



VOLUME DETERMINATION OF STRATEGIC RESERVE FOR WINTER 2018-19: CONSULTATION REPORT

**Public Consultation on input data for Belgium for the next 3
winters, held between 21 August 2017 – 18 September 2017**

29/09/2017

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INTRODUCTION

The consultation aimed to receive any comments of market participants on the input data to be used for the strategic reserve volume determination for winter 2018-19. The consultation period was set from Monday August 21st to Monday September 18th, 2017, 6:00pm.

Elia received five answers to the public consultation, of which one should be considered as confidential:

- FEBEG
- FEBELIEC
- Dominique Woitrin
- Arcelor Mittal (no remarks)
- Engie (confidential)

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

- General
- General data
- Market Response
- Flow Based domains
- Out of Scope

All relevant information to this consultation can be found on the following Elia webpage as from Friday September 29th 2017:

<http://www.elia.be/en/about-elia/publications/Public-Consultation/Strategic-Reserve-input-data-for-determining-the-volume-for-winter-2018-2019>

The result of this consultation was also presented during the Task Force "implementation Strategic Reserve" of September 26th, 2017.

1. General

Febeliec

Febeliec would like to thank Elia for this consultation input data for determining the volume of Strategic Reserve for winter 2018-2019, as it is very important to have a clear, common and accepted understanding of which hypotheses, generation and demand volumes and capacities will be taken into account for the analysis conducted by Elia. In general, Febeliec regrets that Elia has not provided in the excel file under consultation more of the assumptions and hypotheses it has applied to come up with the proposed numbers. As a result, it is very difficult to get real insight in the methodology applied by Elia.

Elia's answer

Elia has organized two public consultations: one on the methodologies and data sources, and the current one on the input data used for the analysis. With these consultations, Elia aims to be as transparent as possible on its analysis. Should Febeliec have specific areas of interest on which more information could be shared, on top of those mentioned in the context of these public consultations, Elia will be glad to take them into consideration for future consultations.

2. General data

Dominique Woitrin

FOR CN's optimiste car, « les autres arrêts » ne sont pas comptés. Et pourtant ce sont de nombreux arrêts fortuits, sans parler des longs arrêts "sûreté" comme Tihange 1.

Ces centrales vieillissantes sont moins fiables que dans le passé et cela n'apparaît pas sur vos données. Cela devrait renforcer le besoin de RS ? malgré que ce ne soit pas une solution LT (arrêt du nucléaire dans 8 ans)

Des 'arrêts de CN non mentionnés "unplanned outage" mais communiquées le jour même comme "normaux" !

Elia's answer

The forced outage rates used by Elia in its analysis are based on the official communication of the producers. Moreover, long term outages of nuclear units are taken into account in the analysis through the use of sensitivities. However, Elia acknowledges the point made, and will further investigate the availability of the conventional generation units for the next version of its assessment.

Febeliec

With respect to renewable production, Febeliec has no specific comments, but observes a very significant increase in both PV and onshore and offshore wind in the numbers proposed by Elia. Febeliec wonders whether this increase is based on hard evidence (e.g. permits granted, investment decisions taken, construction and planning of offshore windmills) or rather based on extrapolation of current trends and/or growth paths. Febeliec insists on the need to take into account the evolution of the minimum load factor of renewables since this is an important factor in the analysis of the determination of the volume of strategic reserve.

Elia's answer

The assumptions concerning PV and onshore wind used by Elia in its analysis are provided by the Federal Energy Administration, who requests this information from the regional administrations. They are not based on an extrapolation of current trends, but take into account foreseen future policy. Concerning the development of the installed capacity of offshore wind, the assumptions used here are based on direct contacts Elia has with the owners of each individual concession. Taking into account the information communicated to Elia, a best estimate of the evolution of the installed capacity is constructed.

The load factor of renewables is modelled through the use of time series per production type. These time series are acquired through ENTSO-e, and are

regularly updated. This allows taking into account the evolution of the load factor, following technological improvements.

Febeliec

With respect to the demand, Febeliec wonders why Elia takes such fairly steep increases for the following years, taking into account that the average over 2011-2016 is even slightly negative and over 2013-2016 is only very slightly positive (+0.06%). Can Elia provide the basis on which to forecast yearly increase of around 0,5%? Is this based on a macro-economic top-down approach, and if so, which GDP-growth rates and other macro-economic parameters have been used for the calculation, or is it based on an additive bottom-up approach and if so, which segments of consumption are expected to increase over time? Febeliec does not see any direct validation on why a -0,91% decrease in 2016 would turn into a 0,44% increase in 2017 (e.g. not significantly more electric vehicles, no substantial uptick in GDP, no significant increase in heat pumps or electric heating, ...).

