AdeqFlex study Elia will extrapolate from 2017 onwards. Elia has presented a draft version of its new tool for demand forecasting (developed by Climact) on the last taskforce. This presentation was given by Climact and was well received by stakeholders. Workshops will be organized in order to get familiar with the new framework. Elia believes this new approach will show the required transparency as is desired by stakeholders. Elia does not believe that a sensitivity for winter 2020-21 (the only dimensioning simulation) will give any additional insights knowing the small difference between zero load growth and load with a growth of 0.49%.

3. Questions on Market Response

CREG:

[Q4] Elia stelt op basis van de E-Cube studie 3 evoluties van marketrespons voor: +1%/jaar, +3%/jaar en +5%/jaar, vertrekkende van 699 MW voor de winter 2018-2019. Elia vraagt de stakeholders hun voorkeur te motiveren.

Zoals eerder reeds gesteld (meetings ISR-TF, Studie (F)1957 ,…) meent de CREG dat de toegepaste methodologie voor de bepaling van de markrespons tot resultaten leidt die niet overeenstemmen met de vastgestelde marktreactie voor de winter 2018-2019. De situatie voorafgaand aan de winter 2018-2019 (aankondiging van grotere onbeschikbaarheid van het nucleaire park) mag dan wel als uitzonderlijk beschouwd worden, toch kan de snelle reactie van de markt niet ontkend worden. Gezien de activering van strategische reserve een uiterst uitzonderlijke situatie is (de aangekochte volumes aan strategische reserve in de voorgaande jaren werden immers nooit geactiveerd voor een adequacyprobleem), meent de CREG dat de marktreactie in dergelijk geval niet onderschat moet worden. Bovendien is de maximum onevenwichtsprijs gestegen van 4.500 €/MWh tot boven de 10.000 €/MWh. De CREG meent dat de methodologie voor de bepaling van de in rekening te nemen marktrespons aan herziening toe is.

In het algemeen, lijkt de CREG niet aangewezen om te blijven werken met vaste waardes voor marktrespons. Het volume marktrespons (zowel qua volume in MW als qua duurtijd) wordt getriggerd door het prijssignaal. In het kader van de volumes voor de strategische reserve moeten de volumes aan market respons overeenkomen met deze bij het bereiken van de technische price caps (die op hun beurt ook kunnen stijgen telkens 60% van de price cap bereikt wordt). Bovendien schat Elia een lage duurtijd in van demand response, terwijl het logisch is te veronderstellen dat deze duurtijd verhoogt indien er vanuit de markt een vraag zou zijn. Gezien prijsniveaus boven de 500€/MWh reeds zelden voorkomen, en de technische price cap nog nooit werd bereikt omwille van een adequacy issue, blijft de concrete inschatting van het potentieel aan marktrespons een moeilijke oefening.

De CREG meent bijgevolg dat de startwaarde van 699MW reeds een onderschatting is en dat bovendien een stijging van 5%/jaar niet voldoende is om de werkelijk niveaus van marktrespons te benaderen. De CREG benadrukt het belang om een studie aan te vatten om het economisch potentieel aan marktrespons grondig te onderzoeken. Dergelijke studie is trouwens ook in het kader van de andere adequacy-studies eveneens noodzakelijk.

CREG:

[Q5] Tijdens een vorige publieke consultatie heeft de CREG gevraagd om het geïnstalleerde vermogen van de noodstroomaggregaten die kunnen synchroniseren met het net ook te evalueren en apart te vermelden in het rapport. Het antwoord van Elia hierop was enerzijds dat Elia geen zicht had op de geïnstalleerde capaciteit aan noodgeneratoren en anderzijds dat noodgeneratoren die reageren op marktsignalen in tijden van schaarste reeds meegenomen werden in het volume van marktrespons. Uit de resultaten voor de volumes aan Market Respons (zie opmerking hieronder) lijken de noodgeneratoren niet in de market respons vervat te zitten. De CREG herhaalt bijgevolg haar vraag die zij tijdens vorige consultatie over de basisgegevens voor SR reeds stelde. De CREG refereert ook naar haar survey bij de Belgische ziekenhuizen waaruit blijkt dat er alleen al in de ziekenhuizen 200 MW aan noodstroom is geïnstalleerd.

Febeliec:

[Q6] Febeliec strongly wants to contest that base value that Elia is using for the determination of demand response in the future. It is unclear on which source Elia bases its initial starting point of 699MW market response, taking into account that two of the largest BRPs in the Belgian system contracted for winter 2018-2019 substantial volumes (+500MW and +200MW) of additional market response. Febeliec would greatly appreciate that Elia provides a detailed breakdown of its data in order to be able to analyse it (e.g. categories and constraints). In any case and as already indicated, Febeliec has the feeling that Elia underestimates the real market response that was available in 2018-2019 and as such should use this higher value as the starting point for its analysis. Moreover, Febeliec does not understand how a 1% growth from the volume of 2018-19 (699MW) can lead to a decrease for 2019-20 (697MW) (cfr Elia file). Moreover, Febeliec also wants to highlight the introduction of smart meters (with currently already more than 60.000 installed in Flanders, amongst which more than 8000 in cases of local solar production, and variable price contracts and the fact that this will unlock a vast volume of currently untapped (untappable) flexibility in the residential and SME segments. Febeliec regrets that these elements are still not (and never have been) taken into consideration by Elia in its analyses. Febeliec also refers to the numerous comments it made to the methodology developed by E-Cube in the recent past and its reservations it has towards this methodology, which it also never approved. Last but not least, based on the provided data it is for Febeliec impossible to analyse to which extent the data for market response provided by Elia (with a scope much larger than demand side response) are taking into account all elements. For example the inclusion of the impact of diesel generators (and similar technologies) is at least very opaque. CREG studies have shown that for example already the (aggregated) Belgian hospitals already have up to 200MW of diesel generators and this is not taking into account all the other emergency generators (from industrial sites over public services, office buildings to even residential consumers) that are operational in Belgium, while last winter also has clearly shown that BRPs can install more than substantial volumes of diesel generators to cover their positions (diesel generators which cannot be formally accounted for as "emergency" generators as they are not connected to specific consumption processes). Febeliec would like Elia to provide thus a very clear and detailed breakdown of its data on "Market Response" in order to be able to assess the expected evolution over time by Elia

FEBEG:

[Q7] Elia proposes three different scenarios for the evolution of the demand response from 2019 to 2023 ranging from 1 % over 3 % to 5 %.
FEBEG supports the scenario with 1 % growth as is based on observations of the five previous years, including the lower volumes for market response and ancillary services in the winter 2018-2019. The observed evolution demonstrations that it is very difficult to make extrapolations for the future and that a cautious approach is justified.
A scenario with 3 % growth could be considered – although such an approach would not be cautious – a scenario with 5 % growth seems unacceptable. Such a strong growth of demand response should be clearly motivated with by a relevant expected change in the market that would increase the profitability of implicit demand response in the market. Such a significant change is not identified.
Furthermore, FEBEG wants to point out that it should also be taken into account that the expected increase of economic growth might reduce the operational margin of industrial players to lower their production for market response actions.

ELIA:

[A4-5-6-7] Elia understands the reservations the CREG & Febeliec have concerning the methodology of the market response capacity determination, given the deviations between press communications & analytical findings for winter 2018-19 following the methodology. Discussions on the methodology however, are not part of the input

consultation. In this regard Elia refers to the answer it provided when these remarks were raised by CREG in the context of the methodology consultation.