Elia's answer

Concerning the total yearly normalized demand growth, Elia bases itself on the forecast made by the consultant IHS Markit. The most recent version of this forecast has been used, taking into account the most recent IHS Markit research on the underlying economic and policy drivers that affect the European power markets up to June 2017. The IHS Markit forecast is based on a top-down model (e.g. using parameters such as GDP). For this year it is not possible anymore to consider an alternative for this data source for the upcoming adequacy study. Although Elia does not see sufficient reasons at this point to replace the forecast of the specialized consultant IHS Markit, Elia is open to analyze other sources in the future, if they would seem more appropriate.

Febeliec

With respect to the profiled thermal production, Febeliec wonders how this profile was put together: is it based on historic observations with stochastic forced and unforced outages? Or some other methodological approach? With respect to the forced outage rates, Febeliec observes that the outage rate for gas turbines is 13,6%. Is this high level due to a specific installation encountering multiple issues (and if so, to which extent this can be mitigated in order to reduce its forced outage rate and increase its reliability) or is this the result of issues with all gas turbines in the system? The same question applies to the classical (?) units.

Elia's answer

The modelling of the profiled thermal production was detailed during the public consultation on methodology, hypotheses and data sources which was organized

from 24/04/2017 to 22/05/2017. Elia refers to the consultation document¹ for more information.

Forced outage rates per production type are determined as the average outage rate over the last ten years. In particular, the forced outage rates of the gas turbines and classical units are caused by different production units throughout the last ten years for both categories.

FEBEG

Elia will assess the volumes for the strategic reserves for winter 2018-2019, but will also make some forecasts for the next two winters. For the moment, Elia proposes to keep the capacity of gas-fired power plants at the same level in the input data for the next three years. FEBEG suggests to also make a sensitivity analysis with lower capacity of gas-fired power plants assuming that some power plants will close.

Elia's answer

Elia takes note of the remark made by FEBEG, and will take it into account when determining which sensitivities will be analyzed.

FEBEG

Elia has put the raw input data used for the calculation to the disposal of the stakeholders. FEBEG considers the data for Belgium very complete and detailed, but regrets that similar data are not available for the neighboring countries.

FEBEG understands that there are issues with regard to confidentiality, but wants to point out that the input data that are used for the other countries are very important as well as Belgium is highly interconnected. Because of the interdependency between France and Belgium, especially the input data for France are relevant. Elia stated that the reference scenarios are being used for France, but FEBEG would welcome more details on these scenarios and more specifically on the sensitivities that Elia has investigated.

Elia's answer

Elia agrees on the importance for its analysis of the assumptions for other countries. A significant update of the Elia databases has taken place over the last months in the framework of the ongoing Pan-European and regional studies. For the neighbouring countries (France, Great-Britain, The Netherlands, and Germany), all relevant information and assumptions will be detailed in the report respecting the necessary confidentiality constraints.

¹http://www.elia.be/~media/files/Elia/users-group/Public%20consultations/2017/20170424_SR2018-19-Public-consultation-on-methods-and-data-sources.pdf

3. Market Response

Febeliec

On the volumes of market response, Febeliec has provided ample input and comments during the work conducted by both Elia and E-cube in the subgroup of the Task Force implementation of Strategic Reserve. Nevertheless, Febeliec regrets that the excel file under consultation (as opposed to the corresponding introductory powerpoint presentation) does not contain both the table on the activation constraints nor the proposed increase over the following winters of the market response volume (5% CAGR), both elements that are very essential to the analysis that Elia will have to conduct. Febeliec supports both of those proposals, as the former is the outcome of the market consultation via questionnaire (conducted by E-cube), and the latter is the result of the discussion in the Task Force iSR, where a CAGR of 5% was agreed upon consensus as even in this case the increase of market response in absolute numbers (MW/year) remains limited to only around 30MW/year. This minimal increase in absolute numbers needs to be put in perspective with the very broad range of measures to unlock the potential of demand response; the even lower proposals of respectively 1% and 3% CAGR for market response discussed but not withheld in the TF iSR, in which cases the increase of market response in absolute numbers would be almost non-existent, are not in line with neither the replies to the questionnaires nor the efforts done by all actors to increase the elasticity of the demand curve.