> *"Elia agrees that if more MR volume is available, it was not offered in the market in the previous winter, as otherwise the E-Cube study would have uncovered it. … For the current assessment, the legally binding deadlines do not allow for such a major change of methodology at this point. However, Elia is open to further discuss this in the taskforce with the stakeholders and is eager to hear what solutions could be preferred over the current methodology or which improvements could be considered."*

In the meantime, Elia has organized in the context of the TF ISR a presentation by E-cube explaining why the current methodology in 2017 was opted for as the methodology to be retained. It also investigated the methodology in order to identify incremental changes that could further improve the assessment for the future. Two elements were identified:Block bids & multiple NEMO impact. Elia also believes the stakeholders respect that a thorough methodological changeover in the span of time between the presentation of the results of the E-Cube study in the ISR-TF of 1st of April 2019 and the end of the input consultation of that same year is unrealistic. In any case, Elia wishes to reiterate that it remains open to update or revise the methodology and that it, besides feedback, it welcomes proposals from stakeholders for such improved methodology. However, it should be understood that the current methodology, being based on a thorough research effort and bearing in mind experiences with alternative methodologies in the past, cannot be abandoned without having a better alternative at hand. In this context of potentially improving the methodology, Elia is interested in learning and open to discuss how these 'established market responses as seen in winter 2018-19' could be objectively quantified and integrated in a yearly recurring assessment other than by looking at market data such as the offer curves. In that respect also the integration of a potential impact of the increased balancing price cap seems difficult to isolate from the market response as observed in the analyzed curves, as this represents 'the' market, including how anticipates on the balancing time frame. Additionally, Elia was unable to identify currently active mechanisms that allow residential consumers that already possess a smart meter to act on price signals. Moreover, Elia believes emergency generators that want to respond to market signals can only do so by participating in the market, and therefore should be assumed covered in the E-cube methodology. Elia cannot predict how Emergency generators, which are not in any way active in the market would act on a scarcity market signal, the very first question would be why they are then not in the market and whether it would be wise to take them into account in the context of this market response analysis.

Additionally, Elia would like to rectify some erroneous statements made above:
- Elia does not apply fixed values for market response, but rather applies a range of DSM categories, each with their own thresholds and limitations. See Elia's answer to question 25 of this year's methodology consultation.
- Elia does not believe that the currently applied duration constraints are too conservative. In this regard, Elia wishes to highlight the fact that, compare to last year's 7 categories, this year only 5 exists, with severely reduced activation limit's. Firstly, the weekly limits have been removed, resulting in a weekly higher DSM availability. Secondly, the share of the no-limit category has been tripled.
- The reason a 1% growth from the volume of 2018-19 (699MW) can lead to a decrease for 2019-20 (697MW) can be derived from the methodology. The growth rate is applied to both Ancillary Services and Market Response. The forecast of the market response is obtained by deducting the forecasted ancillary service values from these values. The higher growth rate in ancillary services rate for this specific year explains the slight decrease in market response.

In conclusion, and after hearing arguments from all stakeholders, Elia does not see the appeal in rejecting the current methodology for this year's assessment, as no alternatives exist. However, in line with the progressive approach towards MR evolution

in last year's assessment, and to react on the strong opinions made by FEBELIEC & CREG stating that none of the proposals are progressive enough, Elia will proceed with a **7%** growth rate, which is exceeding any of the 3 proposed growth rates. By applying a growth rate, no lower than last year's growth rate, to which most stakeholders responded positively, Elia anticipates that the historical data from winter 2018-19 could have been an outlier.

Febeliec:

[Q8] Storage: Febeliec regrets that this aspect is not even covered in the input data of Elia. If Elia has included this segment in "Market Response", Febeliec reiterates its position on the need for a clear breakdown of this category, but also wants to stress that if this would be the case, the volume of market response is presumably a gross underestimate.

ELIA:

[A8] Different types of storage exist. Pump storage is an integral part of the input consultation. While 500MWh of reservoir capacity is reserved for ancillary services, a remainder of 5300MWh can be used on the market in the current models. Storage by means of fuel cells are nonexistent in Belgium. A single fuel cell installation on the site of Solvic in Antwerp was taken out of service in 2016. Battery storage is very limited in Belgium. According to the latest Elia production database (PISA, updated monthly by DSO's input) exports, 7MW is available at Drogenbos (the Alfen project for ENGIE) and 18MW is available at Dilsem-Stockem (LRM project with Tesla batteries at the 'Terhills' site). Both of these projects revolve around providing FCR reserves. Elia has an FCR need of 86MW in 2020. This volume is estimated to be provided fully by 'sharing' (contracts with neighboring TSO's) and 'storage'. Hence, the volume of FCR on Belgian production, as can be seen in the input consultation, is 0 MW. It is estimated that an increase of domestic storage will replace an equally large share of FCR sharing. Elia will continue to follow the trend of battery storage, and when volumes exceed the FCR need, or market triggers change, incorporate the required storage units in the market optimization, such as done in studies looking at a longer timeframe.

4. Questions on the Generation assumptions

CREG:

[Q9] Kan Elia een toelichting geven over de evolutie van de capaciteit van de niet geïndividualiseerde eenheden?

ELIA:

[A9] This answer extends the provided insight in the methodology as discussed in section 3.2.1.2 of the methodology consultation document in order to increase transparency in the constitution of the data assumptions. There are 3 categories of profiled thermal production: waste, biomass & NCNR (non CIPU / non renewable; also called Gas & other in the input data Excel file). For all of these categories, the installed capacity of the current year is provided by the Elia PISA database. This database contains the reporting of DSO's of installed capacities in the distribution grid (officially units with capacities larger than 400kVA but in practical terms many smaller units are also reported). This database also contains units which yet have to be commissioned but for which connection capacity has been reserved or acquired. For the evolution of the capacities, a different approach is considered for the 3 generation categories. For waste & NCNR, new projects announced in PISA are considered for the first winter extrapolation. For waste this usually means no increase nor decrease. For NCNR this typically shows an overestimation of the capacity present in the target winter of the volume assessment. Indeed, not all acquired & reserved capacity is commissioned in due time. E.g. for winter 2019-2020 last year's volume assessment incorporated an increase of 80MW compared to winter 2018-2019. To this date only 42MW of that capacity increase has been observed in PISA. Given that the year is not yet over, and that, considering a load factor of 0.5-0.6 (which corresponds to historical values for such type of units), the final impact on the volume need is quite small, Elia wishes to stick to the proposed number, even though it is quite progressive. For the 2 'outlook winters' that follow the target winter of the volume assessment no additional increase is considered. The reason is twofold: firstly, the data is not available in PISA. Secondly, the units that fail to be commissioned by the target winter, will be incorporated in the number for the 'outlook winters'. For Biomass another extrapolation is applied as the regions provide their own outlook for Biomass capacities. The currently installed capacity in PISA has proven to be the most trustworthy starting point. Then the growth rate as is visible in the projections of the regions is applied to obtain the values for the target winter and the 'outlook winters'. However, the growth rate of the regions has to be corrected for the commissioning & decommissioning of large CIPU Biomass units as the regions do not make this distinction. In the Excel file that accompanies this document, and contains the input data after stakeholder feedback, new values for future profiled Biomass capacities have been provided that correctly reflect this distinction.

FEBELIEC:

[Q10] As the source of the provided data is lacking (which projection of the regions), it is impossible for Febeliec to make any valuable contributions. Febeliec can only remark that for certain categories, most notably biofuel, the volumes decrease over time, but with the data at hand it is impossible to make any assessment on the correctness of this analysis.

[Q11] Febeliec is surprised to see in the accompanying slide deck of Elia that for biomass and waste, the data in the database of Elia and of the Regions is very different, with more than 15% difference for Flanders and the Walloon Region.

ELIA:

[A10-11] For today's installed capacity, and depending on the type of generation (solar, wind, bio, waste), either the values from the regions, or the values from the Elia production database (PISA)are used. As for many categories the regions possess better data (e.g. GHC numbers) Elia deems they are more precise. For CHP and other gas fired units, we rely on PISA as there is no reporting of the regions, and have positively crosschecked this with "Cogen Vlaanderen" in the past.