Elia's answer

Elia would like to thank Febeliec and all other participants for their valuable input during the elaboration of the Market Response methodology together with E-cube. The results of the Market Response study performed in cooperation with the volunteering market parties were presented and validated during the TaskForce Implementation Strategic Reserve of July 12th 2017. Although all details of the method are available in the study reports of E-cube, Elia will incorporate the activation details in the final Excel file published together with the Volume Assessment report for completeness sake.

FEBEG

First of all, FEBEG would like to thank Elia for its efforts to try to improve the estimation of the volume of market response which will be taken into account in the analysis to determine the volume of strategic reserves. The work performed together with E-Cube is considered to be very valuable.

Nevertheless FEBEG is seriously doubting if the choice for a 5 % growth rate for market response is realistic as the historical quantitative analysis only indicated a growth rate of 1 %. When further analyzing the data, FEBEG observes an overall growth of 1 % of market response as the volume which is available for the market shows on average a decrease of 6 % while only a strong increase of 14 % is expected on the volume of ancillary services market response.

The reason for the decrease of available market response in the market is that currently the profitability of explicit market response products is not sufficient to trigger an increased offer.

On the contrary, participants prefer the ancillary services products to acquire a capacity fee in order to make the operation profitable.

Deviating from the observed quantitative results should be clearly motivated by an expected market shift that would increase the profitability of the market products. As mentioned by the BRPs in the questionnaire one could indeed expect additional volumes to be unlocked in the future due to, for example, the transfer of energy. However sufficient profitability is still required for these volumes to be offered on the market. In addition the expected increase of economic growth might reduce the operational margin of industrial players to lower their production for market response actions, unless the expected remuneration would increase significantly.

Therefore FEBEG proposes to opt for the 3% growth rate as a compromise and more realistic approach for the future evolution.

Elia's answer

Elia would in turn like to thank FEBEG and all other participants for their valuable input during the elaboration of the Market Response methodology together with E-cube. A 5 % growth rate for Market Response was agreed upon after discussion during the TaskForce Implementation Strategic Reserve of July 12th 2017. Elia prefers to not revise this validated growth rate, repeating its commitment to conduct a yearly re-assessment of the calculation with the approved method. Elia takes note of the concerns raised by FEBEG, and will take them into account when conducting the re-assessment.

4. Flow Based domains

Febeliec

With respect to the flow-based domains, Febeliec refers to its comments provided during the public consultation on methods, hypotheses and data sources. Febeliec welcomes the inclusion of more granularity with respect to flow-based domains in the analysis by Elia and also welcomes the inclusion of NEMO Link within this analysis. On this last point, Febeliec wonders what the impact will be of this interconnector, and which outage rates and other derating elements will be taken into account by Elia in its model for his interconnector. Febeliec also wonders why the ALeGRO interconnector has not been taken into account for 2020, as according to communicated planning by Elia this interconnector is supposed to be commissioned in 2020 (and has also an incentive from the CREG linked to this commissioning date).

Elia's answer

The modelling of the Nemo Link interconnector was detailed in the consultation document for the public consultation on methodology, hypotheses and data sources. A forced outage rate of 6 % will be applied, in line with the ENTSO-e MAF hypotheses. No additional derating will be considered for the modelling of this HVDC interconnector.

Indeed Elia will not take into account the ALeGRO interconnector for the analysis of its base case. The reason for this is the uncertainty regarding the integration of the ALEGrO project in the flow-based operational process, as specified in the consultation document for the public consultation on methodology, hypotheses and data sources.

5. Out of Scope

Febeliec

Febeliec however would like to iterate its request for a public and official list with a clear status of all the announced closures of thermal generation units as well as their end dates. Such list still does not exist, which has all parties to rely on information to be found in the press and/or on company websites, which is not the most transparent process.

Elia's answer

The assumptions used by Elia for its adequacy analysis are made available through the current public consultation. However, these assumptions indeed do not constitute an official list with a clear status of all the announced closures of thermal generation units, nor their end dates. Elia believes that publication modalities as described by Febeliec fall out of scope of the volume determination of strategic reserve for winter 2018-19. The impact of the announced closures is duly taken into account, as can be seen in the consulted Excel file.