Elia wishes to underline that in the methodology it has established in comparing the capacity value from the regions with available data in PISA, it continuously selects the non-conservative number as a basis for future extrapolation.

Elia has faith that the different regional bodies that govern the distributed generation are well informed and best placed to provide data on the future evolutions. Indeed, these generation types are often policy driven (subsidies, taxation, ...). Additionally, The growth rates are independent of the methodology for installed capacity calculation, making them useful for extrapolation purposes. For in depth information on the constitution of the forecasts, one can contact the governing bodies directly. The biomass decrease has been adjusted in the attached excel file after careful revision (cfr. [A9] final paragraph).

5. Questions on the list of Power Plants

EM Generations Brussels:

[Q12] Concerning the Vilvoorde GT. The ISO conditions of the gas turbine (based on recent figures) is 255 MW. The data refers to 265 MW.

ELIA:

[A12] The figures in the attached Excel file as well as the simulations' parameters have been updated accordingly.

FEBELIEC:

[Q13] Febeliec would like to remark that for several units (Langerlo 3-4, Monsanto Lillo) these were "exceptionally available in 2018-2019", because one or several BRPs were exposed to a risk of imbalance in their portfolio and took measures to avoid being imposed potentially very high imbalance prices (up to 13.500€/MWh), including making available these units. As such, for Febeliec, units in this situation should not be discounted in an analysis on adequacy for Belgium, unless it is proven that they cannot be put back into operation if needed by and for BRPs, thus avoiding costly volumes to be contracted in a strategic reserve at a cost for all consumers in Belgium. On Doel 3 and the decommissioning foreseen on 01/02/2023, Febeliec would request Elia to make at least a sensitivity analysis with this unit still in the market (even though the volumes for winter 2022-2023 are only indicative and not used for composing a strategic reserve at this point).

ELIA:

[A13] Elia does not possess the necessary information to judge whether units are 'able' to be put back into operation nor whether it would economically be sound to do so from the market actor's perspective. In the advice Elia provides the Belgian government concerning the required volume of SR, Elia deems it is necessary to stick to official information as is legally regulated.

Sensitivities such as requested on Doel 3 in the winter 2022-23 are out of scope of the assessment. Elia sticks to the nuclear phase out calendar as defined in the law.

6. Questions related to Flow-based modelling

CREG:

[Q14] In de Excel-sheet over flow-based domains wordt aangegeven dat Elia een minRAM zal toepassen van 20% in lijn met de Adequacy and Flexibility Study. Deze laatste studie van Elia voorziet een minRAM die evolueert van 20% in 2020 tot 50% in 2023 om te eindigen op 70% vanaf 2025. De CREG meent dat voor de berekening van de volumes van strategische reserve een evolutie van de minRAM tussen 2020 en 2023 in rekening zou kunnen worden gebracht.

ELIA:

[A14] The application of the 20% minRAM was announced in answer 31 to the methodology consultation report. The flowbased layer applied onto the Strategic reserve volume determination model is based around the SPAIC historical domain clustering process. As has been explained in the past, this method has both advantages and disadvantages. The advantages being that this method has a grounding in historical data and therefore incorporates many complex effects such as LTA's. The drawback being that the modification of the domains to integrate future grid & market evolutions is at best cumbersome and at worst impossible. The latter is the case for the minRAM adjustment if done correctly. In addition, nothing can be said on the feasibility of market results when virtual margins are introduced. Moreover, such a modification would prove costly and would serve limited use as Elia is contemplating moving towards another flowbased framework in upcoming volume assessments such as the one used for the AdeqFlex study. Furthermore, Elia believes the impact of the 'Clean-Energy Package' can only be properly evaluated when all national action plans are well detailed (e.g. for Germany). Given that winter 20-21 is the target winter for this year's volume assessment, for which 20% minRAM is still fine, Elia will not be incorporating a minRAM modification for the 'outlook winters'.

FEBEG:

[Q15] The selection of SPAIC typical days is calibrated to represent the yearly functioning of the system. As a result this selection is only partially representative for a tight winter situation. Because of the fact that the functioning of the strategic reserve is limited to the winter period, FEBEG is of the opinion that it seems logic to only use the SPAIC of this winter period.

It is not clear how the split of Germany and Austria is integrated in the study. Previously Elia has indicated that TSOs struggle with the use of FB parameters post-split for SPAIC analysis. FEBEG thinks that the SPAIC analysis should correctly represent the situation of the system post-split.

Elia:

[A15] Elia will, for the assessment of winter 2020-21, take 4 typical winter days into consideration based on historical flow-based data from 1 October 2018 onwards, in accordance with the SPAIC process as agreed upon at CWE level. This insures that the volume assessment models incorporate the DE-AT split based on representative historical domains.

With respect to the challenges faced in incorporating these more complex domains, Elia refers to its presentation made during the TF of 8th July 2019. The challenges are twofold:
- typical day selection based on multidimensional distance metric;
- mapping these domains onto regular polytopes to reduce computational complexity.

Elia is happy to confirm that both challenges have been tackled. The second challenge did however result in a significant increase in computation time resulting in simulations that take over 24hours for an iteration. Elia will focus on back-end development next year in order to increase the efficiency of implementing such complex domains.

Febeliec:

[Q16] Febeliec appreciates that Elia has evolved its methodology in order to include 4 "typical" days with each 24 CWE flow based domains. If selected correctly, this approach should presumably improve the analysis. Febeliec however regrets that Elia is not providing a qualitative overview of the impact of new grid elements, such as the introduction of Alegro or the impact of NEMO (with operational experience in the meantime), as well as the introduction of new interconnectors (already happened or foreseen in the timeframe of this analysis by Elia) in the neighbouring countries and their impact on the Belgian import-export situation.

Elia:

[A16] The goal of the strategic reserve volume assessment is to evaluate the Belgian adequacy situation taking into account latest information on demand, generation and interconnections. The introduction of sensitivities evaluating the adequacy impact of specific grid elements is not part of the scope of the strategic reserve volume assessment. For an impact assessment of the addition of new interconnections in the CWE region, please refer to the SPAIC studies performed at CWE.

7. Various

Febeliec:

[Q17] Febeliec regrets that Elia does not conduct a consultation on the methodology, and thus wants to use this consultation to reiterate its position on the (past but maybe also current) methodological approach of increasing the margin and/or strategic reserve volume by blocks of 100MW in the iterative process for the determination of the potential required volume. For Febeliec, a finer granularity than 100MW should be used, as even the lack of 1MW under the current approach would immediately lead to a need of 100MW additionally. Applying a finer granularity would avoid sourcing unneeded volumes. Alternatively, an approach could be implemented where very marginal transgressions of the LOLE criterion do not automatically lead to an increased contracting of strategic reserve volumes, through the application of a deadband, taking into account the multiple layers of sensitivity already applied by Elia in combination with low probability, high impact scenarios, which already skew all the results towards a very conservative approach. For Febeliec, it should in any case be avoided to increase the cost for the grid users unnecessarily by following a much too conservative approach.

Elia:

[A17] Elia refers Febeliec to the consultation on methodology that took place from April 26 2019 until May 24 2019 at 18h00. In this consultation, more specifically question 11, Febeliec raised the same point. Moreover, this point is a reiteration of a research

question that was raised in 2018 to which Elia responded with a detailed convergency analysis which showed that a finer granularity in the volume determination proces is not statistically sound. For more information please refer to the minutes of TF 09 July 2018. Elia is, as always, willing to reopen discussion when new argument are provided and would therefore welcome any such analyses that could contribute to the discussion. However, Elia would ask that a forum to discuss input data is not used to voice questions involving methodology.